

ELBERT COUNTY OPEN SPACE STUDY

A TOOL FOR UNDERSTANDING HIGH VALUE LANDS FOR OPEN SPACE

OCTOBER 2016



an OPEN SPACE STUDY in partnership with



ELBERT COUNTY, CO



DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

A study performed by Design Workshop in partnership with
Elbert County and the Douglas Land Conservancy.

Contributors

Patti Hostetler | Executive Director
Douglas Land Conservancy

Jane Boand | Board Member
Douglas Land Conservancy

Doug Reagan | Board Member
Douglas Land Conservancy

Kyle Fenner | Director, Community and Development Services
Elbert County

Photography

Design Workshop

Special thanks

*A special thanks to the following agencies and organizations
for their insight over the course of this study:*

Boy Scouts of America, Denver Area Council

Colorado Parks and Wildlife

Kiowa Conservation District

Douglas County Conservation District

USDA, Natural Resources Conservation Service

Town of Elizabeth

Town of Kiowa

Colorado Open Lands

Colorado Cattleman's Association

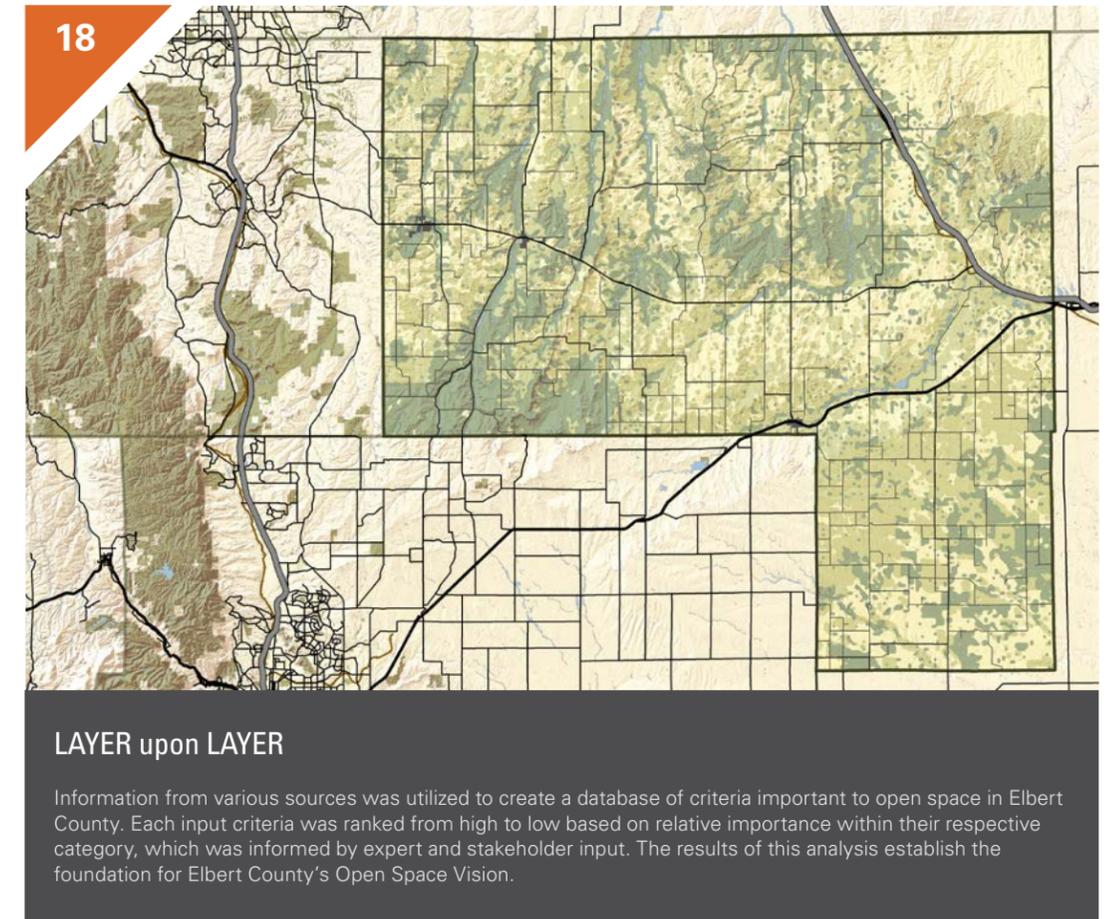
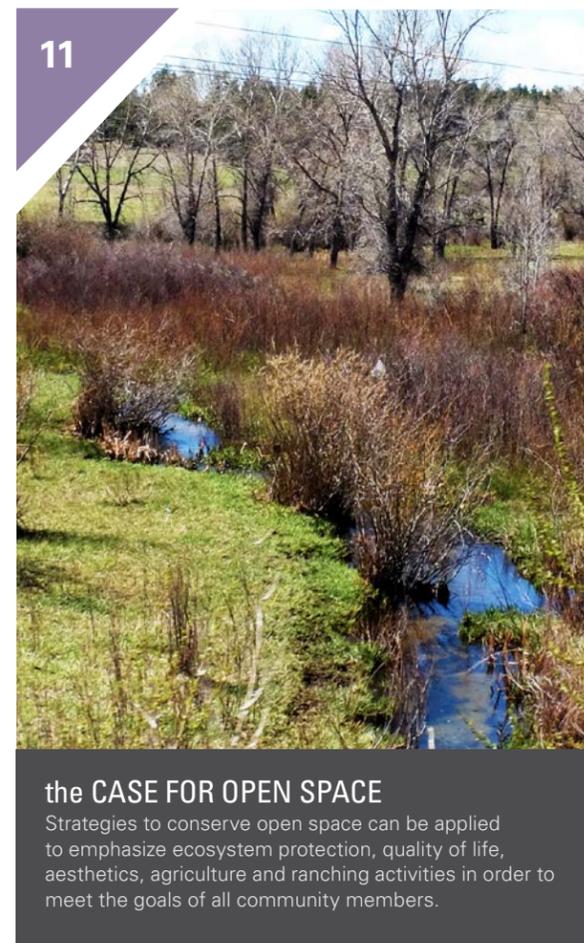
Plains Conservation Center

Nature Conservancy

The Conservation Fund

INDEX

4	about THIS STUDY
5	WHY NOW?
5	VISIONING PROCESS
6	the LAY OF THE LAND
7	NATURAL LANDSCAPE
8	COMMUNITIES AND PEOPLE
9	LOCAL ECONOMY
11	THE CASE FOR OPEN SPACE
12	the PROCESS
13	OPEN SPACE SUITABILITY ANALYSIS
14	open space PRIORITIES
15	PRIORITIES FOR CONSERVATION
15	TOOLS FOR LAND PROTECTION
18	appendix: LAYER upon LAYER
20	A. NATURAL AND WORKING AGRICULTURAL LANDS
22	A1. WILDLIFE HABITAT
26	A2. LAND CHARACTER
30	A3. WORKING AGRICULTURAL LANDS
34	B. SCENIC QUALITY
36	B1. VIEWS
40	B2. SCENIC RESOURCES
44	C. CHARACTER OF PARCEL
46	C1. SIZE OF PARCEL
48	C2. ADJACENCY OF PARCEL





about THIS STUDY

What lands are important for preserving the natural landscape and rural character of Elbert County and where are they located? How should these lands be protected to retain the County's western character and culture? This study aims to address these questions and provide guidance for open space conservation within the County for the next decade and beyond.

Design Workshop, in partnership with Elbert County and the Douglas Land Conservancy, performed this study to understand key variables that may impact the landscape of Elbert County and identify lands that contain qualities most desirable for conservation. This document will provide a resource for landowners and land use planners alike to look ahead and play a role in protecting the natural landscape, rural character and the rich history of the County.

WHY NOW?

Elbert County possesses a quintessential Western landscape with long-distance views of the Front Range and working agricultural lands. While agriculture and grazing have historically been the backbone of the local landscape and economy, change has already begun. Large land parcels, particularly in the western portion of the County, are quickly being converted to smaller acreage subdivisions as growth from the Denver Metro area spreads. Energy development is growing statewide and several wind turbines and traditional oil and gas wells have been built on the eastern plains of the County. Active recreation is a high priority for many Coloradans making access to trails and natural areas important to the overall quality of life. As we see open lands throughout the Western US disappearing at a rapid rate, now is the time to make plans that retain the treasured landscape. This report provides an outlook for the future of open space in Elbert County; the findings are timely, as the County is readying to update its master plan. The recommendations are rooted in the County's rich history and endeavor to address key variables that have the potential to change the present landscape while retaining the unique character and culture of the County and its people.

POPULATION GROWTH AND DEVELOPMENT

Growth trends will undoubtedly affect where conservation priorities should be placed as the County continues to grow and develop. Elbert County is commonly perceived as removed from the expanding development of the Denver metro area. However, major towns in the western portion of the County are roughly a 25 minute drive from nearby Castle Rock and less than an hour commute to both the Denver and Colorado Springs areas. Last year alone, the state of Colorado added 101,000 people to its population and more than 80% of these newcomers settled along the Front Range. The surge of people in this concentrated zone makes areas with low cost of living and access to economic centers, like Elbert County, very attractive. As of 2013, about 89% of the County's resident workforce worked outside of the County.

Suburban development will likely continue to move south and east of Denver toward the western portions of Elbert County, as the state is projected to add another 100,000 people in 2016. Statewide, the annual rate of population change is 1.3%. State demographers predict Elbert County will be the fastest growing county over the next five years and experience higher annual rates of population change, growing from a population of 24,144 in 2014 to 49,028 by 2030. The subdivision of lands on this side of the County will reduce the availability of large parcels of land, under a single ownership, for wildlife habitat protection and working agricultural lands preservation. However, residential development also brings a desire for the quality of life benefits that open lands can provide.

CONNECTIONS TO THE OUTDOORS

Coloradans enjoy an abundance of outdoor recreational opportunities and are routinely regarded as some of the healthiest and most active people in the U.S. According to the 2014 Statewide Comprehensive Outdoor Recreation Plan, 90% of the population participates in some form of outdoor activity every year. Walking, jogging and biking are among the top outdoor activities in the state. Elbert County also has a long equestrian history. The County is ranked seventh statewide in total number of horse farms. A recent study showed the equine industry in Elbert and neighboring Douglas County contributed an estimated \$100-135 million in total economic impact. In order to continue to support

Coloradan's outdoor lifestyle and Elbert County's equine activities, linking residents to the diverse outdoor recreation opportunities, from the peaks to the plains, through trail development has become a top priority. The 2015 Colorado Beautiful initiative endeavors to connect every Coloradan to a park, trail or open space area within a 10-minute walk within one generation.

Connecting people, particularly youth, to the outdoors is key to inspiring stewards of natural places. Children are spending more time in front of screens and less time experiencing nature. According to the Center for Disease Control and the National Recreation and Park Association, today's children are spending an average of just seven minutes per day of unstructured activity in the outdoors. The state of Colorado has recognized this sedentary lifestyle affects the health and well-being of youth and reduces the connections necessary to cultivate the next generation of environmental advocates. In an effort to inspire the youth of Colorado and restore those connections to the environment, the State is actively funding initiatives that encourage positive connections with the outdoors

EXTRACTIVE AND RENEWABLE ENERGY

Oil and gas development in Elbert County grew in the 1960s and 70s, then idled until about 2010 when drilling activity began to rapidly increase in nearby Weld County. In 2012, 150 producing oil and gas wells were located in the county. Renewable energy investments in wind and solar among other renewable energy resources are a growing potential in the County. Wind energy made up 13% of the total electricity generated in Colorado in 2014, accounting for the largest percent of renewable energy generation in Colorado. Innovations in technology and reductions in manufacturing costs have positioned both wind and solar resources to be one of the most prolific and cost competitive renewable resources in the market.

Wind energy potential on the eastern portion of the county ranges from fair to good, and turbines have begun to emerge in the Cedar Point Wind Site, with additional turbines located just over the County line in the Limon Wind Site. The County is currently reviewing an application from Xcel Energy to establish the largest wind farm within the state as part of the Rush Creek project, which includes a total of 300-400 turbines with a maximum height of 440 feet to the tip of the blade and 90 miles of transmission lines. Solar energy potential is also high. In most locations across the County 100,000 square feet of solar panel surface area could generate over 530 watt hours per square foot, per day, or enough energy to meet the needs of over 1,300 homes. This addition to the state wide electricity portfolio provides substantial benefits for the County including economic development and job growth. It also brings, however, impacts to wildlife communities and the visual landscape.

PURPOSE

This study builds a an outlook to the future through extensive research, landscape analysis and stakeholder engagement in the face of the variables that have the potential to change the County and its character. The resulting outlook is intended to be a resource and educational tool for private property owners, conservation organizations and local decision makers. Identification of land opportunities in Elbert County will help landowners explore a range of options for the future of their land, assist conservation organizations identify open space partnerships and guide decision makers as development pressures increase.

PROCESS

The outlook for open space in Elbert County is built on analysis and feedback from key stakeholders. The process undertaken in this study, described in more detail below, relied on data analysis and targeted public engagement to establish an approach and reasoning for the identification of important lands and strategies to protect open space in Elbert County.

PHASE 1 DEVELOPING A CONTEXT OF UNDERSTANDING

The effort was launched in November 2015 with a kick-off meeting involving the visioning team, which included consultants from Design Workshop and representatives from Elbert County and the Douglas Land Conservancy. This meeting was key to understanding critical success factors and establishing goals and outcomes.

Following the formal project kick-off data pertinent to open space was collected, reviewed and analyzed to assess levels of suitability of lands in Elbert County for open space conservation. These analyses were summarized and displayed in a series of maps that built the foundation for the identification of priority areas for future open space protection.

PHASE 2 CREATING A SHARED OUTLOOK

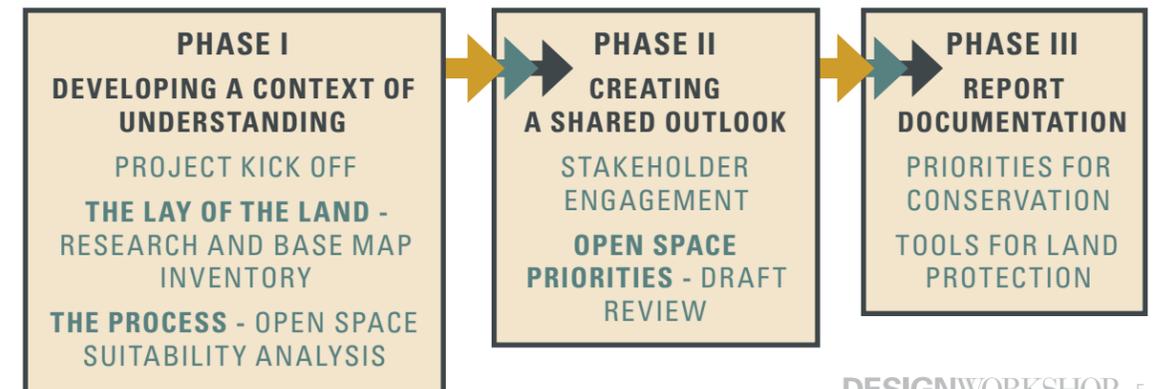
In this phase, on-site reconnaissance by the team provided an opportunity to ground-truth assumptions and identify gaps in the data. With a strong grasp on priority areas for open space conservation, the project team moved on to public engagement with key stakeholder groups to refine the approach. Focus group meetings were held with local land trusts, city and county staff, water resource managers, land managers, large property owners and outdoor recreation providers. These discussions with stakeholders, each with a unique knowledge and interest in the future of open space in the County, yielded valuable insight. Through the lens of feedback from key stakeholders, priority areas for open space were revised and recommendations were drafted.

PHASE 3 REPORT DOCUMENTATION

In the final phase of the study, an outlook for the future of open space in Elbert County was detailed and documented. The study identifies a framework for future open space priority areas based on four equally important goals: 1) wildlife habitat protection, 2) working agricultural lands conservation, 3) scenic resource preservation and 4) access to recreation. The framework plan and supporting recommendations were presented to key stakeholders involved in the study to identify any final adjustments and ultimately gain consensus on the proposed plan.

NEXT STEPS...

The objectives of this report and supporting brochure are twofold. First, provide an educational tool to facilitate future conversations among land use decision makers, land owners and conservation organizations. Second, build a case for the value of open space and provide preliminary recommendations and supporting action steps for the County to incorporate in future comprehensive planning and land conservation efforts.



The background image is a landscape photograph showing a valley with a stream. The foreground is filled with dense, brown, dry brush and grasses. A small stream flows through the center of the valley. In the middle ground, there are several bare, leafless trees. The background shows a line of trees and a clear blue sky with a few wispy clouds. The overall scene is a natural, rural landscape.

the LAY OF THE LAND

Elbert County marks the transition from the Rocky Mountains to the west and the high plains grasslands to the east. Across 1,851 square miles, north-south trending hills with pockets of ponderosa pine and rock outcroppings characteristic of the Front Range give way to flatter landscapes and prairie grasses associated with the high plains. Ridges offer expansive views from Pikes Peak to Mt. Evans to Longs Peak. Meandering streams follow the valleys north and support a variety of wildlife.

The County is centrally located in the State and lies approximately midway and slightly east Denver and Colorado Springs. While the County is perceived as a great distance from surrounding urban and energy development, it is bordered by the fast-growing Front Range counties of Arapahoe and Douglas to the north and west. El Paso County lies to the south and Lincoln County to the east. Elbert County itself has experienced a population growth of almost 5% since 2010, which is occurring primarily in the form of rural subdivisions.

NATURAL LANDSCAPE

HYDROLOGY

Streams and rivers in Elbert County flow into the South Platte and Arkansas Rivers. The major drainage routes flowing into the South Platte River include the north-oriented streams Running Creek, Kiowa Creek, Bijou Creek, West Bijou Creek, Middle Bijou Creek, and East Bijou Creek. Big Sandy Creek and Horse Creek trend more easterly and flow into the Arkansas River. These waterways are prone to flash flooding and have a history of significant flood events, most recently occurring in 1997 and 1999. Waterways in the County contain over 110 flood control dams, although none are categorized as “high-risk.” The 100-year floodplains of these waterways are key areas for open space since they handle runoff and floodwaters, contain wetland and riparian zones, and provide important corridors for wildlife migration and habitat.

While surface water resources are the focus of this study for their importance to wildlife habitat and open space value, it is useful to note the underground aquifers are the sole water source throughout Elbert County. The designated groundwater basins of the Denver Basin Aquifer System contained within the county include Kiowa Bijou and Upper Big Sandy. Extensive recharge ponds have been constructed to augment recharge of this aquifer system that extends from Wyoming to the New Mexico state lines. Protecting water recharge areas and wetlands through large continuous tracts of open lands can preserve aquifer water quality and long-term water supply.

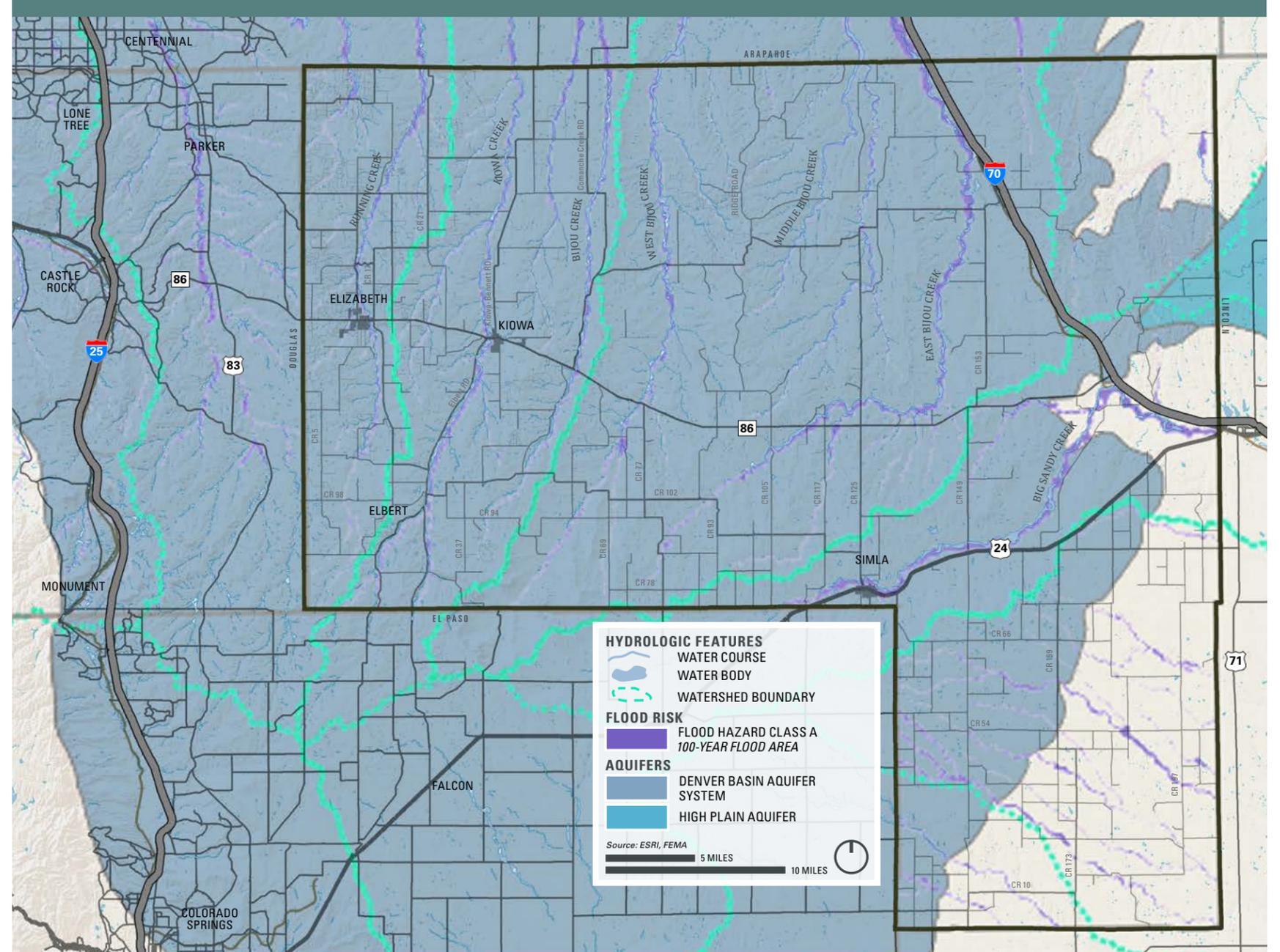
WILDLIFE HABITAT

The natural vegetation occurring within Elbert County consists mainly of high plains drought resistant grasses such as blue grama, buffalo grass, wheat grass and fescue, with large pockets of ponderosa pine forest lands in the western portion of the County. Cottonwoods and willows line the riparian corridors. Riparian corridors in Elbert County provide important habitat for wildlife species including black bear, mule deer, pronghorn and white-tailed deer. In the winter, riparian corridors also support the winter range of bald eagles, elk, and wild turkey. The diversity of wildlife species found in the county includes Abert’s Squirrel, Preble’s Meadow Jumping Mouse, red-necked pheasant, swift fox, massasauga, mountain lion, burrowing owl and black-tailed prairie dogs.

SCENIC RESOURCES

High elevations and ridgelines in Elbert County offer views to the scenic Front Range and iconic peaks such as Pikes Peak, Rampart Range, Mount Evans and Longs Peak. On a clear day, these mountain views are particularly visible from areas on the western portion of the county and Ridge Road, which runs north-south near the center. The mountain backdrop is enhanced by ponderosa pine forests and the overall rural visual character in the foreground. Areas in the county where scenic resources stand out include Ridge Road, Peaceful Valley, Elbert Road, and the forested areas along State Highway 86.

HYDROLOGY



COMMUNITIES AND PEOPLE

POPULATION

The 2014 estimated population in the County totaled 24,144, marking a 4.8 percent increase from 2010. By 2020, the population is projected increase to 25,706. Annually, Elbert County is experiencing a 1.5% annual rate of population growth, which is greater than the statewide annual rate of population growth of 1.3%. The majority of the County's residents live in areas surrounding the communities of Elizabeth, Kiowa and Simla. Smaller historic communities include Agate, Elbert, Fondis, Matheson and Ponderosa Park. The town of Kiowa is the County seat. Elbert County's proximity to Denver and Colorado Springs, lower cost of living and high quality of life has led to increased population growth particularly on the western portions of the County. The map on the right highlights areas experiencing greater rates of growth in the County and adjacent Front Range areas.

