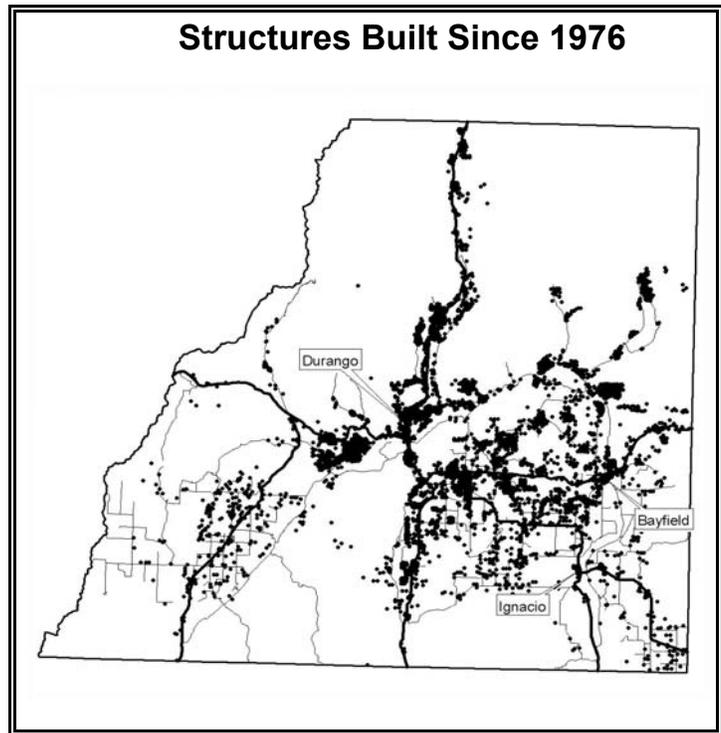


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parts of the County. Many residents rely on hauled water for a consistent source of potable water.

The extensive use of on site individual sewage disposal systems (ISDS) also plays a role in the ground water quality issue. Nearly 11,500 single-family homes were built in the County between 1976 and 2000 (See map to the right). Most rely on ISDS systems and individual groundwater wells. While no major instances of well contamination have been reported as a direct result of the ISDS as of 2001, it is likely that contamination occurs but goes unnoticed and, as a result, unreported. Recent improvement to ISDS regulations, particularly setback requirements, have lessened the potential for contamination



from ISDS systems. A reduction in irrigable lands with a commensurate increase in the number of individual wells also has implications for the continued availability of ground water.

Annual research conducted by the United States Geological Survey(USGS) since 1995 indicates that in many rapidly developing areas, such as the Florida Mesa, ground water recharge is highly dependent on infiltration of irrigation water. As areas develop and previously irrigated agricultural lands are taken out of production, recharge is in many cases insufficient to maintain the existing water table

Key Point: The continued proliferation of on-site ground water wells and individual sewage disposal systems may have a negative effect on both water quality and quantity.

The Colorado Department of Health and Environment supports the development of a rural water system in La Plata County as a means of addressing the growing concern over the lack of a consistent source of potable water for County residents. Since the late 1990s, efforts have been underway to establish a rural water system. Construction of a system had not begun as of 2001. Development of a rural water system in La Plata County would provide County residents with a safe and dependable source of water for domestic use. And due to the largely onsite disposal and treatment of wastewater in the proposed service delivery area, there is the potential that the system water may help to replenish aquifers previously strained by the large number of on-site wells.

Key Point: The development of a rural water system would provide many County

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residents with a consistent and safe source of domestic water.

Surface Water

A number of factors affect surface water quality. Effective storm water management techniques and appropriate erosion control measures are probably two of the most critical. Maintaining the quality of surface water is critical to the overall environmental health of many of the natural features of La Plata County including rivers corridors, other riparian areas, floodplain and wetlands. Without consideration of these issues, unique natural features and wildlife habitat can be irreparably damaged or destroyed.

With the significant amount of open, permeable surface area found in the County, a County-wide storm water management plan is not likely to be a significant concern. Storm water management is, however, an important issue relative to individual projects and their impact on downstream features. As more permeable surface areas are built upon throughout the County, there is less surface area to rely on for storm water absorption. As a result, drainage ditches and natural water courses tend to bear the burden of the additional runoff with downstream natural and man-made features being affected. Typical storm water management techniques may include such things as curb, gutter and piped storm sewer; detention ponds; and building to site ratios that require a certain percentage of permeable land as part of the development site.