GROWTH PATTERNS

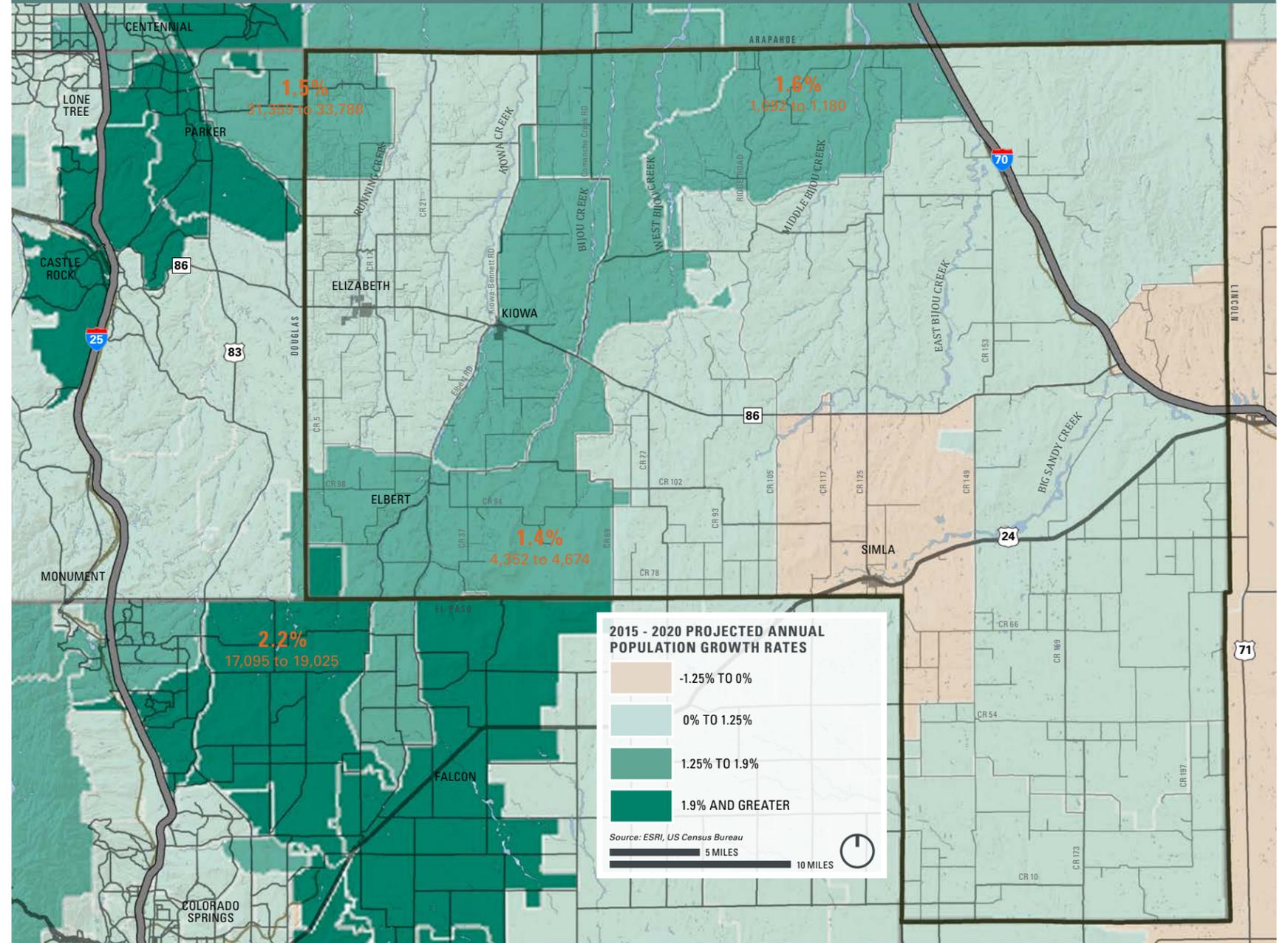
Future development patterns are a key consideration for the planning of future open spaces. The majority of Elbert County is rural in nature, consisting of large tracts of farming and ranching lands. The size of existing parcels can be an asset for open space planning purposes because the financial and political challenges of creating open spaces are typically much greater when attempting to protect several smaller parcels rather than addressing a larger, single area. However, large tracts of land in County are increasingly becoming subdivided as population growth continues to shift more people from the Denver Metro into outlying areas where more land is available and costs are relatively affordable. This is evident in the western portion of the County, where several rural subdivisions have been developed in recent years. While clustered development is encouraged in the County, typically the subdivision of large tracts of land results in large-lot subdivisions between 10 and 35 acres in size. Allowable densities of subdivisions are determined the type of water and sanitary sewer systems available, the amount of open space and amenities provided, and the type of development proposed.

ROOTS

Elbert County was established in 1874 from eastern portions of Douglas County and the dissolved Greenwood County. Its original extent included land reaching eastward to the Kansas state line. In 1889, Elbert County was reduced to its current size. Within 1,851 square miles resides a county rich in history that signifies the American West. Native Americans have inhabited Elbert County and the surrounding plains going back at least 1,200 years. The Apache entered the area in the beginning of the 1500s and dominated the high plains until the region saw the arrival of the Arapaho and Cheyenne around 1800.

The Pike's Peak Gold Rush brought "Fifty-Niners" west to mine gold in Colorado and with this brought white settlers to the areas historically inhabited by Native Americans. Most settlement in the County began as saw mill camps along the banks of streams. As these prairie camps became more established, economic activity grew to include logging, farming, cattle ranching and dairy farming. To this day, the County remains rooted in its Western heritage evidenced by a primarily agricultural economy, long-distance views and open spaces and rural character of the communities.

2015 TO 2020 POPULATION GROWTH



LOCAL ECONOMY

HOUSEHOLD INCOME

In comparison to most other counties along the Front Range, households in Elbert County have a higher median household income with the exception being adjacent Douglas County. Statewide median household income ranges between \$43,000 and \$73,000 according to 2015 data collected by the US Census Bureau. In Elbert County, the median income increases to \$89,200. Income levels across the County are not evenly distributed, however. The median household income is greatest in the western portion of the County, with income levels ranging between \$76,000 to \$106,000. East of Kiowa, the median household income ranges between \$46,000 to \$71,000.

WORKING AGRICULTURAL LANDS

Elbert County's economic base has long been rooted in cattle ranching and farming. Soils containing characteristics of prime farmland and farmland of state and local significance are found throughout the County, most notably in proximity to stream corridors and in the County's southeastern corner. 2015 surveys conducted by the United State Department of Agriculture indicate the County contains an inventory of 37,000 head of cattle, 41,000 acres of planted winter wheat and 2,900 acres of planted corn. These numbers indicate Elbert County raises approximately 1.5% of the State of Colorado's cattle and 2% of the State's winter wheat. Working agricultural lands in the County represent a significant source of revenue. The production of winter wheat alone generated \$6,750,650 in 2015.

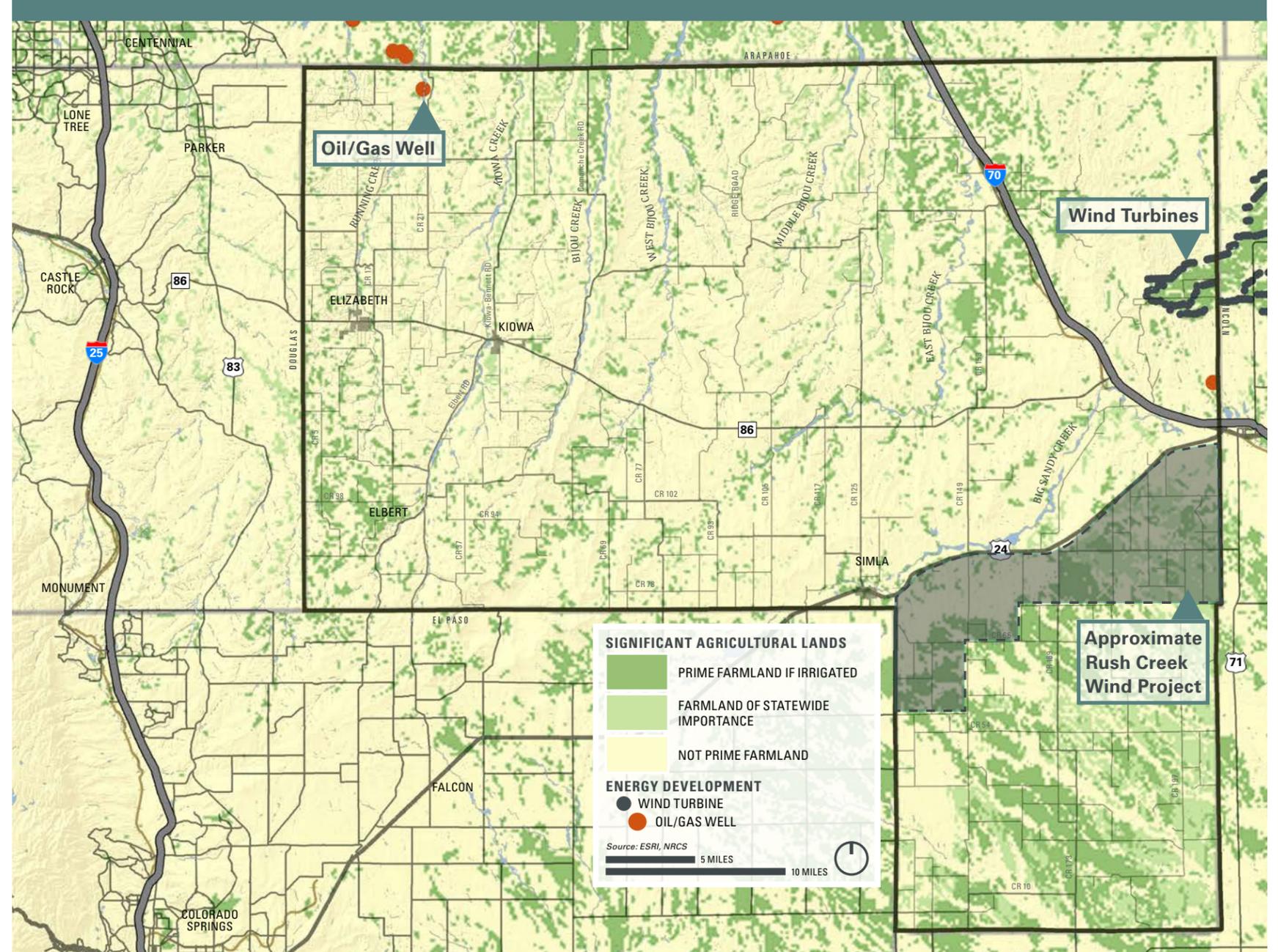
Elbert County is included in the nearly one-third of Colorado counties that are either economically dependent on the cattle industry or having the cattle industry serve an important role in their economies. In comparison to statewide cattle inventories, Elbert County's contribution falls just short of the top 10 counties in Colorado. Additionally, the equine industry is a significant revenue generator. Components of this industry include equine associations, horse shows and activities, 4-H Clubs and therapeutic riding programs. All these components contribute to a vibrant equine economy in the County through fees and labor. While it is difficult to calculate the direct contribution, a 2007 Census of Agriculture indicates the County had equine sales totaling \$1.31 million ranking Elbert County seventh overall in Colorado.¹

ENERGY

Interest in oil and gas development in Elbert County has grown with increasing drilling activity in nearby Weld County. The County is located along the oil and gas rich Niobrara shale formation, which runs from southeast Wyoming down the Front Range and into Elbert County and parts of Kansas and Nebraska. Elbert County began exploring oil and gas drilling in their jurisdiction around 2011. According to initial estimates, the Niobrara formation in Colorado could yield as much as \$250 billion in oil and gas and each oil rig could potentially provide 100 jobs.² Weld County has experienced significant economic growth from oil and gas drilling, including the use of horizontal drilling and hydraulic fracturing, or "fracking." In 2012, approximately 16,500 active oil and gas wells were operating in Weld County. That same year, 150 producing oil and gas wells were located in Elbert county. While the County has not experienced the level of oil and gas activity seen in Weld County, interest in the economic potential of drilling continues.

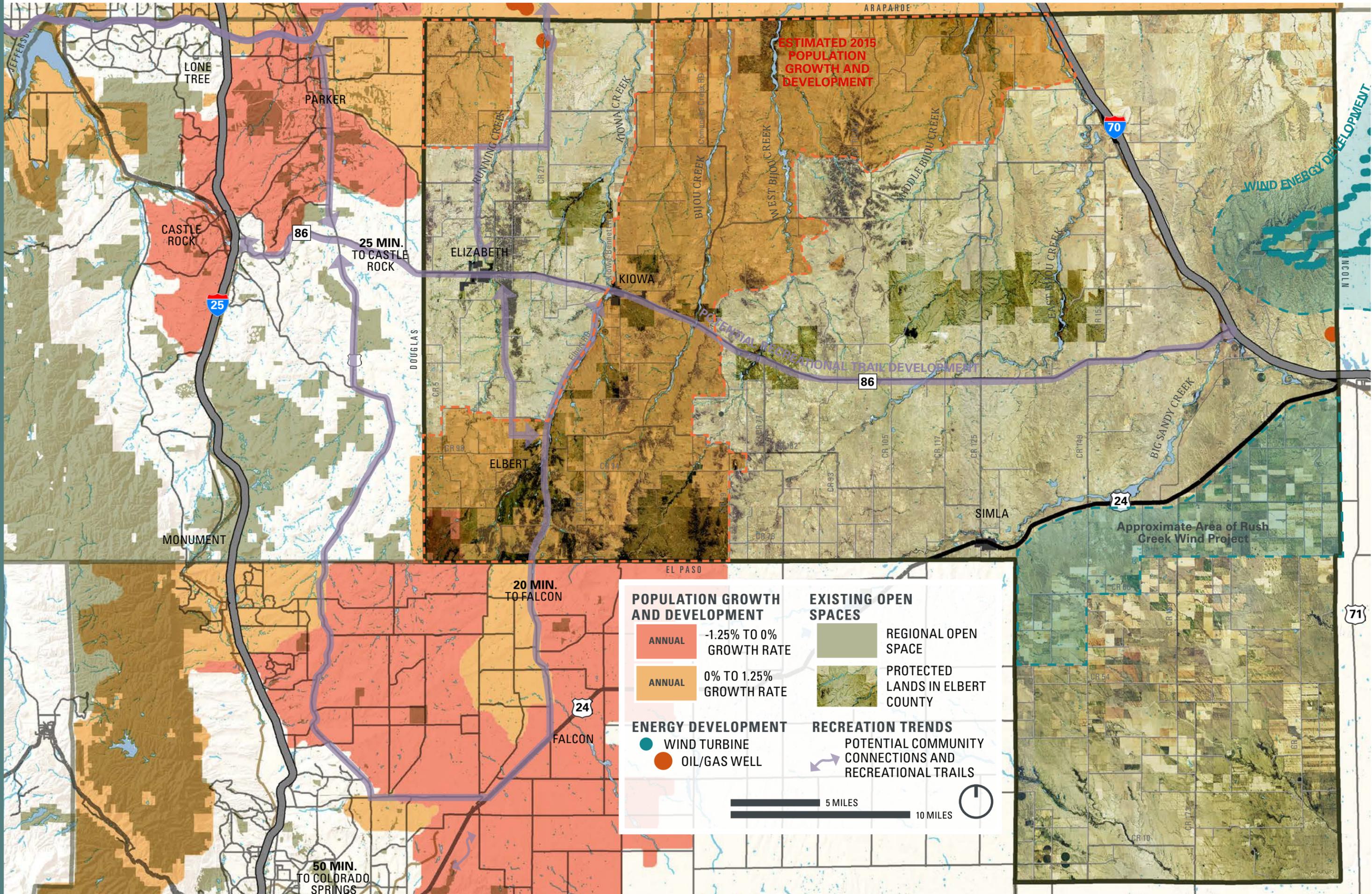
Renewable energy resources are a growing potential in the County. Recent applications for development indicate investments in solar and wind, in particular, are increasing in and around Elbert County. Elbert County's wind energy potential ranges from fair to good on the eastern portion of the county. Turbines have begun to emerge in the Cedar Point Wind Site, with additional turbines located just over the County line in the Limon Wind Site (See map on right). Solar energy potential is also high. In most locations across the County 100,000 square feet of solar panel surface area could generate over 530 watt hours per square foot, per day, or enough energy to meet the needs of over 1,300 homes. Renewable energy generation has the potential to provide substantial economic benefits for the County.

KEY ECONOMIC CONTRIBUTORS



¹ Summit Economics (2012). The Economic Impact of the Equine Industry in Douglas and Elbert Counties.

² Illescas, Carlos (2011). Elbert County banks on oil boom. Retrieved September 16, 2016, from <http://www.denverpost.com/2011/04/12/elbert-county-banks-on-oil-boom/>



THE CASE FOR OPEN SPACE

The value of open space often differs depending on the lens of the viewer. Whether through wildlife habitat protection, economic impact, recreation amenity or preservation of community character, open space conservation can provide value to conservationists, planners and landowners alike. Strategies to protect open space can be comprehensive to emphasize ecosystem protection, quality of life, aesthetics, agriculture and ranching activities and meet the goals of all community members.



ENVIRONMENTAL VALUE

WATER

Streams and drainage corridors are important natural features in the County and their protection and enhancement as open space is critical. As development from surrounding metro areas spreads into Elbert County and large expanses of open space are lost, the integrity of water resources is threatened. In the County, like many other suburban and rural settings, household water is supplied by wells that tap into an underground aquifer. Open spaces adjacent to streams maintain the integrity of water resources and filter pollutants from stormwater runoff. These areas act as filters, allowing rainwater to percolate into the ground without being polluted and recharging aquifers with clean water.

WILDLIFE HABITAT

Riparian area protection and conservation of working agricultural lands in a rural area such as Elbert County are critical to support a rich diversity of wildlife species. Open space buffers adjacent to streams and waterways provide numerous environmental benefits for wildlife habitat, including stream bank stabilization and promotion of tree canopies to shade streams helping to create a desirable aquatic and riparian wildlife environment. Open space connectivity provides critical pathways for migratory wildlife that move between seasonal breeding areas and winter protection. The conversion and fragmentation of agricultural lands to residential and community development is damaging both for fish and wildlife as ranches and farms provide large open spaces important to wildlife habitat.



ECONOMIC VALUE

LOCAL AND NATIONAL ECONOMIES

Continuation of livestock grazing, agriculture and equine activities is important to the economies of Elbert County and the State. Agriculture is the third largest driver in Colorado's economy and the state ranks 10th in overall cattle numbers nationwide. Agriculture directly benefits the local economy of Elbert County through product sales, job creation, and secondary markets such as food processing. Equine activities contribute to the local economy and the horse culture within the County attracts large events and horse owners. The loss of ranches and farmlands in favor of residential development can place a burden on local government budgets. Typically, working agricultural lands pay more in taxes than they require in services, while residential lands require more in services than they pay in taxes.

PROPERTY VALUES

Open space protection can maintain and enhance property values. Frequently, property values near conserved lands are higher than those of properties surrounded by houses. These properties near open spaces are more desirable because they offer views of and access to the natural landscape, seclusion and higher resale value. The National Association of Home Builders estimate that parks and recreation areas can increase the value of nearby building sites by 10 to 15%.

RECREATION

Outdoor recreation in Colorado leads to significant consumer spending and is an essential economic generator. Annually, outdoor recreation contributes \$21 billion in direct expenditures, supports 313,000 jobs and provides \$4.9 billion in local, state and federal taxes according to the 2014 Statewide Comprehensive Outdoor Recreation Plan. The northeast region of the State, where Elbert County is located, represents the smallest economic contribution in the state but outdoor recreation still supports 4,528 jobs and \$34 million annually in local taxes. Continued development of outdoor recreation in the County represents a valuable economic opportunity.



COMMUNITY VALUE

IDENTITY

Ranches and farmland create a recognizable and unique community character that is an integral part of Elbert County's heritage and identity. Development of working agricultural lands changes the rural character and scenic views of the County's western landscape. As development encroaches further into the County, it creates uncertainty for ranchers and farmers as it can be difficult to ensure that agricultural production and livestock operations can remain a viable land use. Avoiding further fragmentation and development of critical agricultural and grazing areas can protect agricultural investments and preserve the rural lifestyle of the County.

HEALTH AND WELLNESS

Outdoor recreation is shown time and again to be good for individual's overall health. Coloradans are some of the healthiest and most active people in the U.S. partly due to the diverse outdoor recreation opportunities from the peaks to the plains. Residents along the Front Range get outside and recreate closer to home in an effort to save time and money and spend longer periods of time in a natural setting, according to surveys recently completed by the Metro Denver Economic Development Corporation. An abundance of natural and open spaces in the County would encourage healthy, active lifestyles and provide inexpensive, close-to-home recreation opportunities.

CONNECTIONS TO NATURE

Spending time outdoors creates a deeper appreciation of open spaces and inspires stewardship of natural resources. In Elbert County, many residents are connected to the land through farming, ranching and equestrian activities. However, nationwide youth and families are spending less time outdoors than they used to. Ensuring connections to the outdoors through open spaces and opportunities to experience working agricultural lands is key to cultivating a population of land stewards.





the PROCESS

Extensive data analysis and feedback from key stakeholders guided this report to establish an approach and reasoning for the expansion and protection of open space in Elbert County. The process that guided this report's open space suitability analysis is outlined on the following page. The first step in the analysis process involved data collection of landscape criteria important to open space. Criteria were organized and ranked around three landscape characteristics: **natural and working agricultural lands**, **scenic quality** and **character of the parcel**. Identification and ranking of suitable criteria for open space in Elbert County involved discussions with local planning officials, state wildlife specialists and conservation organizations.

Each of the three landscape character categories were analyzed using a weighted overlay analysis technique. This method layers landscape criteria according to rank, resulting in a map that spatially illustrates areas of high, medium and low suitability. The analysis of each landscape character category were combined to create an overall open space suitability composite, which was then evaluated against **future open space considerations**. These considerations included growth and development pressures that have the potential to change existing land uses and impact future open space conservation. The map on the following page shows the resulting gradient of open space suitability in Elbert County.

A. NATURAL AND WORKING AGRICULTURAL LANDS

Goal / Identify lands with high natural quality and agricultural value to maintain and preserve sensitive and resource areas.

B. SCENIC QUALITY

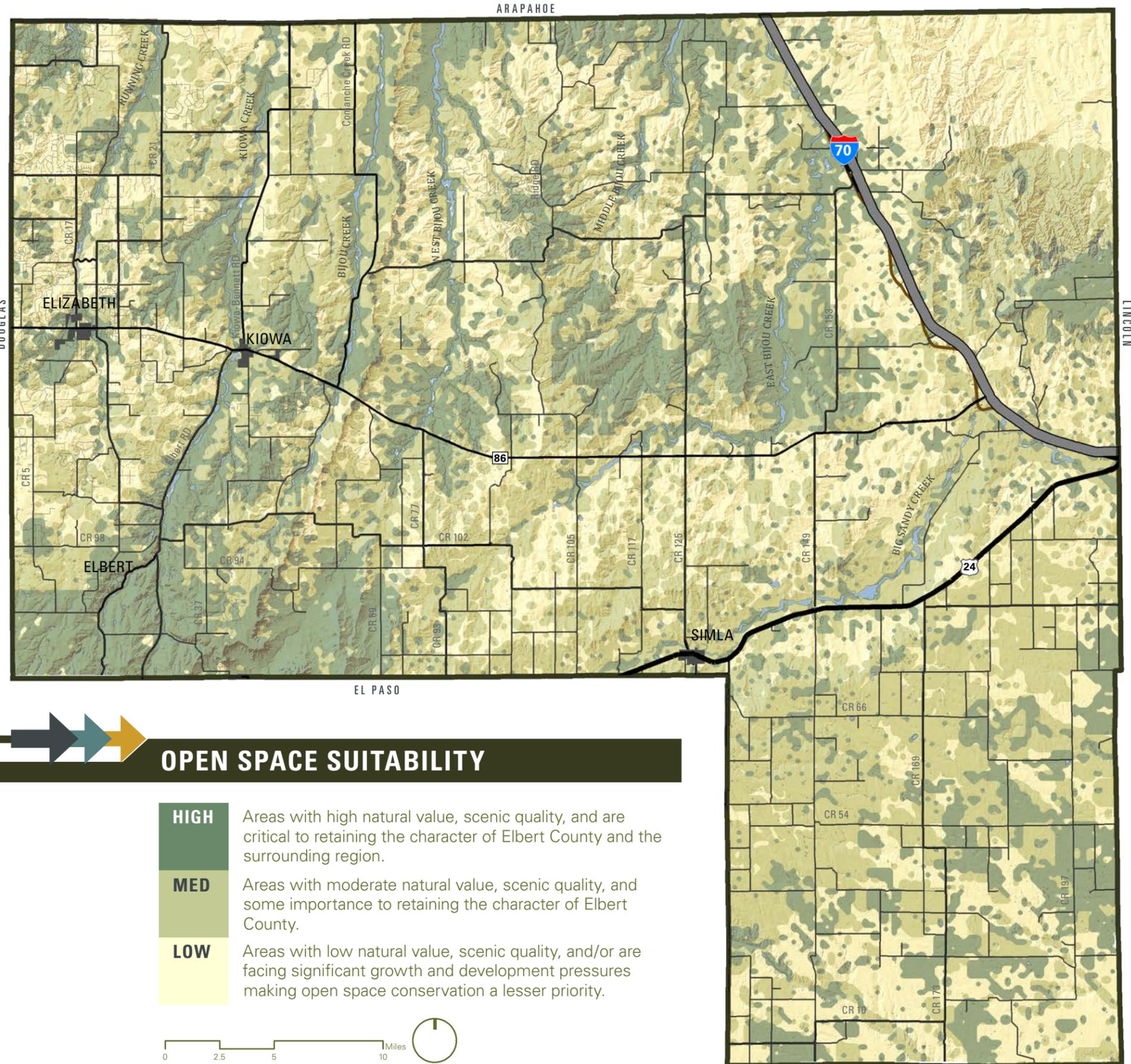
Goal / Identify lands that are highly visible and where open space would preserve scenic areas or views to surrounding features.