Key Point: *To minimize the impact on the downstream features, both manmade and natural, adequate storm water management techniques must be incorporated in all development projects.*

Erosion control measures can play an instrumental role in the protection of surface water quality. As with other storm water management techniques, adequate erosion control measures can prevent excessive silt and other debris from running off a development site during rain falls or snow melts. The use of silt fencing or berming during site preparation as well as adequate landscaping immediately after construction can help to minimize the potential for erosion problems.

Key Point: *Erosion control measures such as adequate landscaping can play an instrumental role in the protection of surface water quality.*

Key Point: *Working to minimize non-point source pollution resulting from existing development and agricultural operations is also an important tool for limiting surface water contamination.*

Identifying non-point source pollution can sometimes prove difficult, however, as it is often hard to identify the source of non point pollutants.

Air Quality

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Good air quality in La Plata County is essential to the tourism economy. The Durango area is an Environmental Protection Agency (EPA) Attainment Area for all air pollution criteria including ozone, carbon monoxide and PM₁₀s. La Plata County, on occasion, experiences localized air quality problems and decreased visibility common to many western slope communities. The majority of these occasional hazy days arise from factors unrelated to activities in the County.

Despite La Plata County's generally clean air and Durango's attainment status, air quality is a concern of local residents who recognize that past and likely future growth could lead to air quality problems. Measure's are being taken to address Countywide air quality issues. In 1998, the San Juan Basin Health Department initiated a community-based air quality improvement initiative for the Durango area called the *La Plata County Air Quality Advisory Council*. The Council's focus is to monitor and evaluate air quality issues important to the community. In 2001, the Durango & Silverton Narrow Gauge Railroad put a pollution "scrubber" on its locomotive maintenance facility in downtown Durango.

Key Point: *While air quality in the County is generally good, residents recognize that growth impacts could result in a decrease in air quality.*

There are a number of other activities and issues that affect air quality. One in particular is road dust. The County has established a program to use Magnesium Chloride, a dust inhibitor and bonding agent, on gravel County roads that experience high-volume traffic. It has proven to be an effective agent for holding the roadbed in place and limiting dust.

Other Activities with the Potential to Affect Air Quality Include:

- Open burning
- sand and gravel mining operations
- vehicular emissions
- Wood burning
- Asphalt batch plants

Key Point: *Partnerships should be established and/or strengthened which help maintain air quality in La Plata County.*

Open Space/Visual Resources

The distinct character and feel of La Plata County is, in many ways, created by the beauty and openness of the landscape. The County encompasses 1,692 square miles. From the 14,000-foot peaks and rugged wilderness in the north, to the lush river bottoms and pinon juniper woodlands in the heart of the County, to the dry farmlands and desert arroyos in the south, the County's landscape defines the County itself. The many "faces" of the County are reflected in its scenery and views. Residents, business owners and visitors place high value on maintaining this scenic character that contributes to community pride and well-being. The County's economy is, in many ways, dependent on the continued vibrancy and integrity of the landscape.

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Open Space

Open Space Serve a Variety of Uses Including:

- Agriculture
- Wildlife habitat
- Visual buffering around and between developments and communities
- Protection of view corridors along County roads and state highways
- Preservation of Floodplain, wetlands and other unique natural areas
- Passive recreation uses such as hiking, horseback and bicycle riding
- Buffering of noise, dust, and lighting glare between adjacent land uses

Approximately forty-one percent of La Plata County land is in public ownership (BLM, Forest Service, Division of Wildlife, State Lands Commission). Still another 18 % (approximately) is tribally owned. However, the public lands are largely concentrated in the northern third of the County, generally removed from areas where the most development is occurring, such as the Animas Valley and the Florida Mesa. It is in these growing areas where concerns about the retention of open land and community character are the greatest.

Preserving open space and the rural character of the County is not just a nostalgic wish to avoid change. There is a direct relationship to the health of the County's economy and the quality of life of its residents. For example, two major sectors of the economy – tourism (which accounts for over 50 percent of the County's economy) and the influx of retirees – are strongly linked to the County's scenic and rural qualities. The County's continuing ability to attract and retain visitors, residents, and businesses will depend on maintaining the values and characteristics that brought them here in the first place.

Key Point: *The primary purpose of protecting open space should be to preserve unique ecological, biological, cultural and aesthetic features of the community.*

Existing and Potential Open Space Protection Programs

Apart from the County's land use system which encourages the preservation of open space as part of the development process, ***there are a number of other land protection techniques that can provide tax benefits and economic incentives to landowners including:***

- Dedications of conservation easements
- Donations for tax and/or estate planning purposes
- selling or transferring development rights
- Exchange of land with public agencies

Several land trusts exist in the County, each having been relatively successful. These land trusts generally work directly with landowners helping to establish easements and monitor the land for compliance with the easements.

Land Trusts Active in La Plata County Include:

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- The La Plata Open Space Conservancy
- The Animas Conservancy
- The Trust for Public Lands
- Colorado Cattlemen’s Association

In existence since the early 1990s, the La Plata Open Space Conservancy has protected more than 40 properties through acquisition or easements, protecting more than 5,000 acres. Just established in 1999, the Animas Conservancy has begun acquiring easements and is dedicated to protecting properties primarily in the Animas River drainage. The Trust for Public Lands, a national organization, has also helped facilitate several large land acquisitions in the County.

In 2001, a proposal was brought before the La Plata County Board of County Commissions to establish an advisory committee to oversee the creation of a County-wide open space acquisition program. Additionally, a proposal to fund open space acquisitions via proceeds of a use tax was brought before the electorate in November 2001. The ballot measure failed by a 3 to 1 margin, thus eliminating it as a near-term funding source.

Key Point: The creation of a County Open Space Advisory Committee would establish a foundation for the development of a comprehensive open space program for La Plata County.

Visual Resources

As stated earlier, the scenic beauty of the County plays a significant role in shaping the local economy and quality of life for local residents. However, as the County grows, the potential exists for development to degrade and diminish many of the view corridors in the County.

Key Point: Poorly designed development has the potential to degrade many of the view corridors in the County.

Of particular importance are the State and U.S. highway corridors passing through the County. The land use code establishes these corridors as “view corridors” that should be treated uniquely by preserving their aesthetic values. The San Juan Skyway, which includes Hwy 550 North and 160 West, has already received significant attention relative to protecting visual resources. Conversely, Hwy 160 East between Grandview and Gem Village has not received nearly as much attention. It should, however, be of particular importance and should be considered a priority corridor for visual resource protection. It serves as the only major east-west arterial through the County and is also located in an area that has significant commercial development potential. New development along this corridor should include significant setbacks and/or vegetative cover to ensure the integrity of the view corridor.

Key Point: Due to development pressures in the area, the Highway 160 corridor between Grandview and Gem Village will be particularly susceptible to a

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loss of visual resources.

Activities That May Affect Visual Resources Include:

- Excessive grading, cutting and filling associated with new roads and site preparation
- Placement of structures in prominent or sensitive locations, such as open meadows, river bottoms, ridge tops and open hillsides
- Obtrusive residential structures that obscure views of prominent natural features, such as meadows, lakes, streams, hilltops, ridgelines and mountains
- Unscreened outside storage areas
- Excessive removal of vegetation and/or lack of re-vegetation along pipeline and utility rights-of-ways and new roads
- Excessive on-site signage and lighting
- Billboards

Existing Visual Resource Protections

Protection of visual resources is addressed in a variety of existing studies and plans. Following is a brief summary of these protection measures.

District Land Use Plans: The District plans contain a variety of incentives to protect visual resources. All seven district plans make use of the public benefit criteria process which provides density incentives for residential developments that are compatible with the goals of each plan. Much of the focus of the public benefit criteria process is oriented toward development that is visually unobtrusive to the surrounding environment.

La Plata Land Use Code: The Code contains several references to the protection of visual resources and development within the Corridor District. Protections, however, are primarily among the Code's encouraged standards and lack specificity. Most notable are the omission and inadequacy of grading and excavation standards; comprehensive signage standards; and enforced landscaping, buffering and revegetation standards.

San Juan Skyway Open Space Strategic Plan: Prepared in January 1998, the plan provides a strategic framework for stimulating open land protection of key corridor segments that have been identified as having important scenic, natural, recreational, wildlife, and/or historic landscape values. The San Juan Skyway encompasses a 232-mile loop connecting Durango, Silverton, Ouray, Telluride, Dolores, Cortez and Mancos.