C. CHARACTER OF PARCEL

Goal / Identify sizable parcels of land in close proximity to existing conserved lands, recreation opportunities, neighborhoods or schools to preserve large contiguous landscapes.

FUTURE OPEN SPACE CONSIDERATIONS

Goal / Identify growth and development pressures that have the potential to change existing land uses and impact future open space conservation.



OPEN SPACE SUITABILITY

- HIGH** Areas with high natural value, scenic quality, and are critical to retaining the character of Elbert County and the surrounding region.
- MED** Areas with moderate natural value, scenic quality, and some importance to retaining the character of Elbert County.
- LOW** Areas with low natural value, scenic quality, and/or are facing significant growth and development pressures making open space conservation a lesser priority.





open space PRIORITIES

This report seeks to identify strategies that can be used to enrich the quality of life and retain the unique character of Elbert County through open space that protects wildlife habitat, conserves working agricultural lands, preserves scenic resources and provides access for recreation. The study provides a framework for private property owners, conservation organizations and local decision makers to identify priority areas for open space in Elbert County. It is intended to help landowners explore a range of options for the future of their land, assist conservation organizations identify open space opportunities and guide decision makers as development pressures increase. This vision offers approaches and tools to support conservation priorities and ensure open space is enjoyed for generations to come.

PRIORITIES FOR CONSERVATION

Engagement with stakeholders representing a variety of interests, including community planners, recreation providers, conservation and land trust organizations and residents, helped identify four distinct open space conservation purposes in Elbert County:

- Working Agricultural Lands Preservation
- Wildlife and Habitat Protection
- Scenic Resource Protection
- Recreation Access

APPROACHES FOR CONSERVATION

WORKING AGRICULTURAL LANDS PRESERVATION

Designating areas to ensure working agricultural lands remain in productive use can protect viable farms and ranches while also benefiting native plant species. Residential development should be limited in areas important to working agricultural lands to preserve the availability of areas for farming and ranching and protect the agricultural base of the County. A sample of approaches to preserving working agricultural lands includes:

- Agricultural Protection Zoning
- Clustered development to preserve open space adjacent to residential neighborhoods and working agricultural lands
- Subdivision ordinances and regulations
- Conservation easements

WILDLIFE AND HABITAT PROTECTION

Riparian area protection and conservation of native vegetation communities is key to protecting wildlife habitat. Protecting streams and wetlands not only enhances riparian and aquatic ecosystems but also protect floodplains and water quality of significant water resources including aquifers. In rural areas such as Elbert County, communities should carefully evaluate agricultural operations within the riparian areas and regulate livestock near and around streams. A sample of approaches to protect wildlife habitat includes:

- Exclude development on slopes greater than 15% adjacent to streams
- Establish a minimal acceptable vegetated buffer of 100 feet from the edge of a stream or wetland
- Promote rotational grazing to avoid environmental damage and benefit healthy ecosystems

SCENIC RESOURCE PROTECTION

Tall stands of ponderosa forests, Front Range views and the agricultural character of Elbert County are all important scenic resources to protect. The expansive views of the rural landscape offered in the County are

threatened by expansion of community and energy development. A sample of approaches to protect scenic resources includes:

- Ridgetop and visible area development restrictions
- Community separators and land use planning
- Clustered development

RECREATION ACCESS

Few open spaces in Elbert County are open to public access for recreation. As the population grows in the community, desire for recreation opportunities will increase. The County's natural setting is compatible for a variety of recreation activities such as horseback riding, biking, hiking and wildlife watching. Approaches to providing access to recreation include:

- Trail development in conjunction with highway improvements
- HOA and neighborhood development open space requirements
- Nature and recreation greenways

TOOLS FOR LAND PROTECTION

Public, private and non-profit entities can protect land in Elbert County. The methods for protection vary greatly and range from full ownership acquisition to easements to partnerships with conservation organizations. Most importantly, the landowner has a range of choices to explore if open space conservation is desired. Among the most common methods for protecting land for the purpose of conservation include:

- Conservation easements
- Fee-simple acquisitions
- Clustered development regulations
- Colorado Agricultural Land Classification
- Leases or licenses
- Trail easements
- Land donations
- Partnerships with nonprofit land preservation organizations

Strengthening relationships between private landowners, land conservation organizations, regional and state entities can build a foundation for partnerships for future land protection efforts. Joint efforts have the potential to save resource dollars and cross jurisdictional boundaries thereby benefiting land owners, the County and surrounding communities.



PRIORITIES AND APPROACHES FOR CONSERVATION



WORKING AGRICULTURAL LANDS

Working agricultural lands have long been an essential economic driver in the County and foster the western landscape that residents appreciate. Preservation of large areas of working agricultural lands is critical to the continued functional operation of agriculture and grazing; thus ensuring economic success and the agricultural roots of Elbert County.



WILDLIFE and HABITAT

Maintaining a diversity of wildlife species hinges upon healthy habitat, which in Elbert County includes riparian corridors, expansive prairie grasslands and stands of ponderosa forest. Protection of these habitat areas is critical to the success of wildlife populations and important to retain species richness in Elbert County.



SCENIC QUALITY

Dramatic views of the Front Range provide a backdrop for the ridge and valley signature topography of Elbert County. Protection of scenic resources preserves the western identity and helps retain rural character as the County continues to grow and develop.



RECREATION

From the peaks to the plains, Coloradans enjoy a diversity of outdoor recreation opportunities. Providing residents and visitors of Elbert County with outdoor recreation experiences will encourage active, healthy lifestyles and help foster a respect of open spaces and stewardship of natural resources.

A NW ELBERT COUNTY

The western portion of Elbert County is experiencing significant exurban growth pressures from the Denver Metro area. Large lot subdivisions and residential development is typical in this area, which lies less than 30 minutes from Parker and Castle Rock. Prioritizing recreation access and scenic resource protection in this area will enhance quality of life. Accessible open space and trails will encourage an active, outdoor lifestyle and protection of views to the Front Range and community separators will retain the unique character.

PRIORITIES	APPROACHES FOR CONSERVATION
	<ul style="list-style-type: none"> Cluster development and require new subdivisions set aside land for publicly accessible open spaces. Develop recreation greenways along travel routes and riparian corridors. Develop community connector trails and equestrian paths.
	<ul style="list-style-type: none"> Restrict development on ridgetops and highly visible areas. Create community separators.
	<ul style="list-style-type: none"> Exclude development a minimum of 100' from stream edges.

B STATE HIGHWAY 86

Residential development in the western portion of Elbert County will likely spark community and economic growth in the towns of Elizabeth and Kiowa. Open space conservation priorities in this area should promote recreation through trails along SH 86, Elbert Road and connective greenways. Two Boy Scout Camps currently operate in the scenic Peaceful Valley and a popular 50-mile bike ride loops through this area. Conservation of scenic resources will greatly enhance these recreation experiences.

PRIORITIES	APPROACHES FOR CONSERVATION
	<ul style="list-style-type: none"> Require new community development set aside land for publicly accessible open spaces. Construct trails in conjunction with highway and road improvements. Develop recreation greenways along travel routes, riparian corridors and forested areas.
	<ul style="list-style-type: none"> Restrict development on ridgetops and highly visible areas. Create community separators.
	<ul style="list-style-type: none"> Cluster development to preserve working agricultural lands adjacent to residential development.

C RIDGES AND FORESTS

Rocky ridges and tall ponderosa forests frame views of Pikes Peak and the Front Range in the southwestern corner of the County. Subdivision of lots has not begun in earnest as in areas to the north, but residential development is quickly occurring just across the El Paso County line. Conservation priorities in this area should focus on protection of ridgeline views and the scenic forests and grass understories, which also support a diversity of wildlife species.

PRIORITIES	APPROACHES FOR CONSERVATION
	<ul style="list-style-type: none"> Restrict development on ridgetops and highly visible areas. Cluster development to preserve open spaces adjacent to residential development. Preserve agricultural views through community separators.
	<ul style="list-style-type: none"> Preserve forests and vegetation of the High Plains through livestock regulations that benefit wildlife. Exclude development a minimum of 100' from stream edges.
	<ul style="list-style-type: none"> Develop recreation greenways within undeveloped ridgeline corridors.

D RIPARIAN CORRIDORS

Multiple north flowing creek corridors cut across the plains of Elbert County. These intermittent and perennial waterways support critical riparian habitat, winter range for a diversity of species and wildlife migration corridors. Protection of wildlife habitat along these stream corridors is the priority in this area. Stream protection provided through development buffers not only benefits wildlife, but also protects the integrity of water quality and reduces risks from flooding.

PRIORITIES	APPROACHES FOR CONSERVATION
	<ul style="list-style-type: none"> Promote riparian area health and exclude development a minimum 100' from stream edges. Exclude development on slopes greater than 15% adjacent to streams to minimize erosion. Regulate grazing and agriculture to benefit healthy ecosystems.
	<ul style="list-style-type: none"> Restrict development on ridgetops and highly visible areas. Cluster development to preserve natural areas adjacent to residential development.
	<ul style="list-style-type: none"> Limit subdivision of land to larger parcels to support contiguous working agricultural lands and wildlife habitat.

E RIDGETOPS

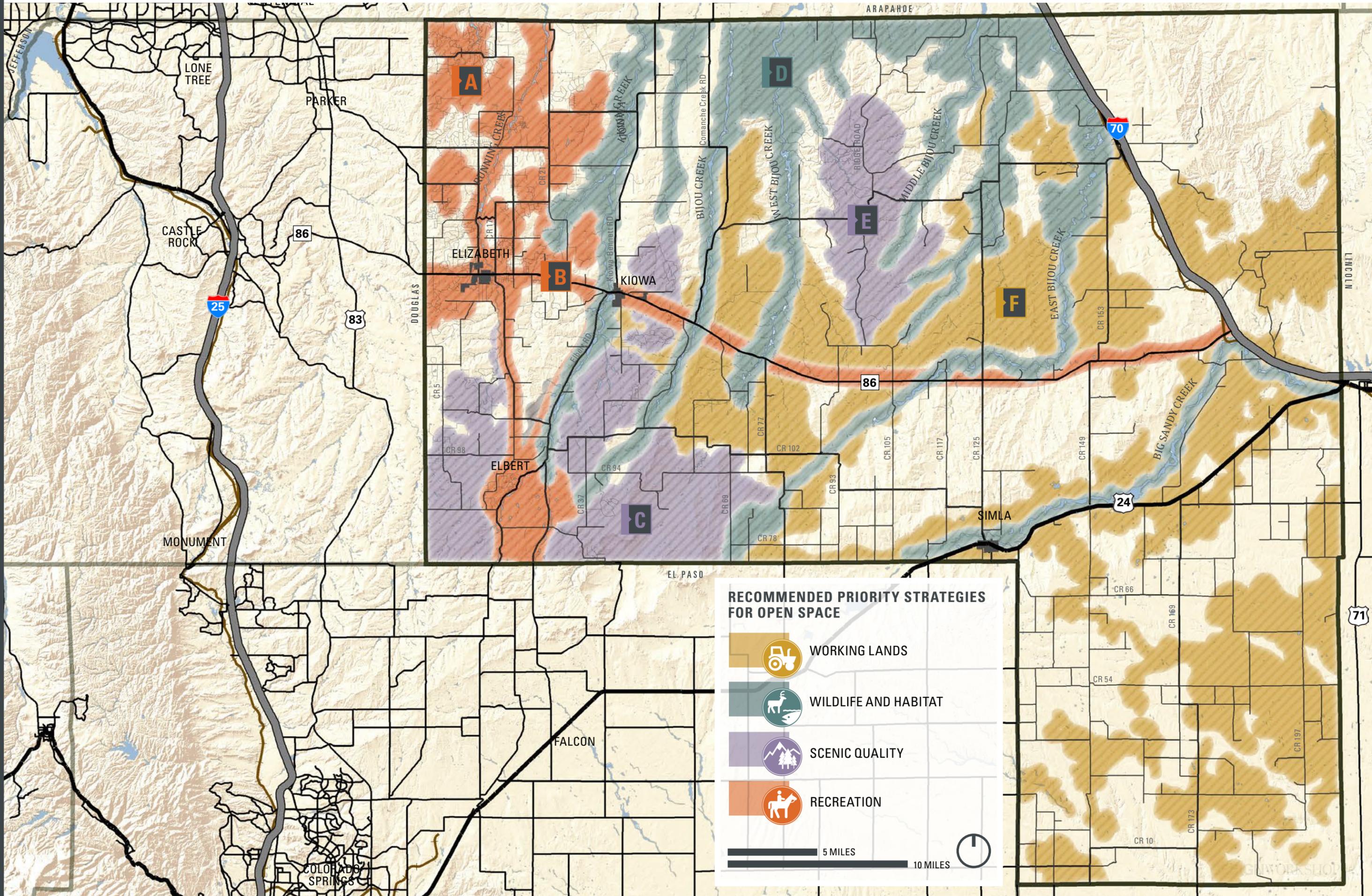
Ridges followed by low valleys characterize Elbert County and mark the transition from the High Plains to the Rocky Mountains. Ridge Road offers panoramic views of Pikes Peak to the south, Mt. Evans to the west, Longs Peak to the north and unbroken plains to the east. Conservation priorities in this area should protect these views. Future community development in this area should be carefully sited to avoid disrupting scenic views. Open space and trails should be used to connect neighborhoods and potentially attract outside visitors.

PRIORITIES	APPROACHES FOR CONSERVATION
	<ul style="list-style-type: none"> Restrict development on ridgetops and highly visible areas. Cluster development to preserve open spaces adjacent to residential development. Preserve agricultural views through community separators.
	<ul style="list-style-type: none"> Require new community development set aside land for publicly accessible open spaces. Develop community hiking and equestrian trails.
	<ul style="list-style-type: none"> Cluster development to preserve working agricultural lands adjacent to residential development.

F WORKING AGRICULTURAL LANDS

Agriculture and grazing are the backbone of the local economy. Protection of lands critical to the continued success of livestock operations and agricultural production is important to the economy and identity of Elbert County and its communities. Conservation priorities in these areas should support working agricultural lands. Designating agricultural areas and limiting residential development and the fragmentation of lands will be key to protecting viable working agricultural lands.

PRIORITIES	APPROACHES FOR CONSERVATION
	<ul style="list-style-type: none"> Protect areas important to agriculture and grazing through zoning. Prevent fragmentation of working agricultural lands through subdivision ordinances that limit small parcels. Consider utilizing conservation easements and other mechanisms that support continued agricultural and ranching uses but limit physical development.
	<ul style="list-style-type: none"> Restrict development on ridgetops and highly visible areas. Cluster development to preserve working agricultural lands adjacent to residential development.
	<ul style="list-style-type: none"> Use best management practices that protect stream edges for agricultural and grazing impacts.





APPENDIX: LAYER upon LAYER

Open spaces in Elbert County preserve lands important for both their natural and economic value and provide opportunities to maintain the county's western character. Local research and input from the public, experts and key stakeholders informed the development of criteria critical to open space in the county. Criteria were organized around three landscape characteristics: **natural and working agricultural lands, scenic quality and character of the parcel**. With a detailed understanding of the landscape characteristics important to open spaces, a process to assess lands within Elbert County for the presence of these characteristics was developed. This process relied on a weighted overlay analysis technique, a method of ranking and "layering" criteria to discover areas with a high concentration of criteria suitable for open space. The process utilized in this report is diagrammed on the facing page. The following pages have been included to describe in detail this extensive data analysis process.

A. NATURAL AND WORKING AGRICULTURAL LANDS p. 20

Goal *Identify lands with high natural quality and community value to maintain and preserve sensitive and resource rich lands important to Elbert County and the surrounding region.*

A1. Wildlife habitat

- Concentration Areas
- Nest Site/Production Areas
- Severe Winter Range
- Winter Range
- Forage Areas
- Migration Corridors
- Overall Range
- Resident Population Areas
- Peripheral Range
- Historic Range

A2. Land Characteristics

- Hydrology
- Land Cover
- Landforms

A3. Working Agricultural Lands

- Agriculture/Cultivated Croplands
- Grazing

B. SCENIC QUALITY p. 34

Goal *Identify lands where open space would preserve scenic lands or views important to the identity of Elbert County and the surrounding region.*

B1. Views

- Frequency seen from major roads in Elbert County
- Frequency seen from major roads adjacent to Elbert County

B2. Scenic Resources

- Natural
- Cultural and Historic

C. CHARACTER OF PARCEL p. 44

Goal *Identify sizable parcels of land in close proximity to conserved lands, recreation opportunities, neighborhoods and schools to preserve contiguous landscapes and promote accessibility for Elbert County residents.*

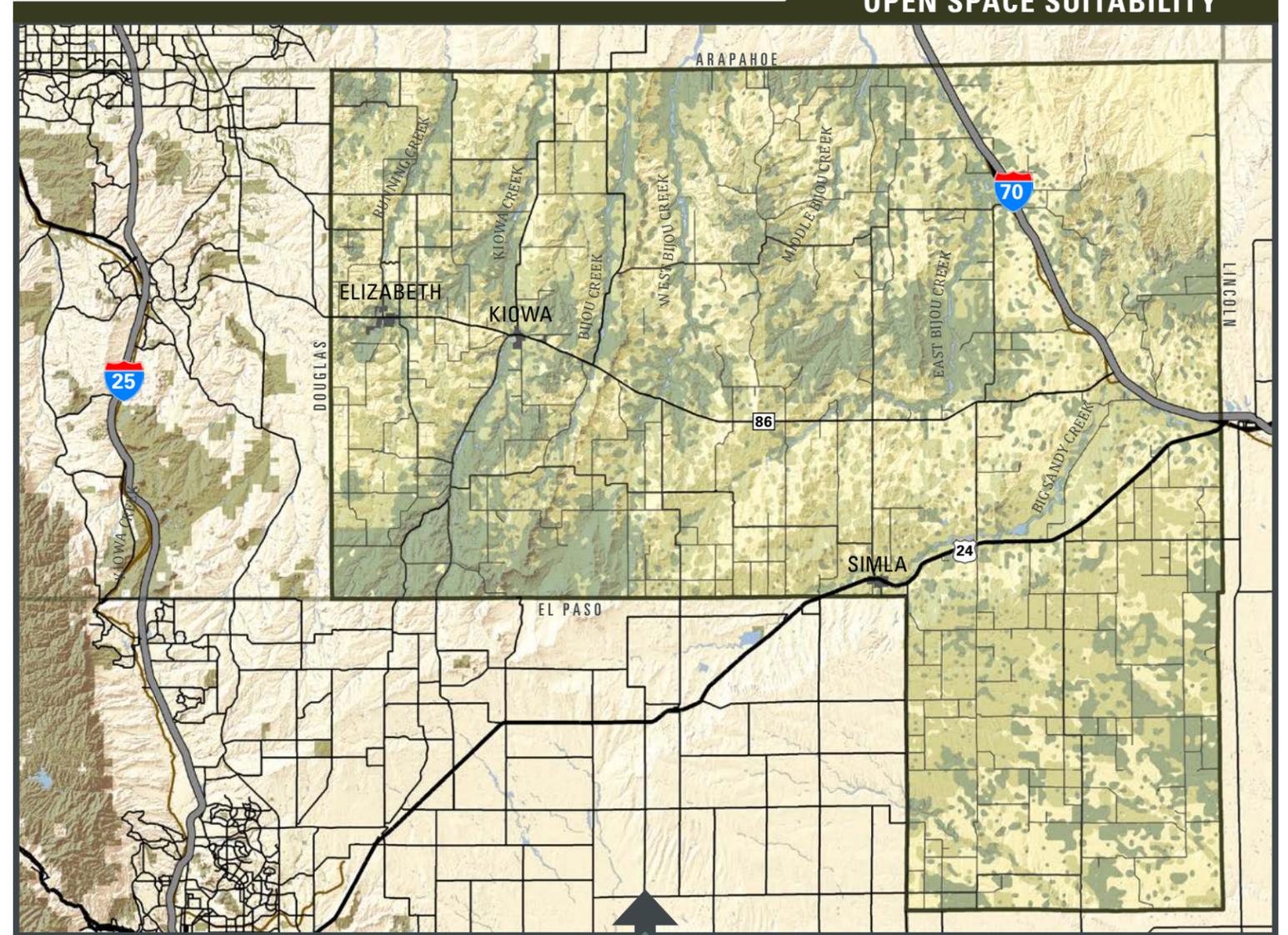
C1. Size

- Parcel size

C2. Adjacency

- Proximity to conserved lands
- Proximity to recreation opportunities
- Proximity to community development

OPEN SPACE SUITABILITY



FUTURE OPEN SPACE CONSIDERATIONS

Goal *Identify growth and development variables that have the potential to impact future open space conservation.*

FUTURE GROWTH POTENTIAL

- Lands Likely to Develop
- Transportation
- Accessibility

ENERGY AND EXTRACTIVE RESOURCES

- Oil and Gas
- Wind Energy

LAND POLICY

- Comprehensive Plan/Zoning
- Urban Growth Boundaries
- Land Ownership
- Regional Open Space
- Subdivision Regulations

A. NATURAL AND WORKING AGRICULTURAL LANDS PROCESS OVERVIEW

Goal: Identify lands with high natural quality and community value to maintain and preserve sensitive and resource rich lands important to Elbert County and the surrounding region.

1. A database of criteria important to wildlife habitat, land characteristics and working agricultural lands was built using Geographic Information (GIS) data from various sources. Each input criteria was ranked from high to low based on relative importance. Identification and ranking of suitable criteria for natural and working agricultural lands in Elbert County involved discussions with local planning officials, state wildlife specialists and conservation organizations.

2. These criteria were overlaid to create composite maps. Those areas containing more favorable conditions for wildlife habitat, land characteristics and working agricultural lands resulted in higher values.

3. The analysis maps were combined to create a composite map to identify lands with the greatest criteria for natural and working agricultural lands (page 21). This analysis was combined with the composite maps from B. Scenic Quality and C. Character of Parcel to identify the overall open space suitability within Elbert County.