City of Durango Parks, Open Space, and Trails Plan(POST): The POST Plan was prepared by the City of Durango in 2000. The Open Space Element of the plan identifies a number of key parcels that should be preserved for the unique characteristics. A number of these parcels are located outside Durango city limits in the unincorporated County.

Key Point: *Proposed developments should recognize and accommodate visual resources as an important aspect of La Plata County's character.*

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Wildlife Habitat

La Plata County has always been home to a diversity of wildlife. Elk herds are commonly seen grazing the Animas Valley during the winter months; Black Bears and mountain lions are often reported in residential areas adjacent to forest lands during the spring and fall. Throughout the year, small game and other wildlife can be seen in any number of places throughout the County. As development of the Animas Valley and along arterial roads continues throughout the County, there will continue to be increasing conflicts between humans and wildlife.

The County district land use plans all recognize the importance of wildlife habitat as a unique aspect of each district, an aspect that the crafters of those plans hoped to retain.

Key Point: By recognizing and preserving critical wildlife habitats in the County, conflicts between humans and wildlife can be reduced, thus maintaining this unique aspect of La Plata County's character.

Wetlands/Riparian Areas

Wetlands

Wetlands is the collective term for marshes, swamps, bogs, and similar areas found in flat vegetated areas, in depressions in the landscape, and between dry land and water along streams, rivers and lakes. They are areas which are saturated or inundated by surface or ground water at a frequency and duration sufficient to support life forms associated with saturated soils. Wetlands are a unique, yet somewhat limited, natural feature in the ecosystem of La Plata County. They serve a number of important functions including erosion and flood control, and as habitat for a variety of aquatic plants and animals.

The County Land use code requires new development to establish a setback of no less than 50 feet from known wetlands. A determination of whether wetlands are on a project site are typically made by qualified engineers or the Army Corp of Engineers. The Corp regulates permitting for disturbance or modification of wetlands under their jurisdiction. The Army Corp has a “no net loss” policy which requires replacement, or mitigation, of wetlands heavily impacted by development. Unfortunately, wetland mitigation has shown to be minimally effective.

Key Point: Wetlands are a unique, yet somewhat limited, natural feature in the ecosystem of La Plata County that should be preserved.

Riparian Areas

Riparian areas are typically linear strips along either side of rivers, streams, creeks, and other drainages. They are characterized by saturated soils that support both wetland vegetation as well as other natural features such as cottonwoods, willows, river birches, adlers, sedges, and rushes. Riparian areas also typically provide critical habitat for many species of wildlife. They are also

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attractive for housing and recreational activities. Additionally, the high productivity of these areas also make them attractive for grazing.

While the County Land use code requires new development to establish a setback of no less than 50 feet from bank high-water line of rivers, streams, and other water courses, this does not, in all cases, provide the protection necessary to limit disturbance of the riparian area.

The **Southwest Colorado Riparian Partnership (SWCORP)**, a local consortium of concerned residents, landowners, land management agencies, and others has formed to establish and maintain a network of interested and diverse parties working toward the common goal of maintaining healthy riparian habitat for multi purpose uses. They are, in essence, developing a long-term plan for conservation of riparian areas throughout the County.

Key Point: *Because of the importance of riparian areas to the biological diversity and character of La Plata County, SWCORP's efforts to establish conservation practices for riparian areas should be supported.*

Other Environmental Resource Considerations

A number of other resource issues which have not received significant attention in the past are mentioned here for future discussion. Things such as energy efficiency standards in new developments; water conservation techniques; alternative energy uses; recycling, and light pollution are all issues which have the potential to impact the County. Given the recent energy problems experienced in California, as well as ongoing concerns over water usage here in La Plata County, a number of these issues, if properly addressed, could play a very positive role in shaping the County as it grows.

Each of these issues have been, or are currently being, addressed via a number of private and public/private initiatives in the County. It is not the intention of this iteration of the County comprehensive plan to recommend any specific steps relative to them. None-the-less, the County should stay informed and support local efforts that lead to appropriate use of these resources.