CRITERIA	INFLUENCE
A3. WORKING AGRICULTURAL LANDS	
AGRICULTURE/CULTIVATED CROPLANDS 50%	50%
<i>Prime Farmland</i>	
<i>Farmland of Statewide Significance</i>	
<i>Farmland of Local Significance</i>	
<i>All Other Existing Croplands</i>	
GRAZING 50%	
<i>Less than 1/2 Mile From a Water Source</i>	
<i>Slopes between 0 and 3 Degrees</i>	
<i>Great Plains Mixedgrass Prairie and Shrubland</i>	
<i>Great Plains Shortgrass Prairie and Shrubland</i>	
<i>Southern Rocky Mountain Ponderosa Pine (Understory)</i>	
<i>Herbaceous Agricultural Vegetation (Hay/Pasture)</i>	
<i>Great Basin Saltbrush</i>	
<i>1/2 to 1 Mile From a Water Source</i>	
<i>Slopes between 3 and 10 Degrees</i>	
<i>Introduced/Semi Natural Vegetation (Perennial)</i>	
<i>Herbaceous Agricultural Vegetation (Cultivated Crops)</i>	
<i>Pinyon-Juniper Shrubland</i>	
<i>Slopes between 10 and 30 Degrees</i>	
<i>Great Plains Sand Grassland and Shrubland</i>	
<i>Great Basin and Intermountain Sagebrush Shrubland and Steppe</i>	
<i>Great Basin and Intermountain Dry Shrubland and Grassland</i>	
<i>Introduced/Semi-Natural Vegetation (Annual)</i>	
<i>Lower Montane/Foothill Forest</i>	

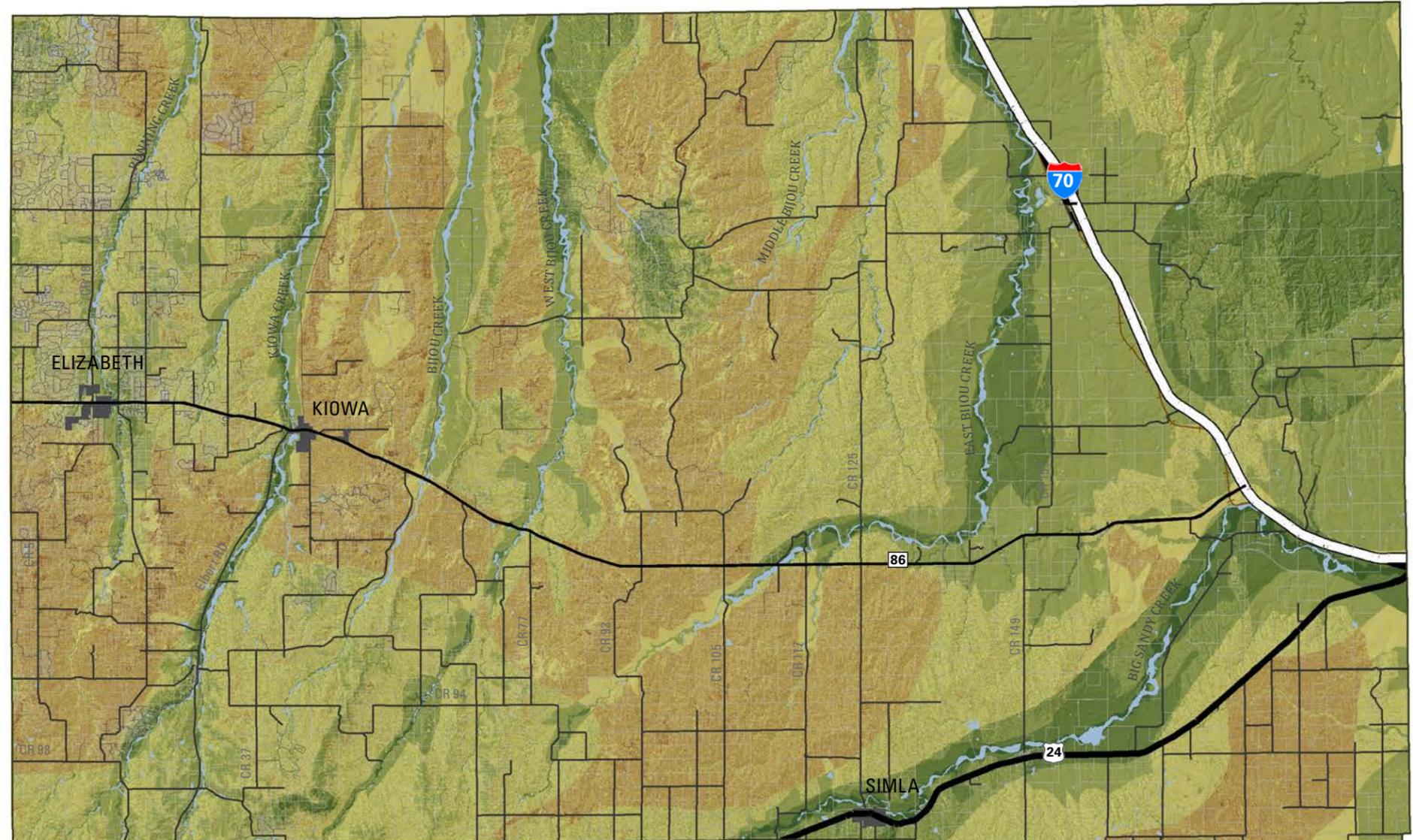
CRITERIA	INFLUENCE	
A2. LAND CHARACTERISTICS		
HYDROLOGY 40%	40%	
<i>Lakes</i>		
<i>Streams</i>		
<i>Wetlands</i>		
<i>100 Year Floodplain</i>		
VEGETATED COVER 20%		20%
<i>Forest/Woodland</i>		
<i>High Montane Vegetation</i>		
<i>Shrubland/Grassland</i>		
<i>Agricultural Vegetation</i>		
<i>Semi-Desert</i>		
<i>Introduced/ Semi-Natural Vegetation</i>		
<i>Rock/Scree</i>		
LANDFORMS 20%	20%	
<i>Cliffbands (Slopes greater than 30%)</i>		
<i>Ridgelines and Hilltops</i>		
<i>Quaternary Alluvial Fans</i>		
<i>Eolian Deposits (Sand Dunes)</i>		
<i>Steep Slopes (Slopes between 20 to 30%)</i>		
<i>Shale</i>		
<i>Hillsides and Foothills (Slopes between 10 to 20%)</i>		
<i>Sandstone</i>		

CRITERIA	INFLUENCE
A1. WILDLIFE HABITAT	
CONCENTRATION AREAS 20%	20%
<i>Black Bear (Fall and Summer)</i>	
<i>Mule Deer (Year-Round and Winter)</i>	
<i>Pronghorn (Year-Round and Winter)</i>	
<i>White-Tailed Deer (Year-Round)</i>	
NEST SITE/PRODUCTION AREAS 15%	15%
<i>Peregrine Falcon (Potential)</i>	
<i>Wild Turkey Roost</i>	
<i>Elk Production Areas</i>	
<i>Geese Production Areas</i>	
SEVERE WINTER RANGE 15%	15%
<i>Pronghorn</i>	
<i>Mule Deer</i>	
WINTER RANGE 10%	10%
<i>Bald Eagle</i>	
<i>Elk</i>	
<i>Mule Deer</i>	
<i>Pronghorn</i>	
<i>Wild Turkey</i>	
FORAGE AREAS 10%	10%
<i>Great Blue Heron</i>	
<i>Bald Eagle (Winter)</i>	
MIGRATION CORRIDORS 10%	10%
<i>Mule Deer</i>	
OVERALL RANGE 5%	5%
<i>Abert's Squirrel</i>	
<i>Preble's Meadow Jumping Mouse</i>	
<i>Red-Necked Pheasant</i>	
<i>Swift Fox</i>	
<i>Black Bear</i>	
<i>Massasauga Rattlesnake</i>	
<i>Mountain Lion</i>	
<i>White Tailed Deer</i>	
<i>Wild Turkey</i>	
RESIDENT POPULATION AREAS 5%	5%
<i>Elk</i>	
<i>Mule Deer</i>	
PERIPHERAL RANGE 5%	5%
<i>Mountain Lion</i>	
HISTORIC RANGE 5%	5%
<i>Greater Prairie Chicken</i>	
<i>Sharptail Grouse</i>	



A. NATURAL AND WORKING AGRICULTURAL LANDS COMPOSITE MAP

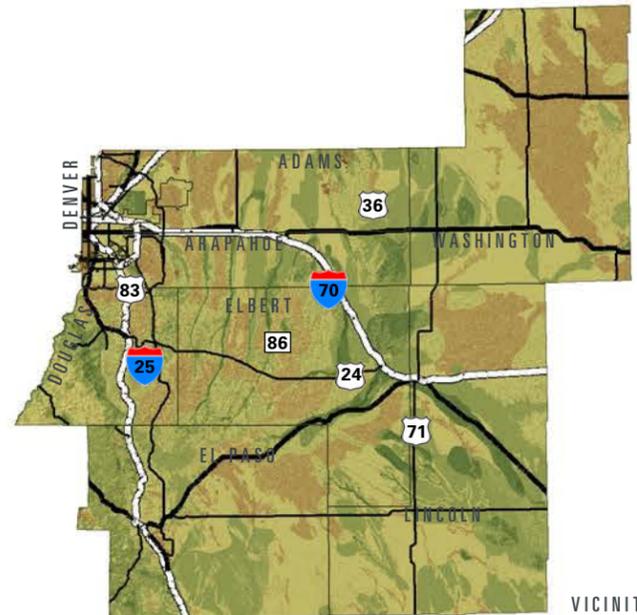
-  Elbert County
 -  Local Road
 -  Highway
 -  Interstate
 -  Rail Road
 -  Lakes
 -  Streams
- Natural and Working Lands
- Significance
-  High
 -  Low



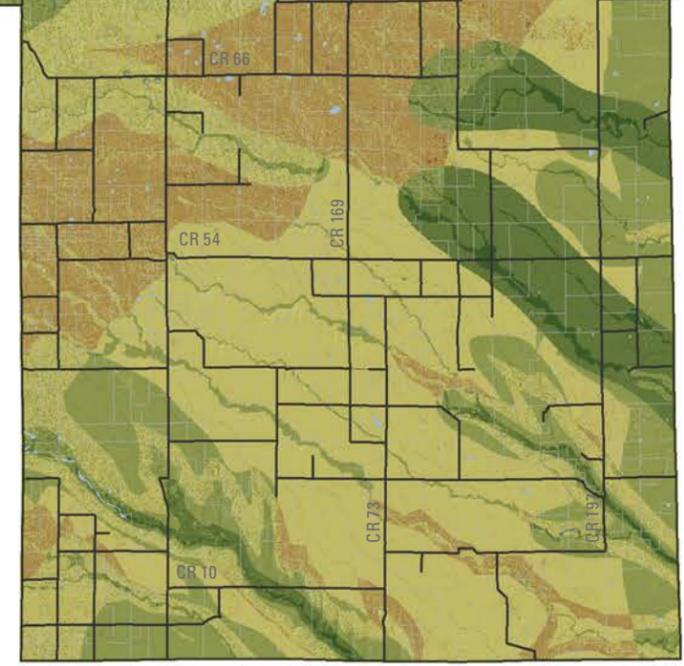
Data Sources: Elbert County, Colorado View, CO Map

Disclaimer: Data was developed for the County's sole use, and that any use thereof by Licensee or any other person is at the user's sole risk. All GIS data is subject to change, and the accuracy and completeness of the Data cannot be and is not warranted or guaranteed by the County. The Data is distributed "as is." The County makes no warranties or guarantees, "express" or implied, as to the completeness, accuracy, or correctness of the Data, nor shall the County incur any liability from the incorrect, incomplete, or misleading information contained therein. The County makes no warranties, either expressed or implied, of value, design, condition, title, merchantability, or fitness for a particular purpose. The County shall not be liable for any direct, indirect, incidental, consequential, punitive, or special damages, whether foreseeable or unforeseeable, arising out of the authorized or unauthorized use of the Data or the inability to use the Data or out of any breach of warranty whatsoever.

Date: 5/3/2016



VICINITY MAP



A1. WILDLIFE HABITAT DETAILED ANALYSIS PROCESS

CRITERIA	RANKING	INFLUENCE
A1. WILDLIFE HABITAT		
CONCENTRATION AREAS		20%
<i>Black Bear (Fall)</i>	High	
<i>Mule Deer (Winter)</i>	High	
<i>Black Bear (Summer)</i>	Medium	
<i>Mule Deer (Year-Round)</i>	Medium	
<i>Pronghorn (Year-Round and Winter)</i>	Medium	
<i>White-Tailed Deer (Year-Round)</i>	Medium	
NEST SITE/PRODUCTION AREAS		15%
<i>Peregrine Falcon (Potential)</i>	High	
<i>Wild Turkey Roost</i>	High	
<i>Elk Production Areas</i>	Low	
<i>Geese Production Areas</i>	Low	
SEVERE WINTER RANGE		15%
<i>Pronghorn</i>	Low	
<i>Mule Deer</i>	Low	
WINTER RANGE		10%
<i>Bald Eagle</i>	Medium	
<i>Elk</i>	Medium	
<i>Mule Deer</i>	Medium	
<i>Pronghorn</i>	Medium	
<i>Wild Turkey</i>	Medium	
FORAGE AREAS		10%
<i>Great Blue Heron</i>	High	
<i>Bald Eagle (Winter)</i>	Medium	
MIGRATION CORRIDORS		10%
<i>Mule Deer</i>	Medium	
OVERALL RANGE		5%
<i>Abert's Squirrel</i>	Medium	
<i>Preble's Meadow Jumping Mouse</i>	Medium	
<i>Red-Necked Pheasant</i>	Medium	
<i>Swift Fox</i>	Medium	
<i>Black Bear</i>	Low	
<i>Massasauga Rattlesnake</i>	Low	
<i>Mountain Lion</i>	Low	
<i>White Tailed Deer</i>	Low	
<i>Wild Turkey</i>	Low	
RESIDENT POPULATION AREAS		5%
<i>Elk</i>	Low	
<i>Mule Deer</i>	Low	
PERIPHERAL RANGE		5%
<i>Mountain Lion</i>	Low	
HISTORIC RANGE		5%
<i>Greater Prairie Chicken</i>	Low	
<i>Sharptail Grouse</i>		
		COMPOSITE MAP

A1. WILDLIFE HABITAT COMPOSITE MAP

-  Elbert County
 -  Local Road
 -  Highway
 -  Interstate
 -  Rail Road
 -  Lakes
 -  Streams
 -  Network of Concentration Area (NCA)
 -  Very High Biodiversity Significance
 -  High Biodiversity Significance
 -  Moderate Biodiversity Significance
- Wildlife Habitat Significance
-  High
 -  Low



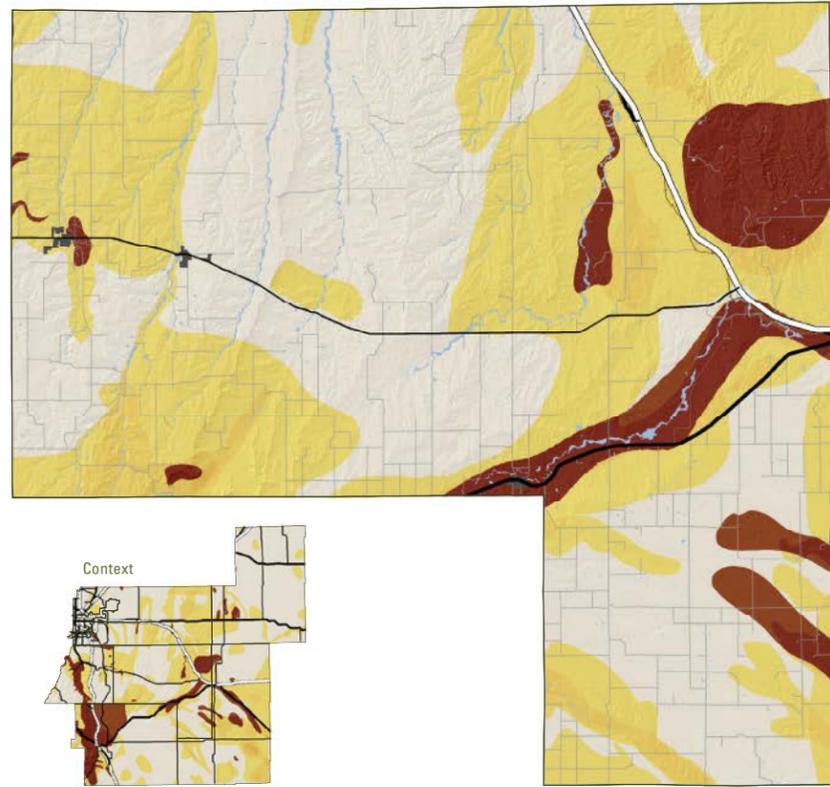
Data Sources: Elbert County, Colorado View, CO Map
 Disclaimer: Data was developed for the County's sole use, and that any use thereof by Licensee or any other person is at the user's sole risk. All GIS data is subject to change, and the accuracy and completeness of the Data cannot be and is not warranted or guaranteed by the County. The Data is distributed "as is." The County makes no warranties or guarantees, "express" or implied, as to the completeness, accuracy, or correctness of the Data, nor shall the County incur any liability from the incorrect, incomplete, or misleading information contained therein. The County makes no warranties, either expressed or implied, of value, design, condition, title, merchantability, or fitness for a particular purpose. The County shall not be liable for any direct, indirect, incidental, consequential, punitive, or special damages, whether foreseeable or unforeseeable, arising out of the authorized or unauthorized use of the Data or the inability to use the Data or out of any breach of warranty whatsoever.

Date: 1/28/2016

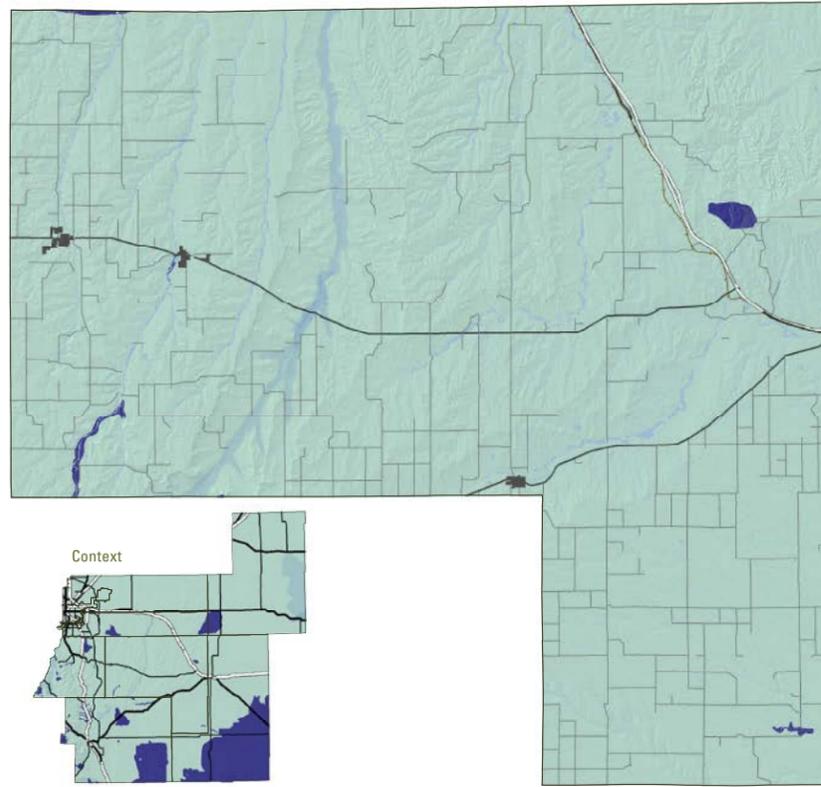
VICINITY MAP

A1. WILDLIFE HABITAT ANALYSIS LAYERS

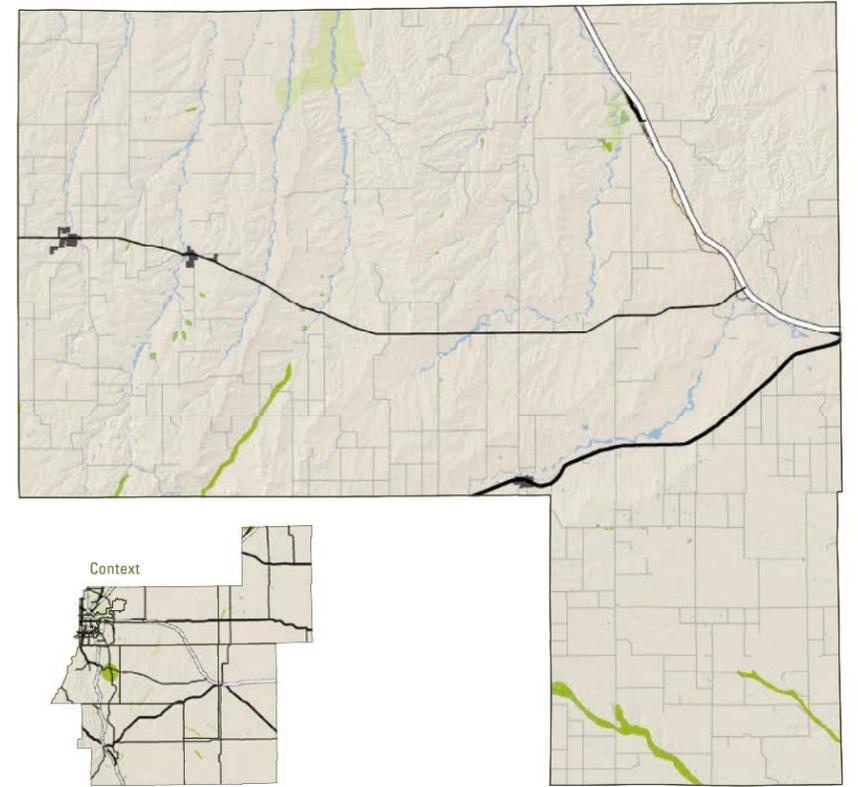
CONCENTRATION AREAS



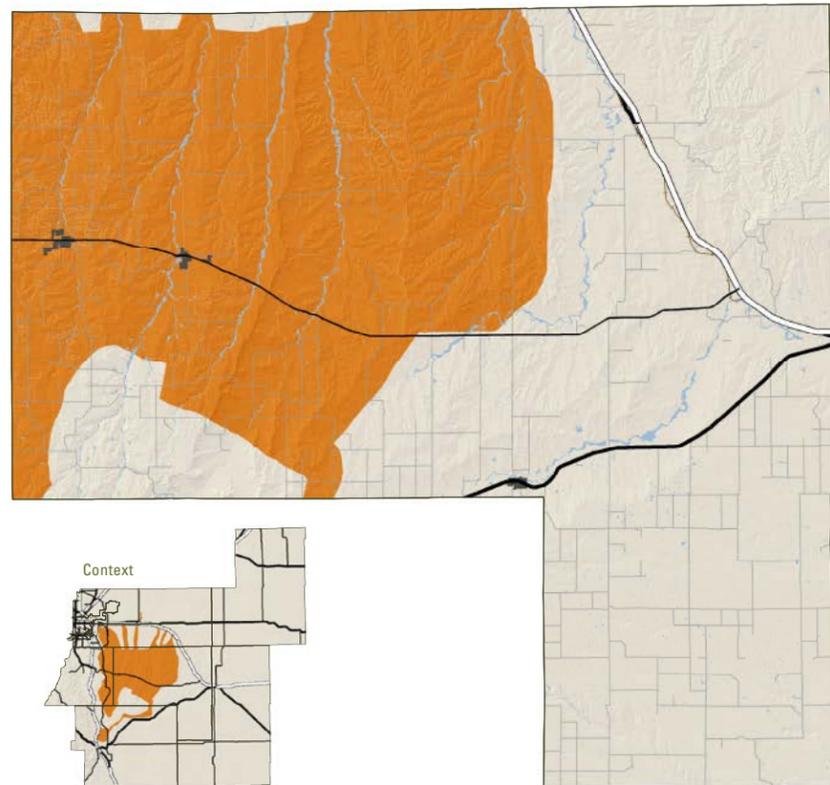
CONSERVATION AREAS



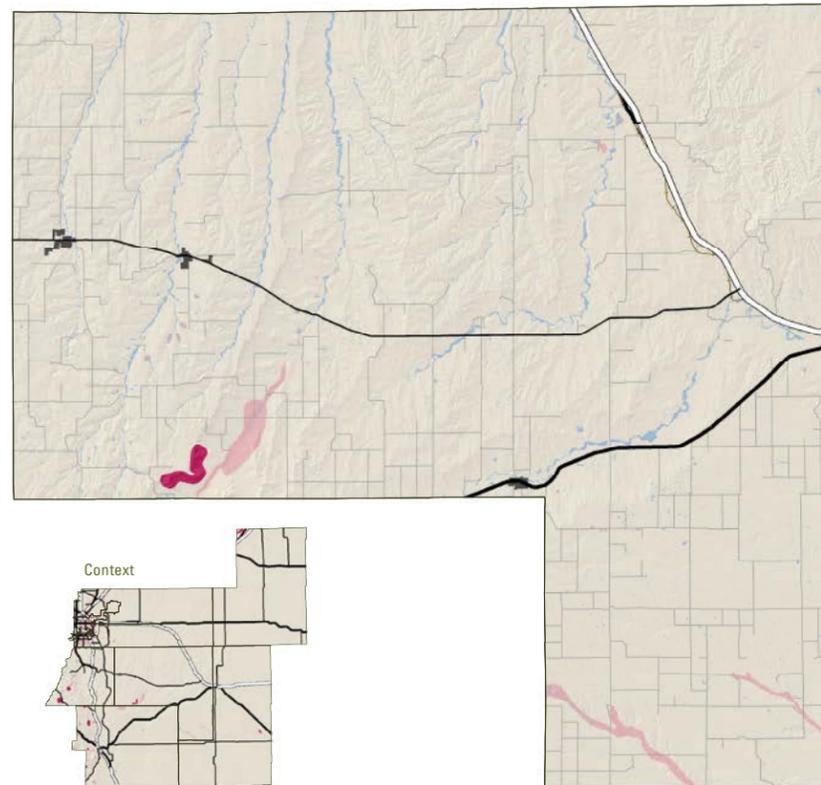
FORAGE AREAS



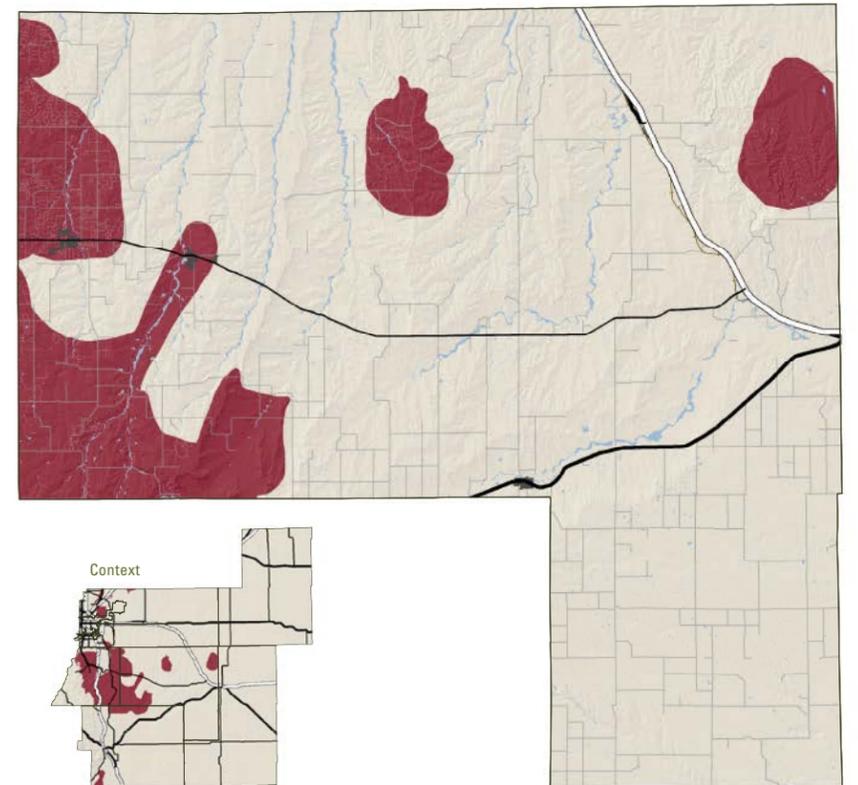
PERIPHERAL RANGE



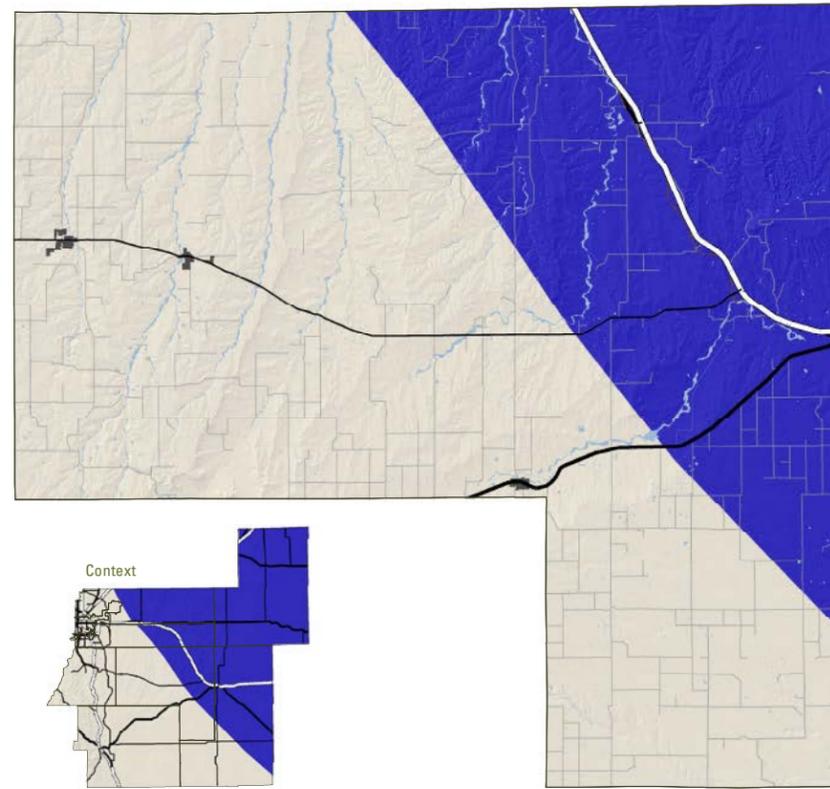
PRODUCTION AREAS



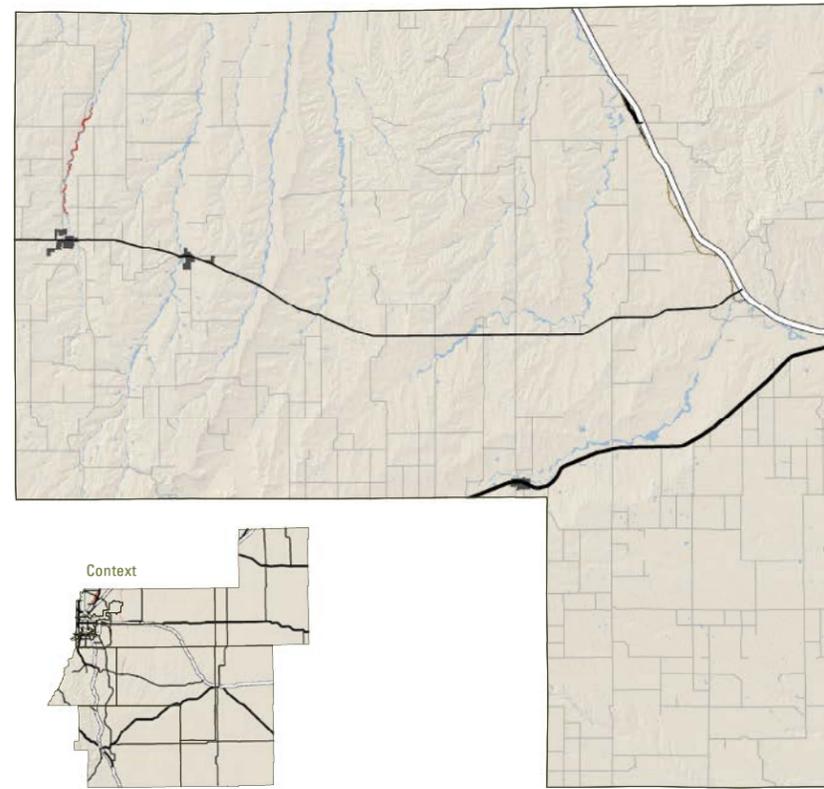
RESIDENT POPULATION AREAS



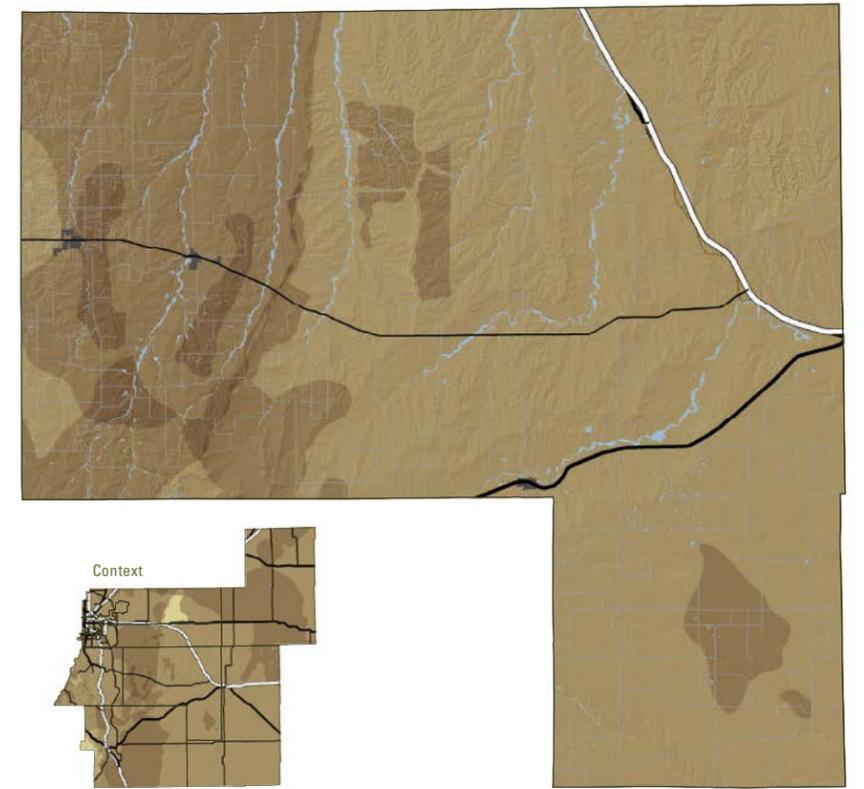
HISTORIC RANGE



MIGRATION CORRIDORS



OVERALL RANGE



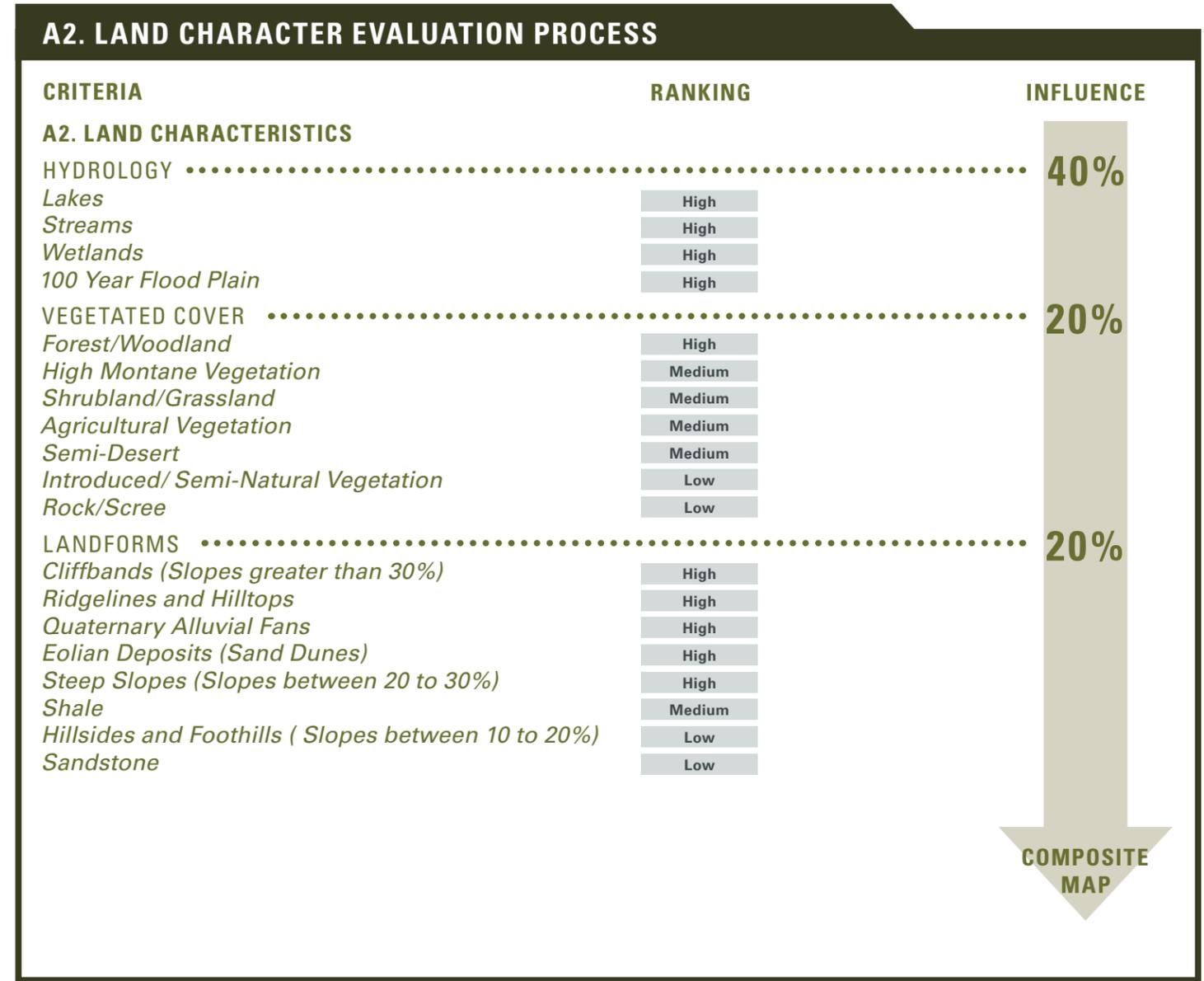
SEVERE WINTER RANGE



WINTER RANGE



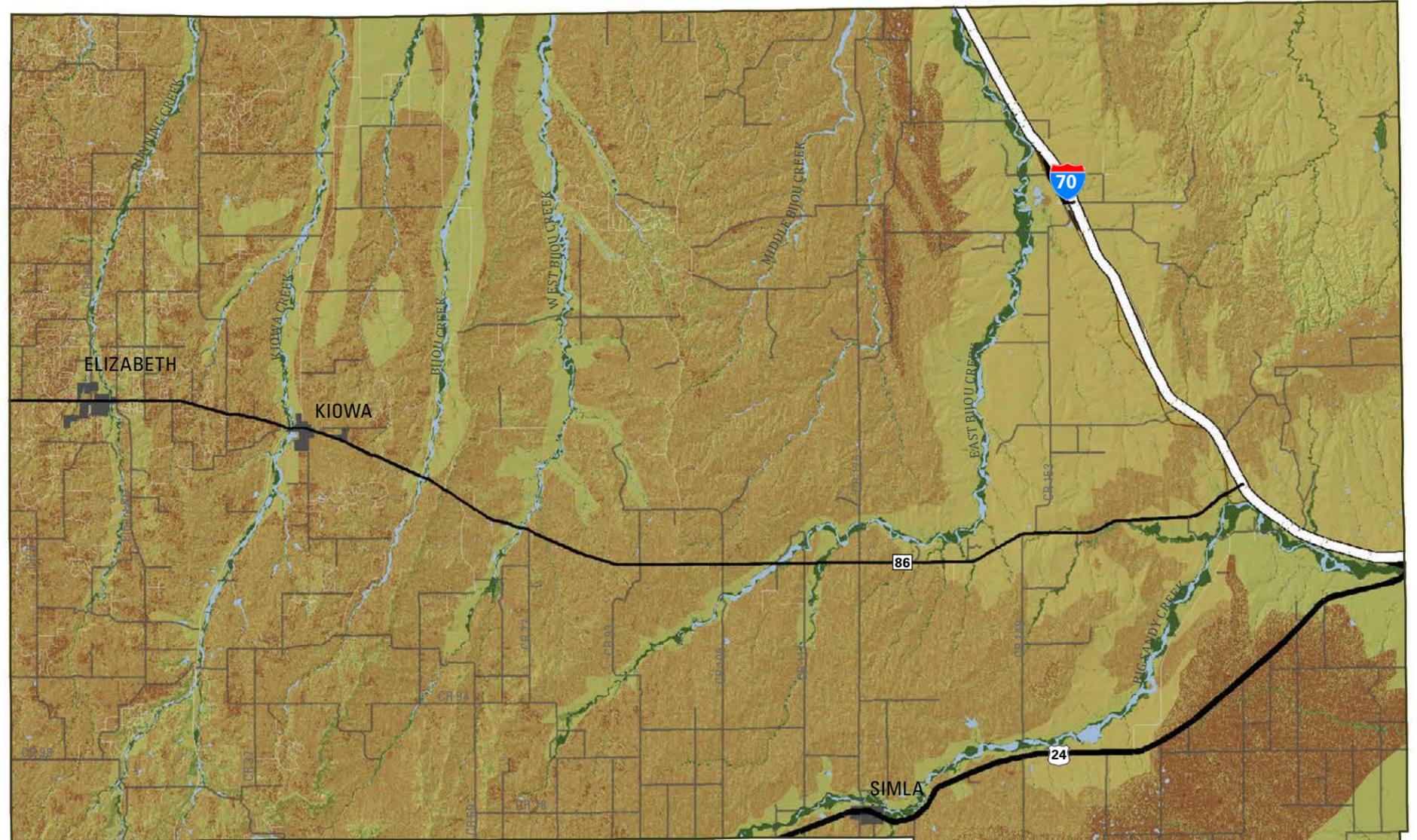
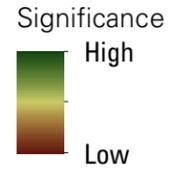
A2. LAND CHARACTER DETAILED ANALYSIS PROCESS



A2. LAND CHARACTER COMPOSITE MAP

-  Elbert County
-  Local Road
-  Highway
-  Interstate
-  Rail Road
-  Lakes
-  Streams

Land Characteristics



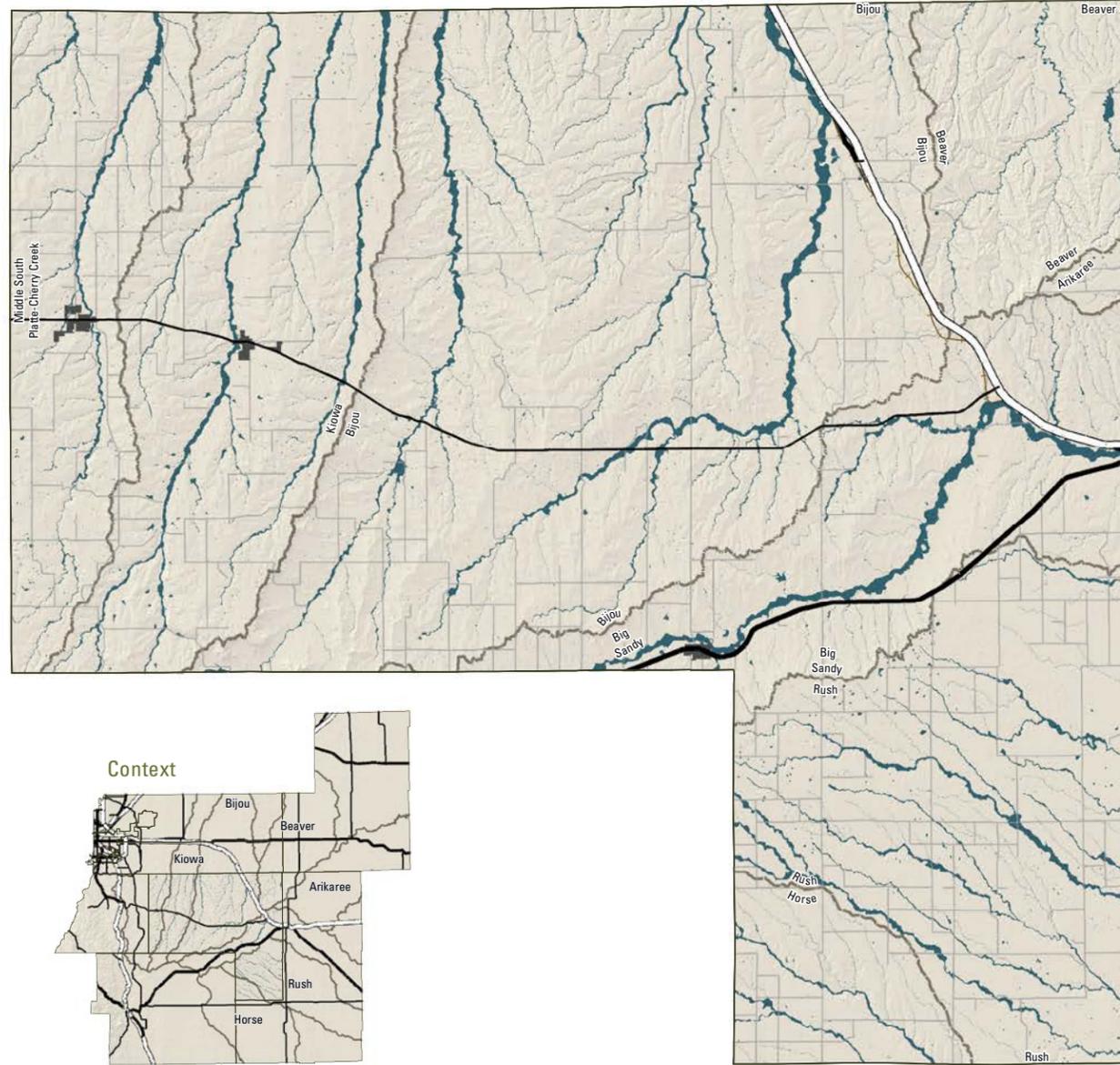
Data Sources: Elbert County, Colorado View, CO Map

Disclaimer: Data was developed for the County's sole use, and that any use thereof by Licensee or any other person is at the user's sole risk. All GIS data is subject to change, and the accuracy and completeness of the Data cannot be and is not warranted or guaranteed by the County. The Data is distributed "as is." The County makes no warranties or guarantees, "express" or implied, as to the completeness, accuracy, or correctness of the Data, nor shall the County incur any liability from the incorrect, incomplete, or misleading information contained therein. The County makes no warranties, either expressed or implied, of value, design, condition, title, merchantability, or fitness for a particular purpose. The County shall not be liable for any direct, indirect, incidental, consequential, punitive, or special damages, whether foreseeable or unforeseeable, arising out of the authorized or unauthorized use of the Data or the inability to use the Data or out of any breach of warranty whatsoever.