Key Point: *The County should stay informed and support local efforts that lead to appropriate use of resources.*

Summary of Goals, Key Points, and Plan Recommendations

Goal

Goal 6.1: To Maintain or Improve the Quality of La Plata County's Environmental Resources including Water, Air, Visual Resources, open lands, forests, Wildlife Habitat, Riparian Areas, and Wetlands.

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Key Points

The **Key Points** presented in this chapter include:

- U The continued proliferation of on-site ground water wells and individual sewage disposal systems may have a negative effect on both water quality and quantity.
- U The development of a rural water system will provide many County residents with a consistent and safe source of domestic water.
- U To minimize the impact on the downstream features, both manmade and natural, adequate storm water management techniques must be incorporated in all development projects.
- U Erosion control measures such as adequate landscaping can play an instrumental role in the protection of surface water quality.
- U Working to minimize non-point source pollution resulting from existing development and agricultural operations is also an important tool for limiting surface water contamination.
- U While air quality in the County is generally good, residents recognize that growth impacts could result in a decrease in air quality.
- U Partnerships should be established and/or strengthened which help maintain air quality in La Plata County.
- U The primary purpose of protecting open lands should be to preserve unique ecological, biological and aesthetic features of the community.
- U The creation of a County Open Space Advisory Committee would establish a foundation for the development of a comprehensive open space program for La Plata County.
- U Poorly designed development has the potential to degrade many of the view corridors in the County.
- U Due to development pressures in the area, the Highway 160 corridor between Grandview and Gem Village will be particularly susceptible to a loss of visual resources.
- U Proposed developments should recognize and accommodate visual resources as an important aspect of La Plata County's character.
- U By recognizing and preserving critical wildlife habitats in the County, conflicts between humans and wildlife can be reduced, thus maintaining this unique aspect of La Plata County's character.
- U Wetlands are a unique, yet somewhat limited, natural feature in the ecosystem of La Plata County that should be preserved.
- U Because of the importance of riparian areas to the biological diversity and character of La Plata

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County, SWCORP's efforts should be supported.

- U The County should stay informed and support local efforts that lead to appropriate use of resources.

Plan Recommendations

Plan recommendations have been included throughout this chapter. They should be implemented through the prioritization and initiation action items. The *Action Items (AI)* summarized below are incorporated into an *Action Item Prioritization Table* included in Chapter 12.

Water

- AI6.1:** Evaluate and refine USGS water monitoring program to improve baseline data collection.
- AI6.2:** Continue study of impacts gas industry activities have on ground water wells
- AI6.3:** Encourage San Juan Basin Health Department to comprehensively review ISDS systems to determine impacts on ground water.
- AI6.4:** Publicly support development of rural water systems

Air

- AI6.5:** Continue support for, and participation in, the La Plata County Air Quality Advisory Council
- AI6.6:** Establish standards for residential wood burning in new developments as part of the development review process.
- AI6.7:** Support the implementation of the County Transportation Plan and its efforts to reduce road dust and promote alternative modes of transportation

Open Space

- AI6.8:** Provide technical assistance to organizations and/or entities attempting to establish a County open space acquisition program.
- AI6.9:** Develop a County voluntary open space plan as an element of the County comprehensive plan
- AI6.10:** Fully evaluate merits of a purchase and transfer of development rights programs

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Visual Resources

- AI6.11:** Revise and refine County visual corridor map.
- AI6.12:** Create design guidelines for development proposed in visual corridors
- AI6.13:** Define Highway 160 between Grandview and Gem Village as a high-priority visual protection corridor.
- AI6.14:** Evaluate and consider for adoption road development standards that emphasize the minimization of grading, cutting and filling; the avoidance of steep slopes and visually prominent hillsides; and revegetation after construction.
- AI6.15:** Complete and expand upon the Animas Valley ridge line study, establishing guidelines to minimize visual impacts of hill side development.

Wildlife Habitat

- AI6.16:** Initiate discussions with the Division of Wildlife to create a revised comprehensive wildlife inventory and develop a “best development practices” guide to integrate new development with wildlife considerations.
- AI6.17:** Work with DOW to create education format on wildlife and their habitat.
- AI6.18:** Create habitat inventory with DOW for planning and educational purposes.

Wetlands/Riparian Areas

- AI6.19:** Support the Southwestern Colorado Riparian Partnership in their efforts to find solutions to maintaining healthy wetland and riparian habitats.

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