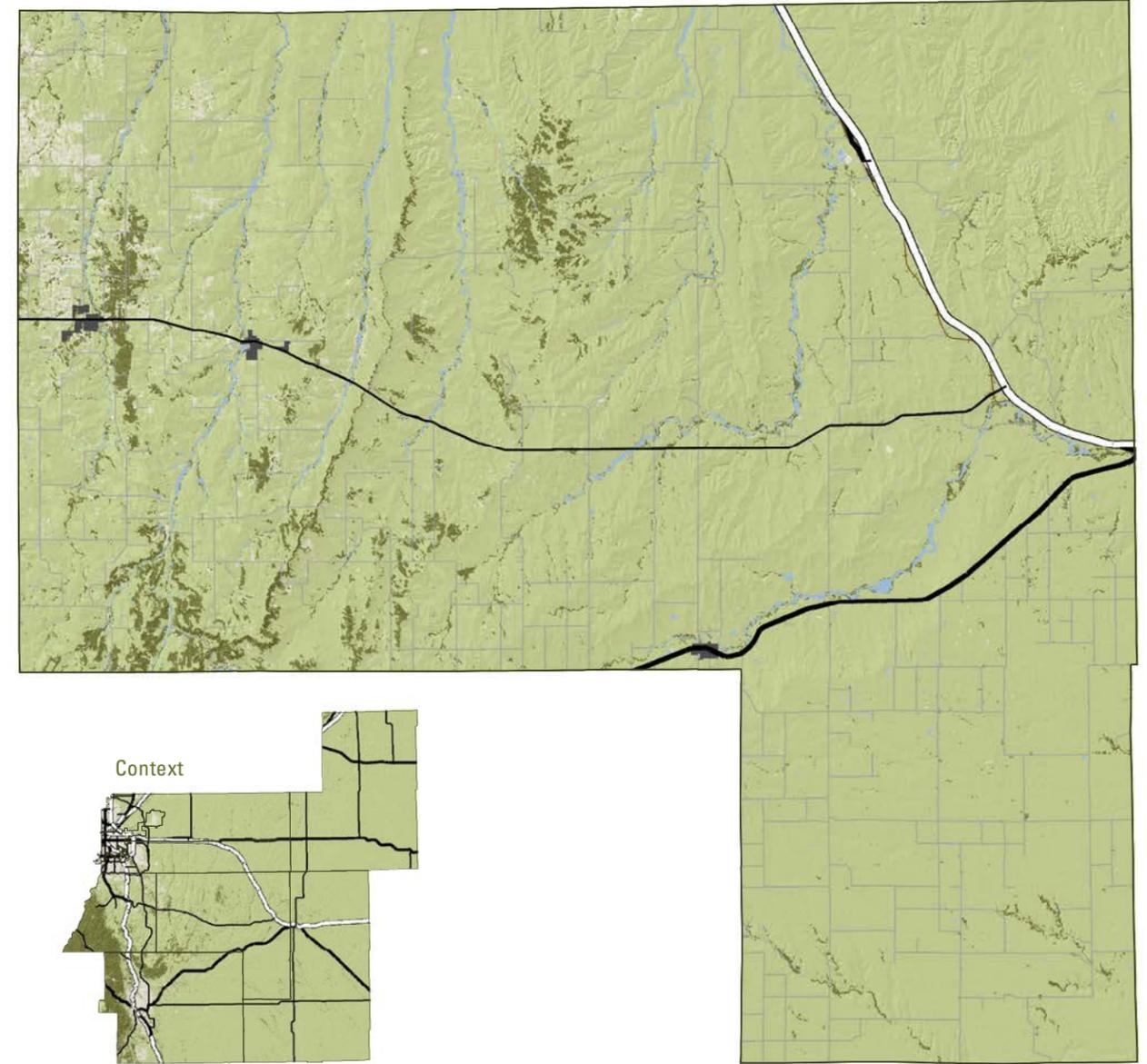
Date: 1/28/2016

A2. LAND CHARACTER ANALYSIS LAYERS

HYDROLOGY



VEGETATION

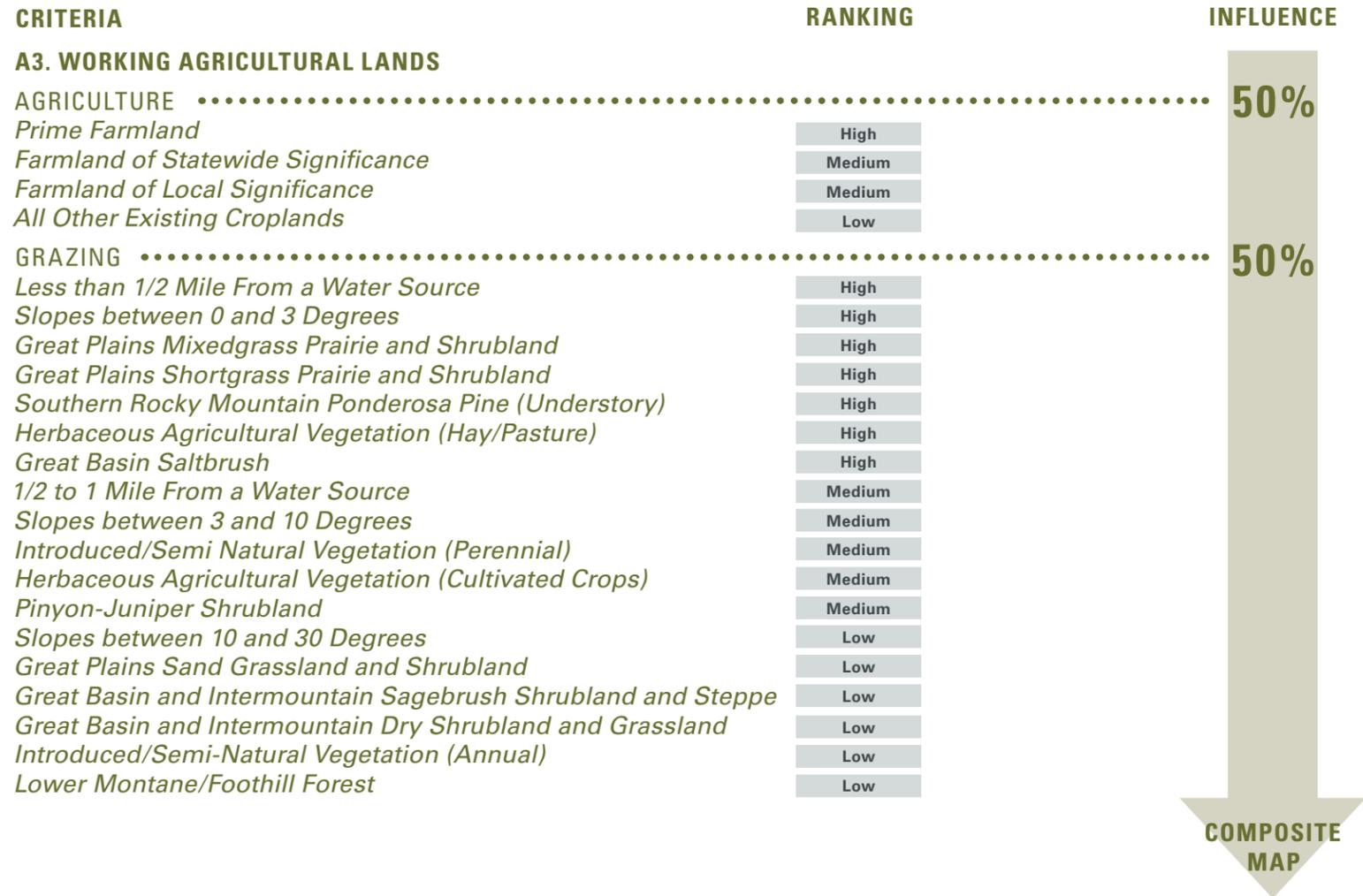


LANDCOVER

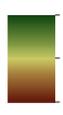


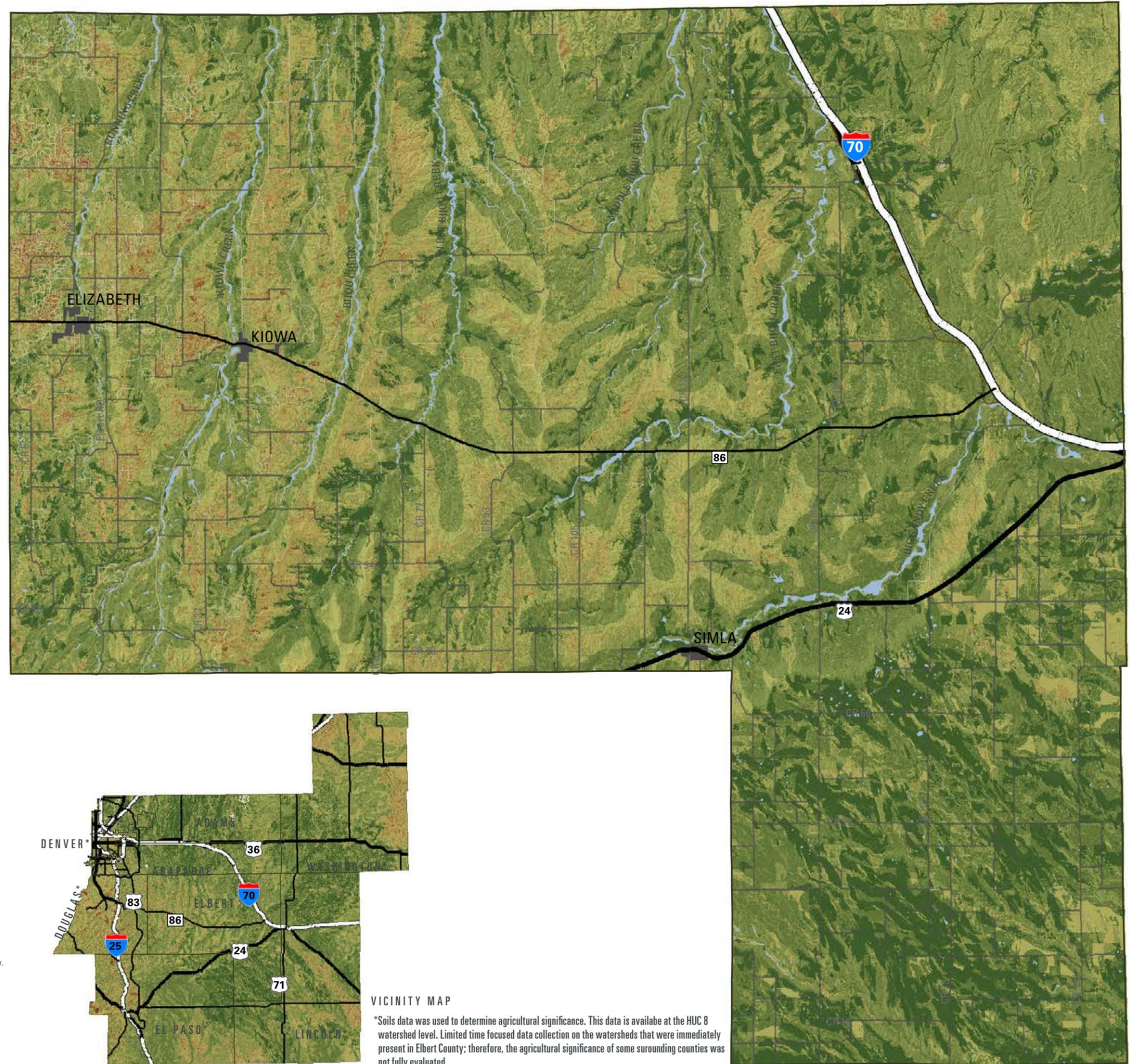
A3. WORKING AGRICULTURAL LANDS DETAILED ANALYSIS PROCESS

A3. WORKING AGRICULTURAL LANDS EVALUATION PROCESS



A3. WORKING AGRICULTURAL LANDS COMPOSITE MAP

-  Elbert County
-  Local Road
-  Highway
-  Interstate
-  Rail Road
-  Lakes
-  Streams
- Working Lands
- Significance
-  High
Low



Data Sources: Elbert County, Colorado View, CO Map
 Disclaimer: Data was developed for the County's sole use, and that any use thereof by Licensee or any other person is at the user's sole risk. All GIS data is subject to change, and the accuracy and completeness of the Data cannot be and is not warranted or guaranteed by the County. The Data is distributed "as is." The County makes no warranties or guarantees, "express" or implied, as to the completeness, accuracy, or correctness of the Data, nor shall the County incur any liability from the incorrect, incomplete, or misleading information contained therein. The County makes no warranties, either expressed or implied, of value, design, condition, title, merchantability, or fitness for a particular purpose. The County shall not be liable for any direct, indirect, incidental, consequential, punitive, or special damages, whether foreseeable or unforeseeable, arising out of the authorized or unauthorized use of the Data or the inability to use the Data or out of any breach of warranty whatsoever.

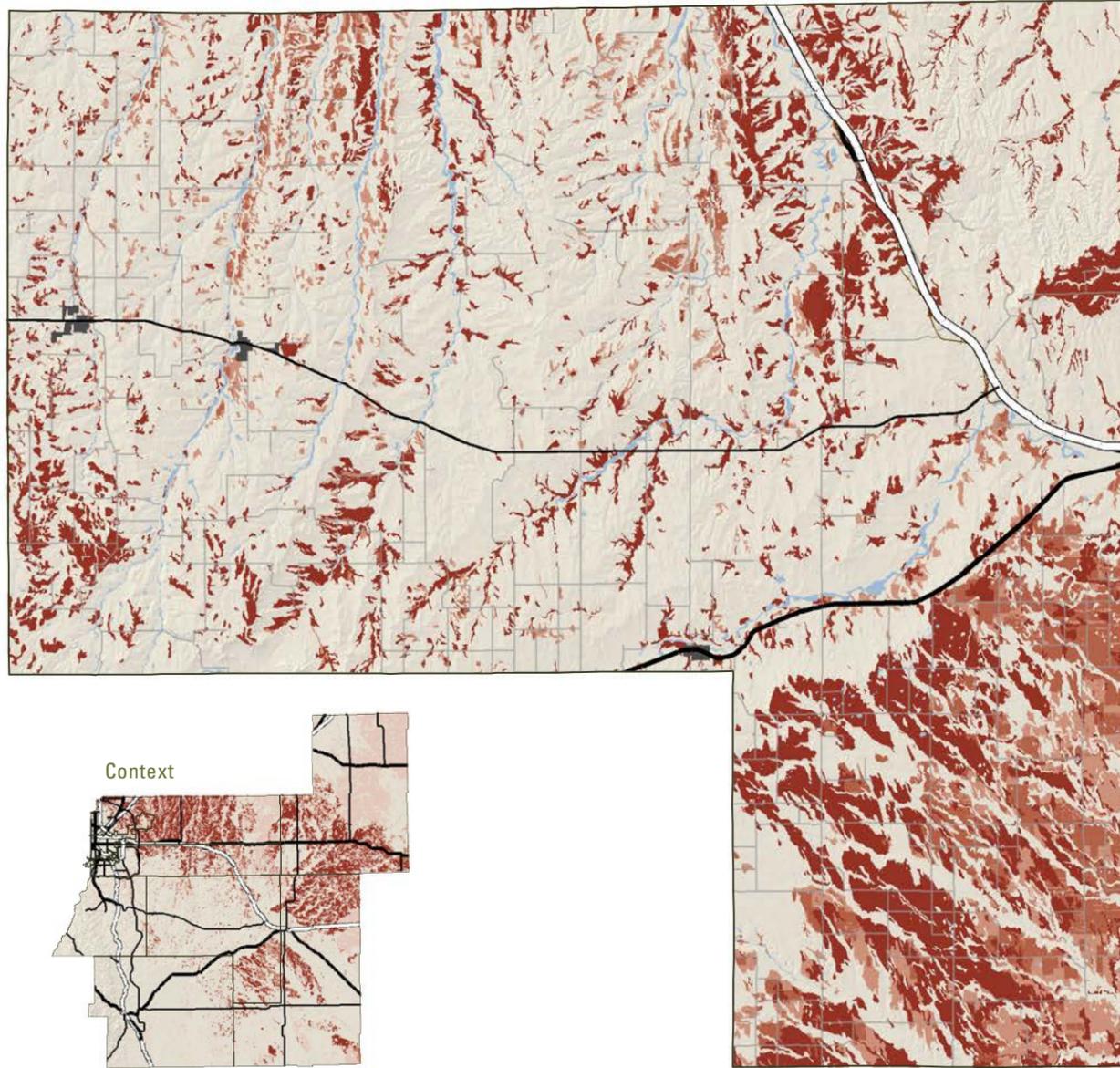


VICINITY MAP
 *Soils data was used to determine agricultural significance. This data is available at the HUC 8 watershed level. Limited time focused data collection on the watersheds that were immediately present in Elbert County; therefore, the agricultural significance of some surrounding counties was not fully evaluated.

Date: 1/28/2016

A3. WORKING AGRICULTURAL LANDS ANALYSIS LAYERS

AGRICULTURE



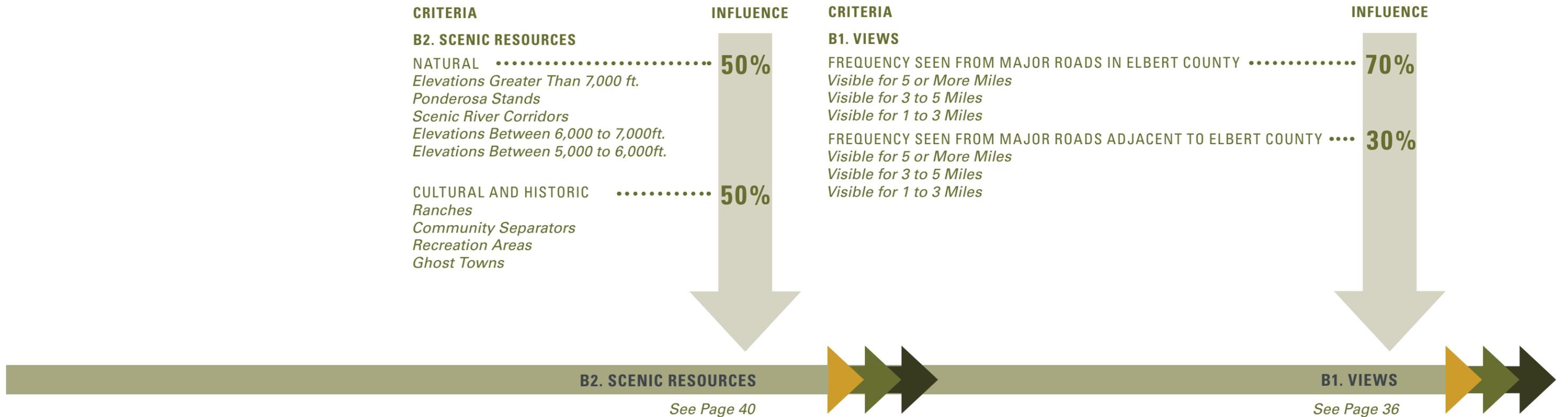
GRAZING



B. SCENIC QUALITY PROCESS OVERVIEW

Goal: Identify lands where open space would preserve scenic lands or views important to the identity of Elbert County and the surrounding region.

1. A database of criteria important to scenic resources and views was built using Geographic Information (GIS) data from various sources. Each input criteria was ranked from high to low based on relative importance. Identification and ranking of suitable criteria for scenic resources in Elbert County involved discussions with local planning officials, state wildlife specialists and conservation organizations.
2. These criteria were overlaid to create composite maps and build an understanding of areas containing more favorable conditions for scenic resources and views resulted in higher values.
3. The analysis maps were combined to create a composite map to identify lands with the highest scenic quality (page 35). This analysis was combined with the composite maps from A. Natural and Working Agricultural Lands and C. Character of Parcel to identify the overall open space suitability within Elbert County.

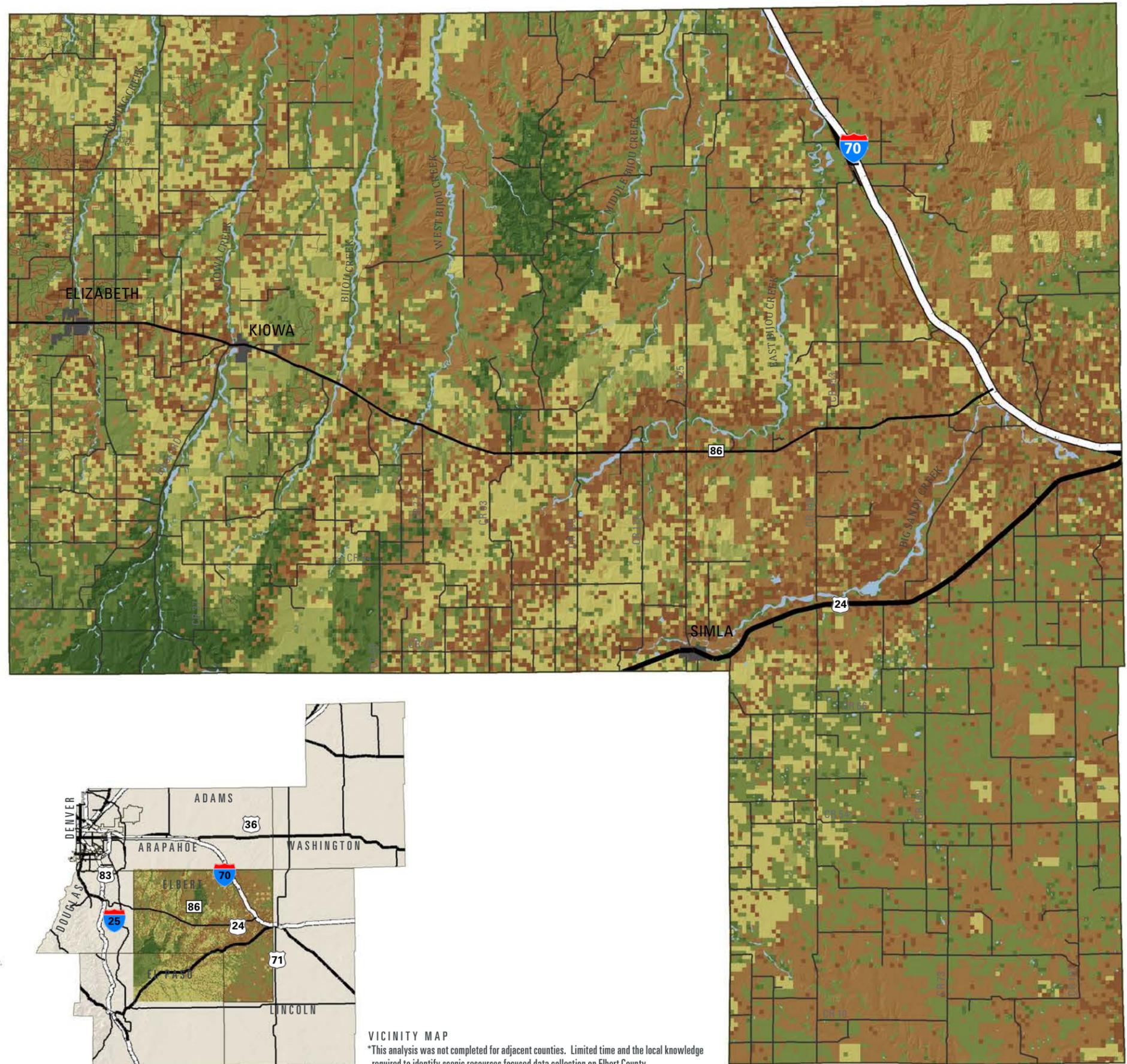
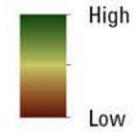


B. SCENIC QUALITY COMPOSITE MAP

-  Elbert County
-  Local Road
-  Highway
-  Interstate
-  Rail Road
-  Lakes
-  Streams

Scenic Quality

Significance



Data Sources: Elbert County, Colorado View, CO Map

Disclaimer: Data was developed for the County's sole use, and that any use thereof by Licensee or any other person is at the user's sole risk. All GIS data is subject to change, and the accuracy and completeness of the Data cannot be and is not warranted or guaranteed by the County. The Data is distributed "as is." The County makes no warranties or guarantees, "express" or implied, as to the completeness, accuracy, or correctness of the Data, nor shall the County incur any liability from the incorrect, incomplete, or misleading information contained therein. The County makes no warranties, either expressed or implied, of value, design, condition, title, merchantability, or fitness for a particular purpose. The County shall not be liable for any direct, indirect, incidental, consequential, punitive, or special damages, whether foreseeable or unforeseeable, arising out of the authorized or unauthorized use of the Data or the inability to use the Data or out of any breach of warranty whatsoever.

Date: 5/18/2016

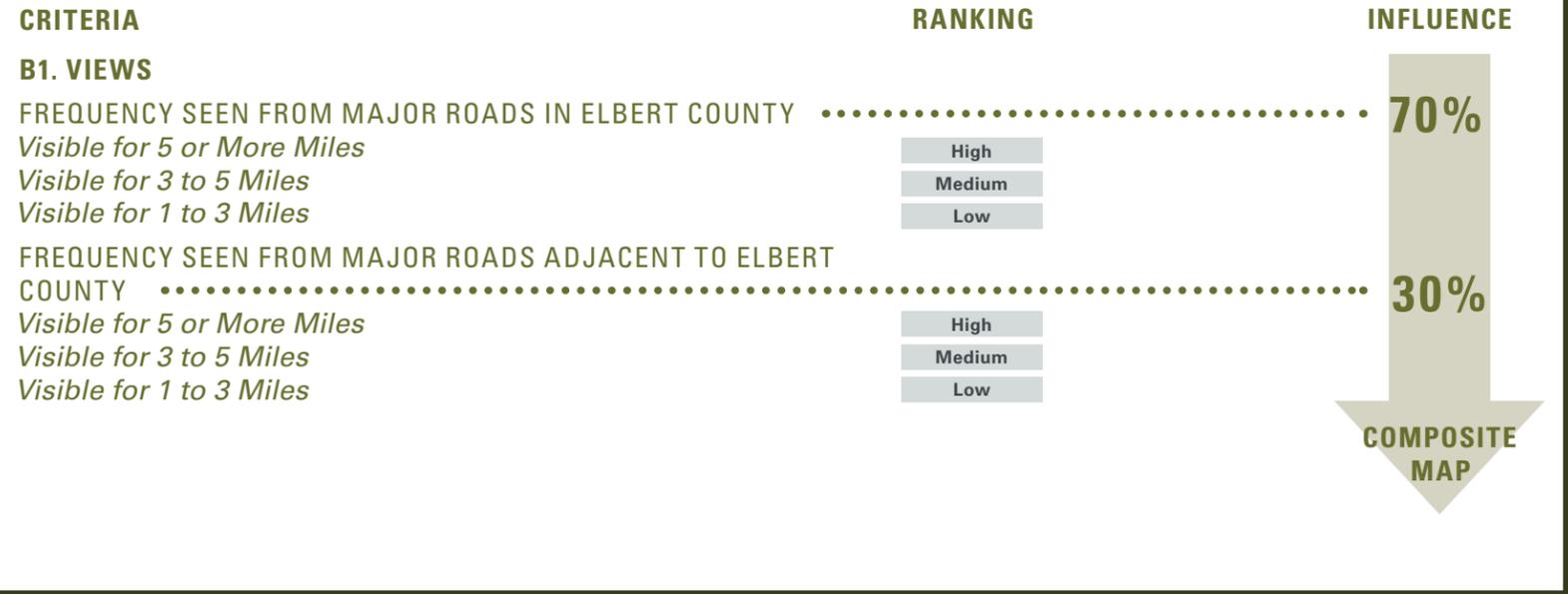


VICINITY MAP

*This analysis was not completed for adjacent counties. Limited time and the local knowledge required to identify scenic resources focused data collection on Elbert County.

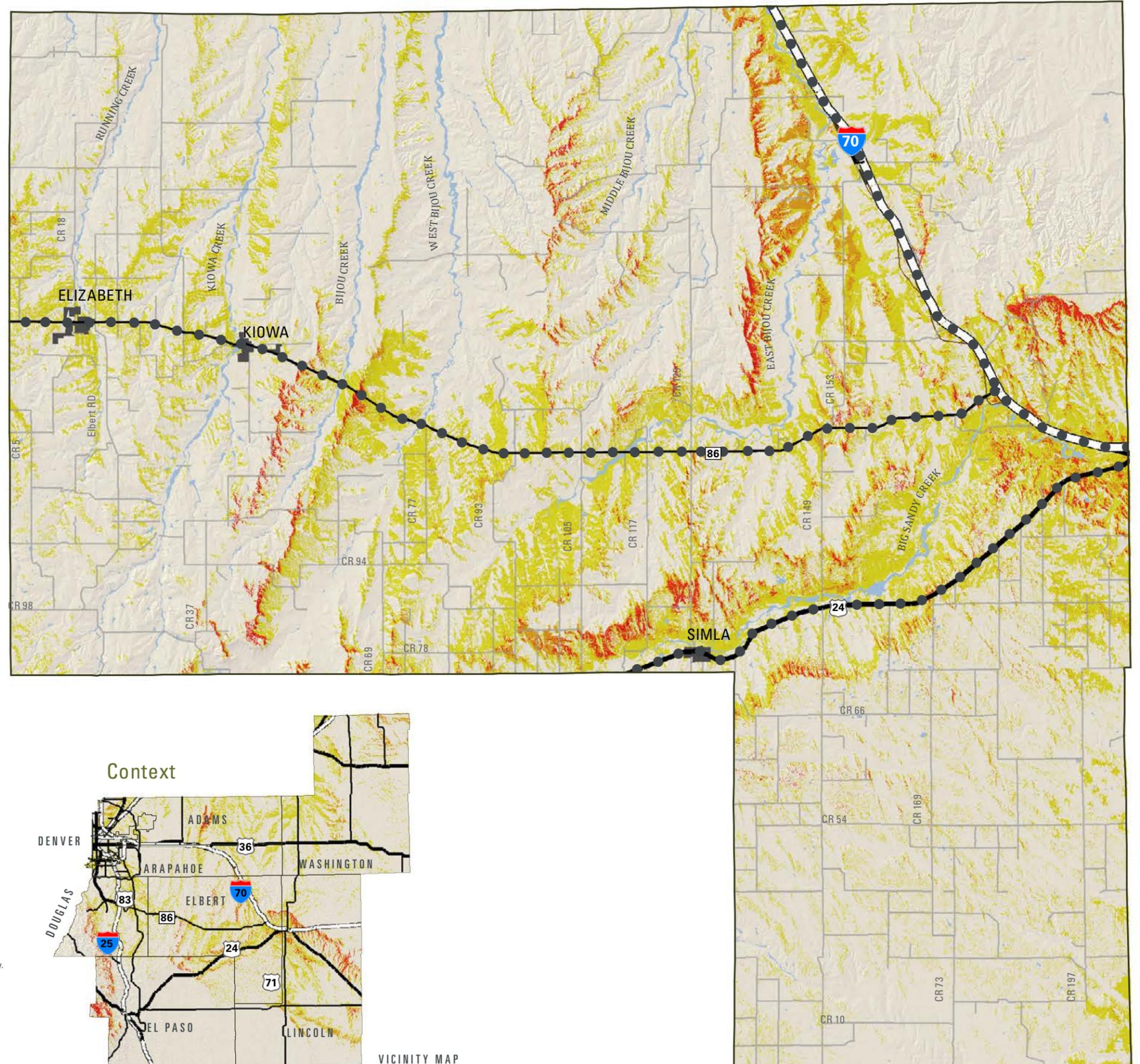
B1. VIEWS DETAILED ANALYSIS PROCESS

B1. VIEWS EVALUATION PROCESS



B1. VIEWS COMPOSITE MAP

-  Elbert County
 -  Local Road
 -  Highway
 -  Interstate
 -  Rail Road
 -  Lakes
 -  Streams
 -  Major Road Milepost
- Frequency Seen
-  Visible for Less Than 1 Mile
 -  Visible for 1 to 3 Miles
 -  Visible for 3 to 5 Miles
 -  Visible for 5 or Greater Miles

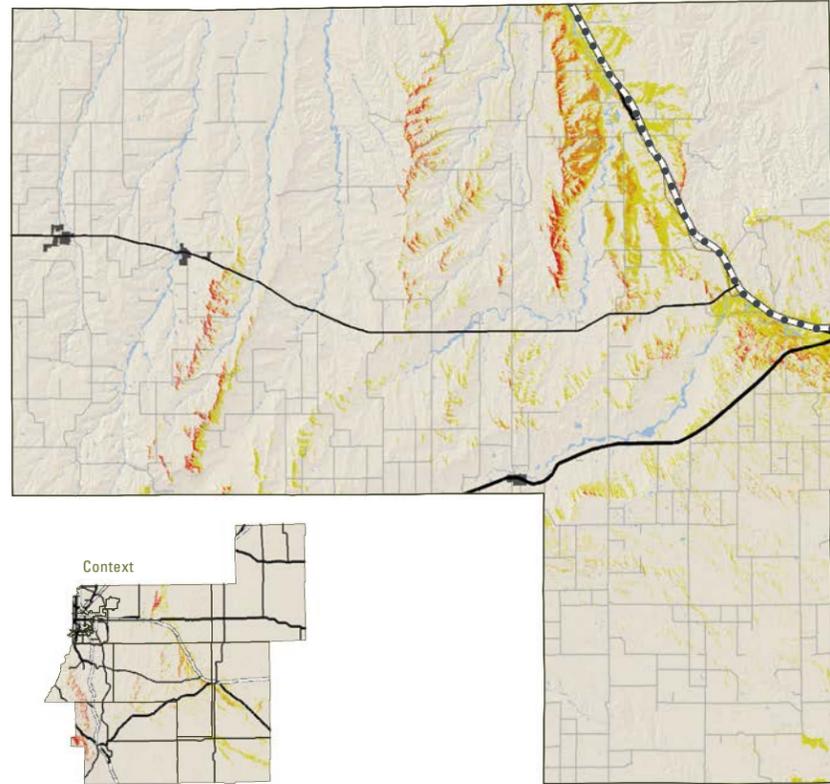


Data Sources: Elbert County, Colorado View, CO Map
 Disclaimer: Data was developed for the County's sole use, and that any use thereof by Licensee or any other person is at the user's sole risk. All GIS data is subject to change, and the accuracy and completeness of the Data cannot be and is not warranted or guaranteed by the County. The Data is distributed "as is." The County makes no warranties or guarantees, "express" or implied, as to the completeness, accuracy, or correctness of the Data, nor shall the County incur any liability from the incorrect, incomplete, or misleading information contained therein. The County makes no warranties, either expressed or implied, of value, design, condition, title, merchantability, or fitness for a particular purpose. The County shall not be liable for any direct, indirect, incidental, consequential, punitive, or special damages, whether foreseeable or unforeseeable, arising out of the authorized or unauthorized use of the Data or the inability to use the Data or out of any breach of warranty whatsoever.

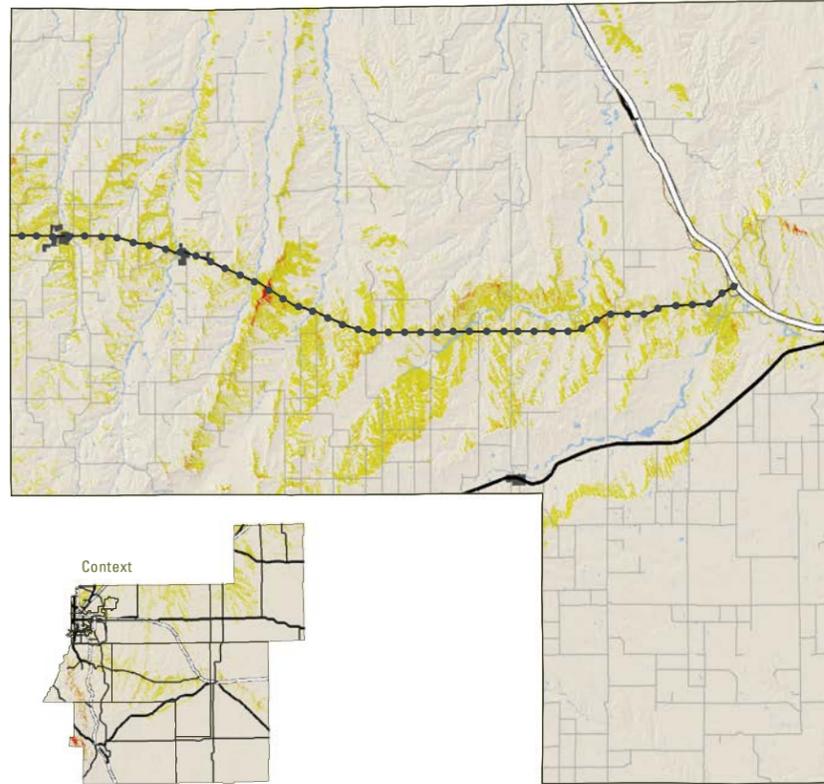
Date: 1/22/2016

B1. VIEWS ANALYSIS LAYERS

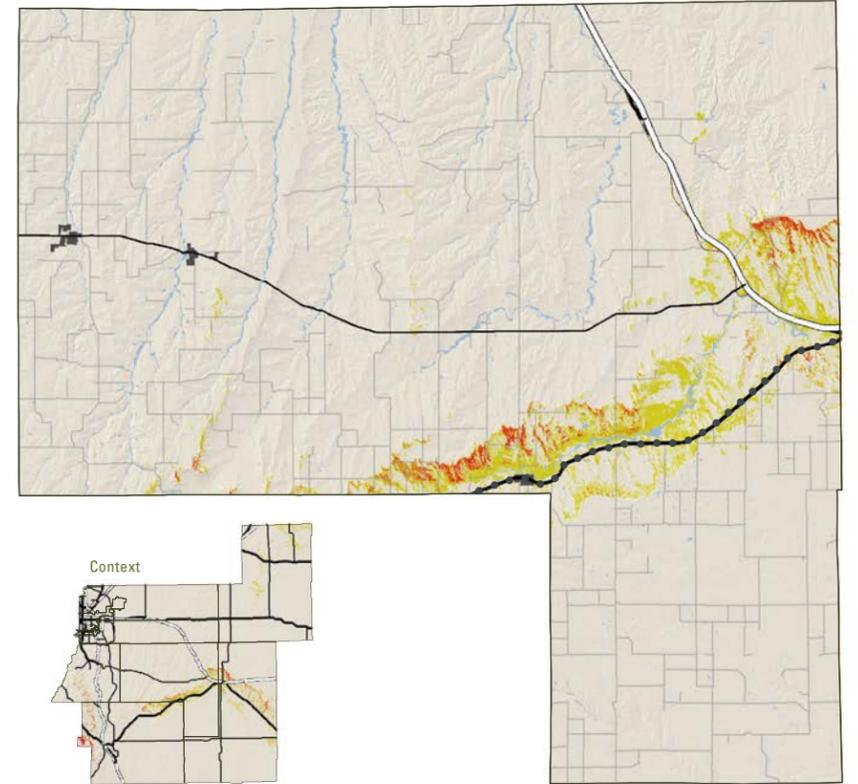
FREQUENCY SEEN FROM I-70



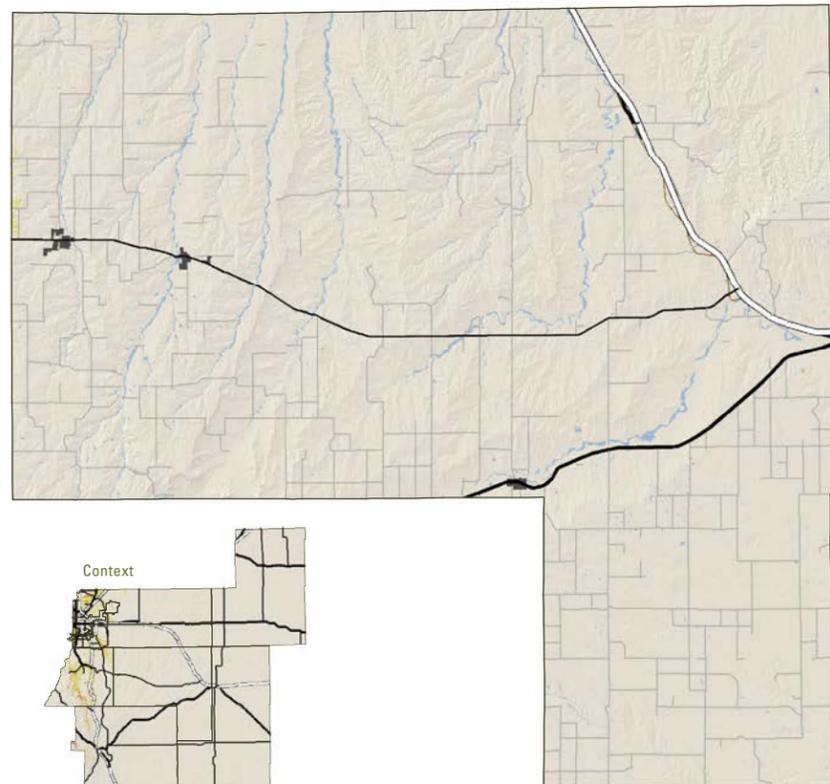
FREQUENCY SEEN FROM HWY. 86



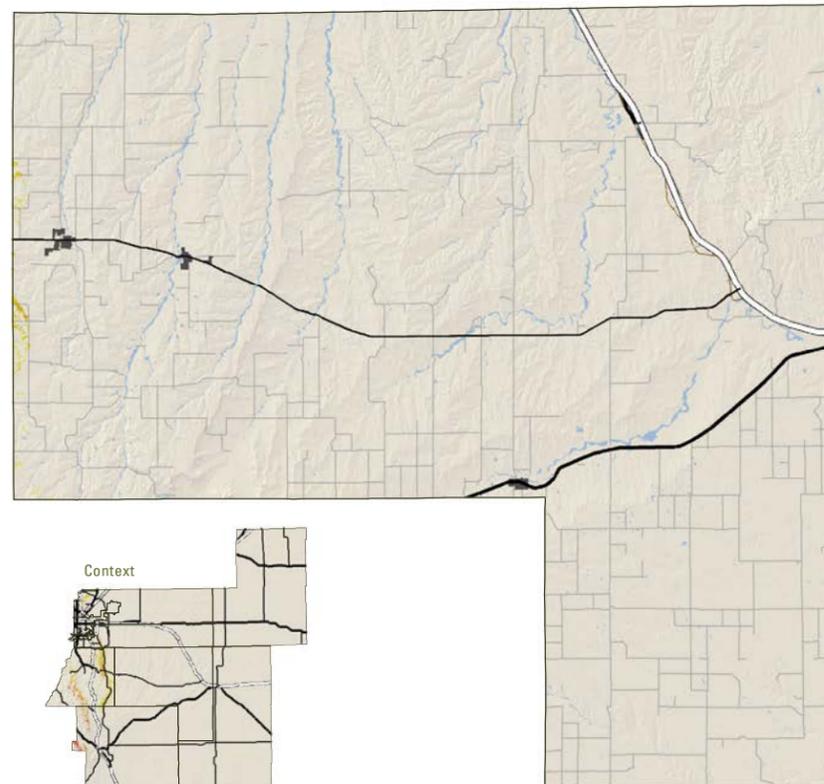
FREQUENCY SEEN FROM US-24



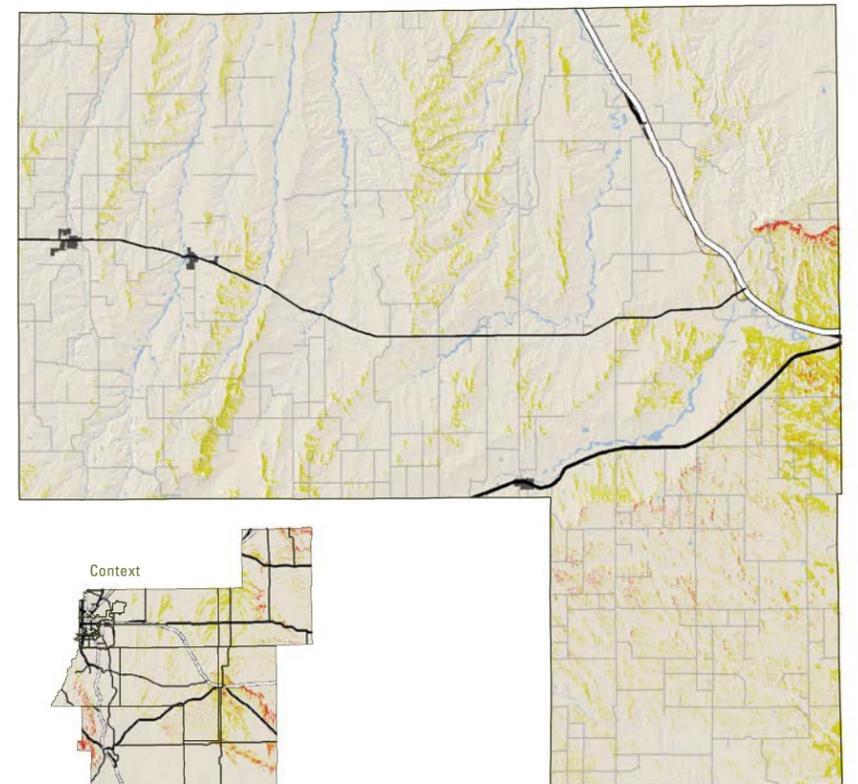
FREQUENCY SEEN FROM I-25



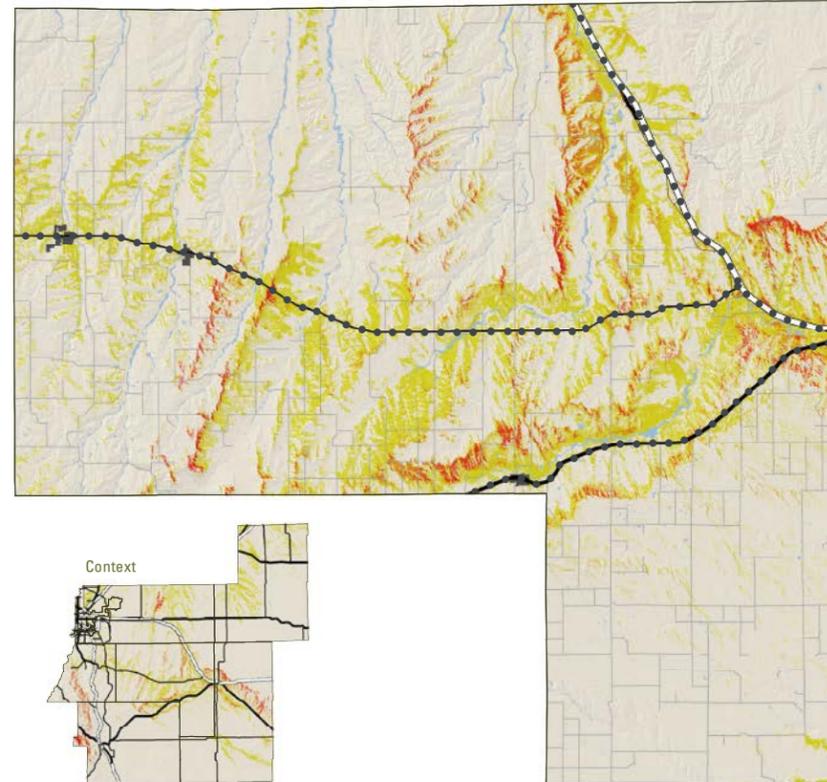
FREQUENCY SEEN FROM US-83



FREQUENCY SEEN FROM US-71



FREQUENCY SEEN FROM MAJOR ROADS IN ELBERT COUNTY



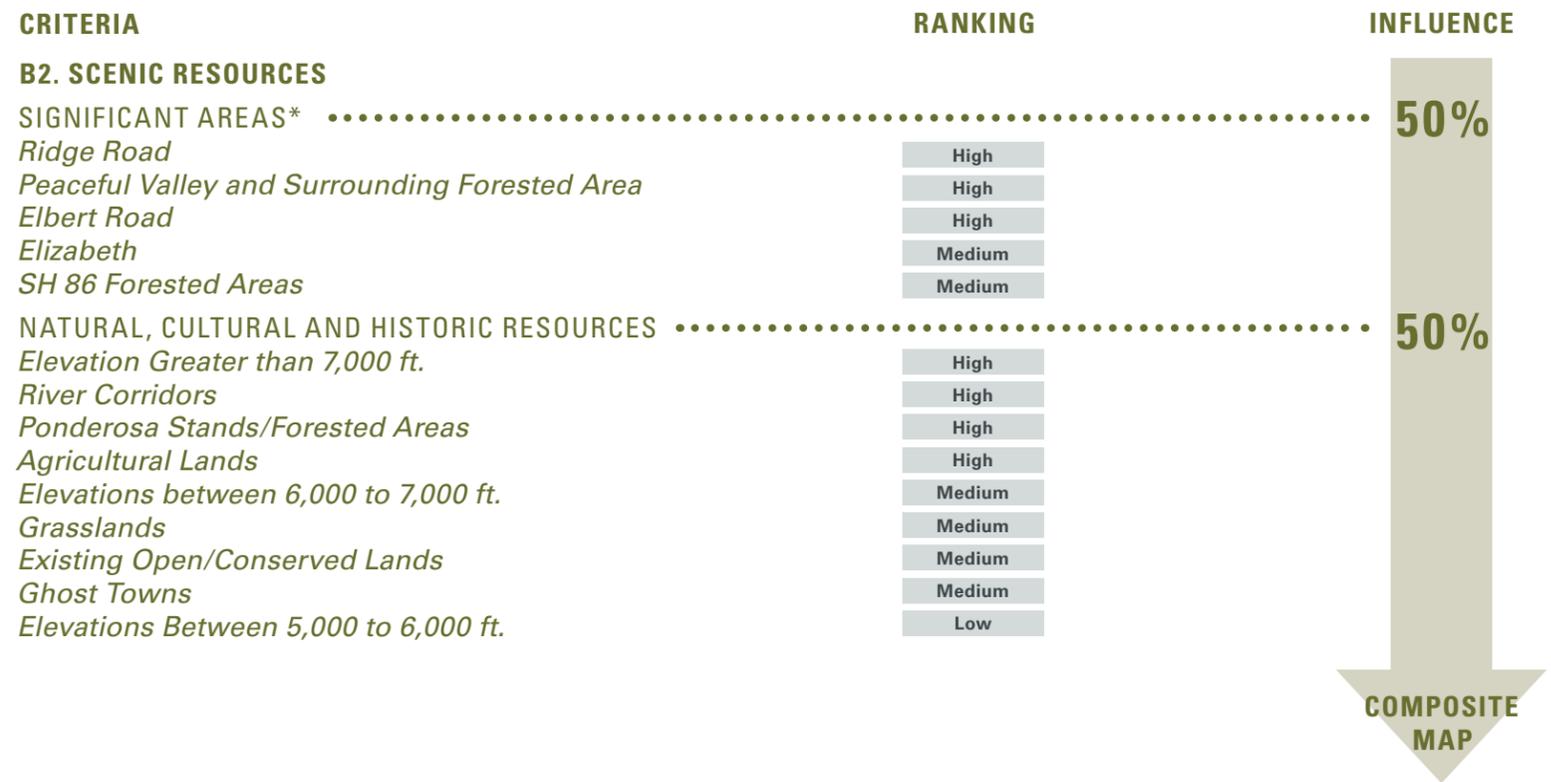
-  Elbert County
 -  Local Road
 -  Highway
 -  Interstate
 -  Rail Road
 -  Lakes
 -  Streams
 -  Major Road Milepost
- Frequency Seen
-  Visible for Less Than 1 Mile
 -  Visible for 1 to 3 Miles
 -  Visible for 3 to 5 Miles
 -  Visible for 5 or Greater Miles

FREQUENCY SEEN FROM MAJOR ROADS ADJACENT TO ELBERT COUNTY



B2. SCENIC RESOURCES DETAILED ANALYSIS PROCESS

B2. SCENIC RESOURCES EVALUATION PROCESS

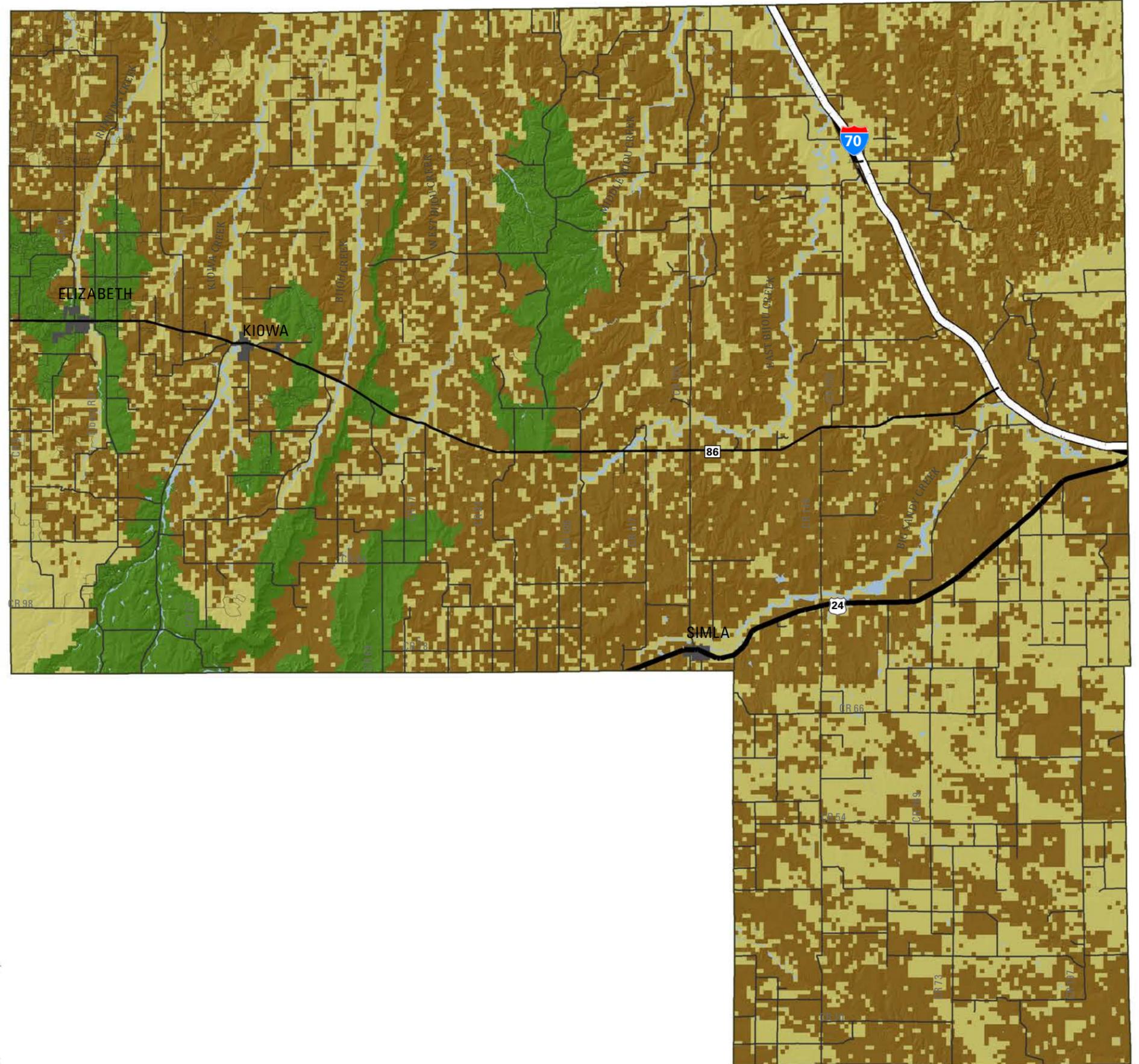
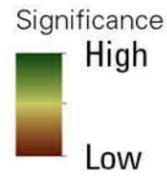


*Significant areas in the County were identified through focus group meetings with key stakeholders and field tours.

B2. SCENIC RESOURCES COMPOSITE MAP

-  Elbert County
-  Local Road
-  Highway
-  Interstate
-  Rail Road
-  Lakes
-  Streams

Character of Parcel



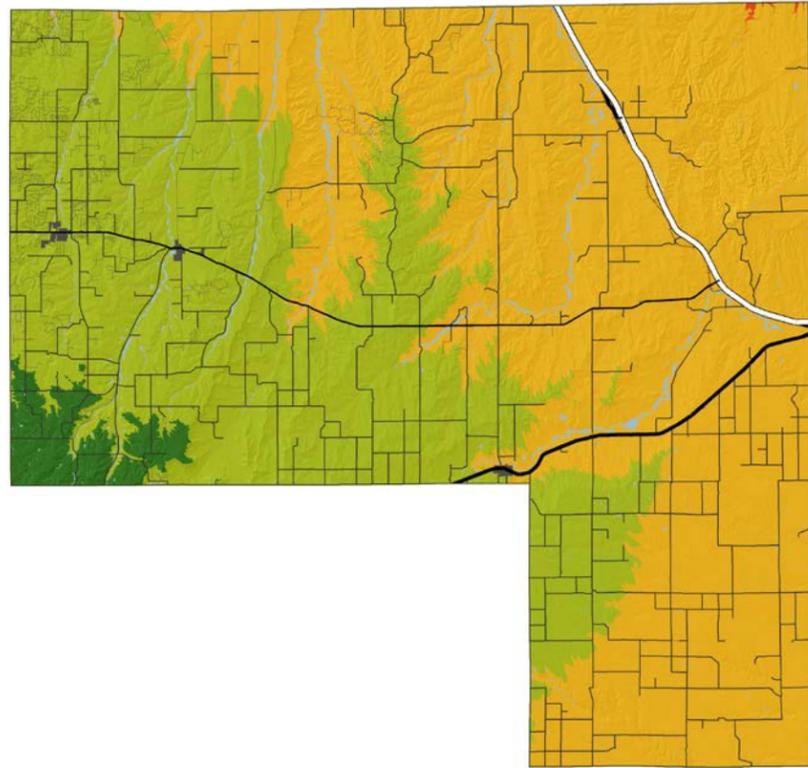
Data Sources: Elbert County, Colorado View, CO Map

Disclaimer: Data was developed for the County's sole use, and that any use thereof by Licensee or any other person is at the user's sole risk. All GIS data is subject to change, and the accuracy and completeness of the Data cannot be and is not warranted or guaranteed by the County. The Data is distributed "as is." The County makes no warranties or guarantees, "express" or implied, as to the completeness, accuracy, or correctness of the Data, nor shall the County incur any liability from the incorrect, incomplete, or misleading information contained therein. The County makes no warranties, either expressed or implied, of value, design, condition, title, merchantability, or fitness for a particular purpose. The County shall not be liable for any direct, indirect, incidental, consequential, punitive, or special damages, whether foreseeable or unforeseeable, arising out of the authorized or unauthorized use of the Data or the inability to use the Data or out of any breach of warranty whatsoever.

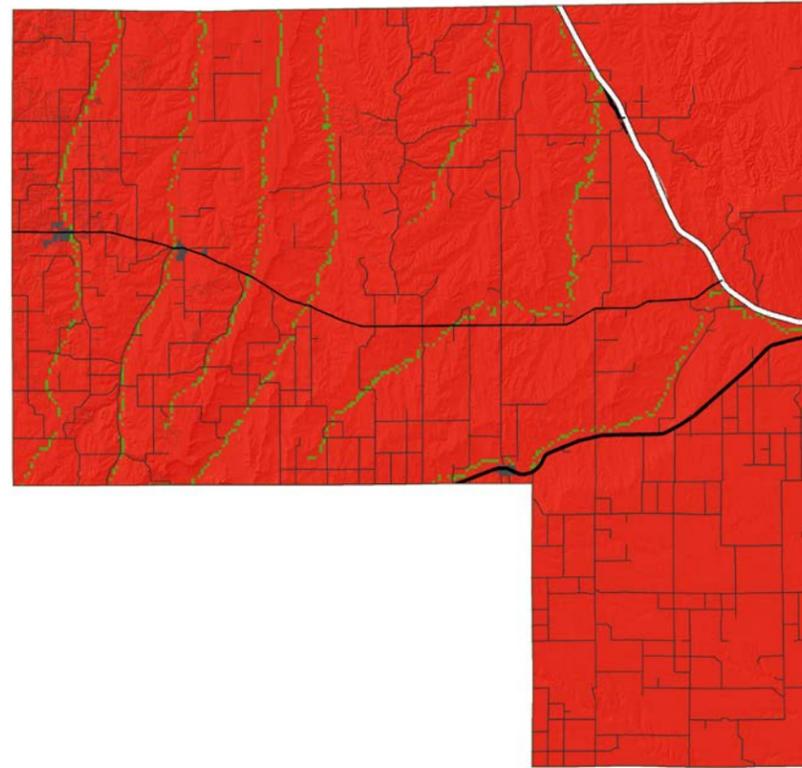
Date: 9/19/2016

B2. SCENIC RESOURCES ANALYSIS LAYERS

ELEVATION



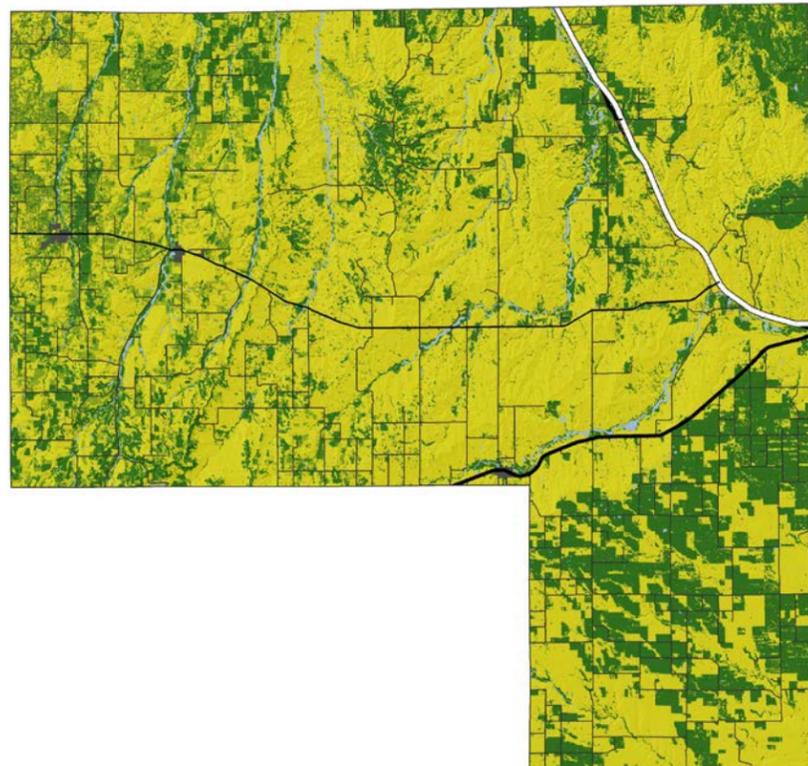
RIVER CORRIDORS



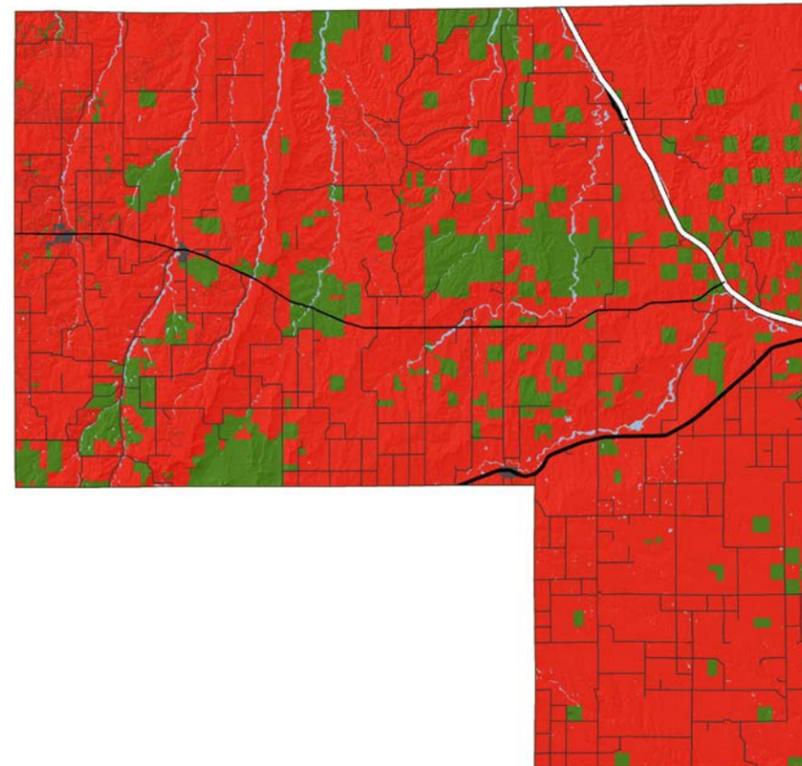
-  Elbert County
-  Local Road
-  Highway
-  Interstate
-  Rail Road
-  Lakes
-  Streams

Significance
 High
Low

AGRICULTURAL LANDS AND VEGETATION



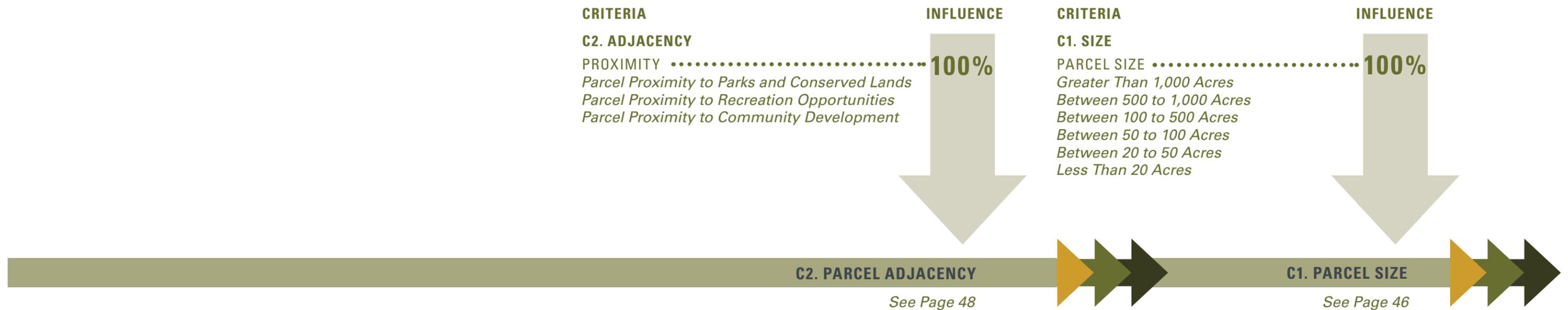
EXISTING OPEN LANDS



C. CHARACTER OF PARCEL PROCESS OVERVIEW

Goal: Identify sizable parcels of land in close proximity to conserved lands, recreation opportunities, neighborhoods and schools to preserve contiguous landscapes and promote accessibility for Elbert County residents.

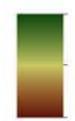
1. A database of criteria important to parcel adjacency and size was built using Geographic Information (GIS) data from various sources. Each input criteria was ranked from high to low based on relative importance. **Identification and ranking of suitable criteria for the character of parcels in Elbert County** involved discussions with local planning officials, state wildlife specialists and conservation organizations.
2. These criteria were overlaid to create composite maps and build an understanding of areas containing more favorable conditions for adjacency and size resulted in higher values.
3. The analysis maps were combined to create a composite map to identify lands with the most character of parcel criteria (*page 45*). This analysis was combined with the composite maps from A. Natural and Working Agricultural Lands and B. Scenic Resources to identify the overall open space suitability within Elbert County.

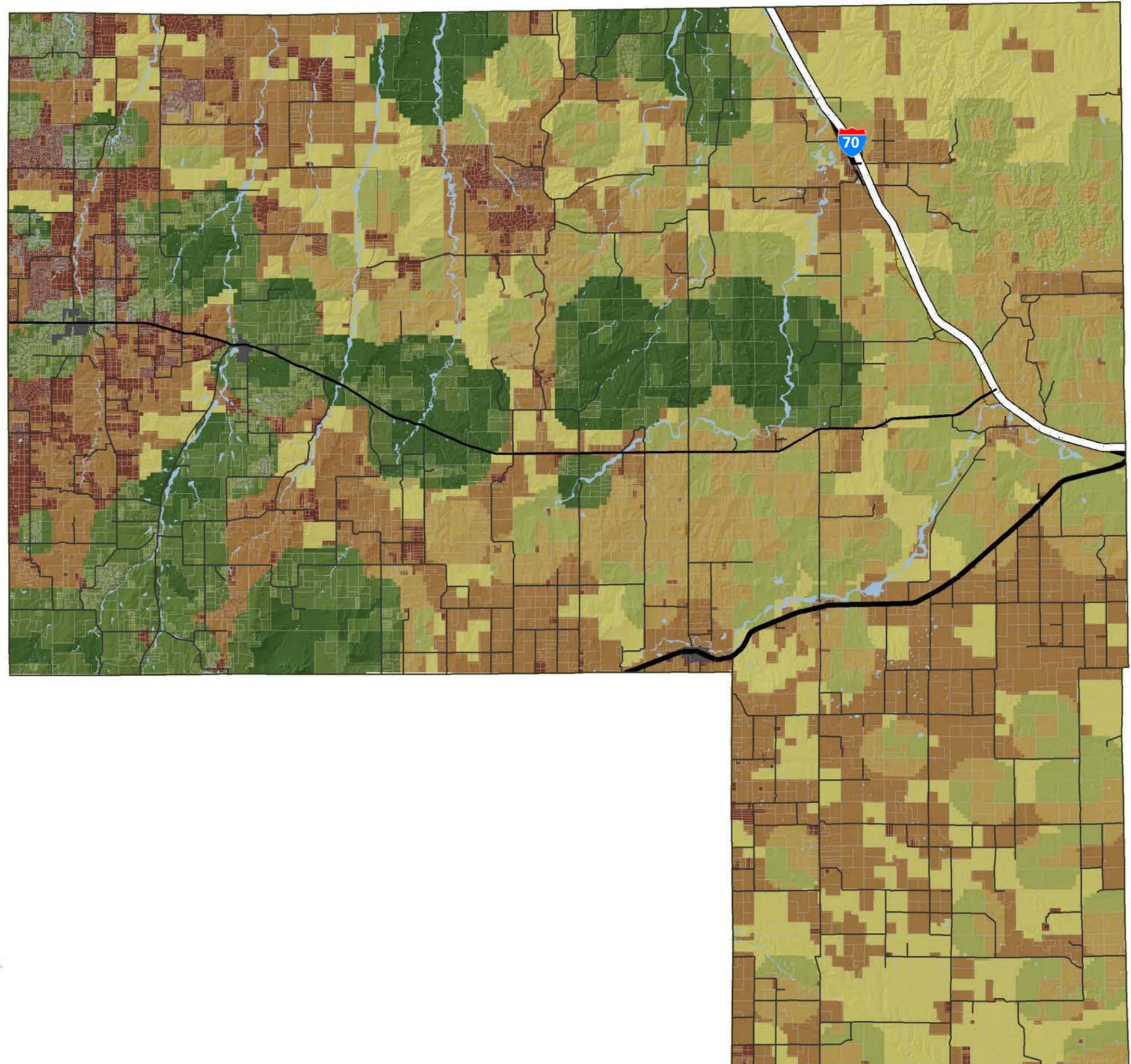


C. CHARACTER OF PARCEL COMPOSITE MAP

-  Elbert County
-  Parcels
-  Local Road
-  Highway
-  Interstate
-  Rail Road
-  Lakes
-  Streams

Character of Parcel

Significance
 High
 Low



Data Sources: Elbert County, Colorado View, CO Map

Disclaimer: Data was developed for the County's sole use, and that any use thereof by Licensee or any other person is at the user's sole risk. All GIS data is subject to change, and the accuracy and completeness of the Data cannot be and is not warranted or guaranteed by the County. The Data is distributed "as is." The County makes no warranties or guarantees, "express" or implied, as to the completeness, accuracy, or correctness of the Data, nor shall the County incur any liability from the incorrect, incomplete, or misleading information contained therein. The County makes no warranties, either expressed or implied, of value, design, condition, title, merchantability, or fitness for a particular purpose. The County shall not be liable for any direct, indirect, incidental, consequential, punitive, or special damages, whether foreseeable or unforeseeable, arising out of the authorized or unauthorized use of the Data or the inability to use the Data or out of any breach of warranty whatsoever.

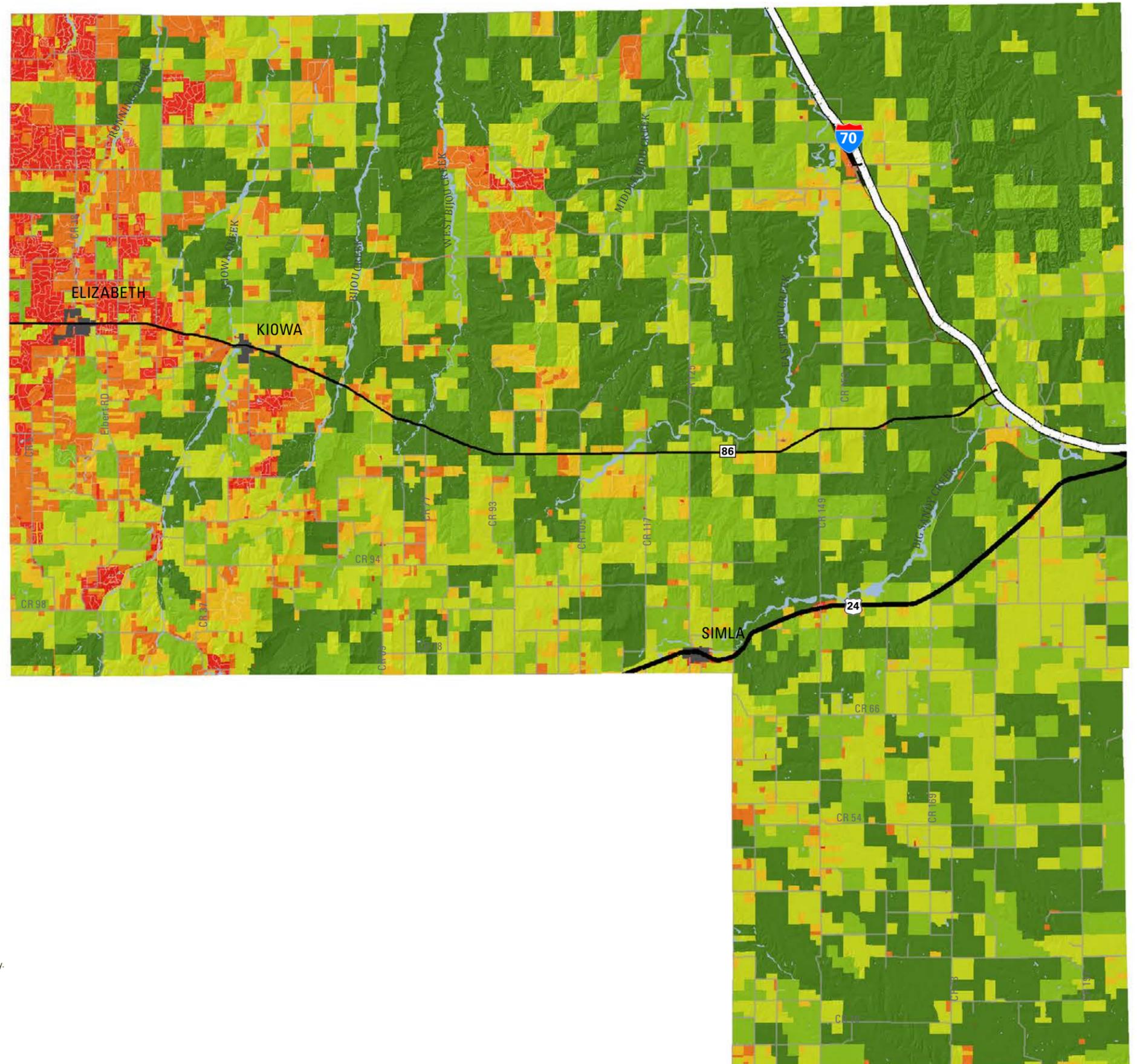
Date: 5/3/2016

C1. SIZE OF PARCEL DETAILED ANALYSIS PROCESS

C. CHARACTER OF PARCEL EVALUATION PROCESS



-  Elbert County
 -  Local Road
 -  Highway
 -  Interstate
 -  Rail Road
 -  Lakes
 -  Streams
- Parcel Size
- Acres
-  Less Than 20 Acres
 -  20 to 50 Acres
 -  50 to 100 Acres
 -  100 to 500 Acres
 -  500 to 1,000 Acres
 -  Greater Than 1,000 Acres

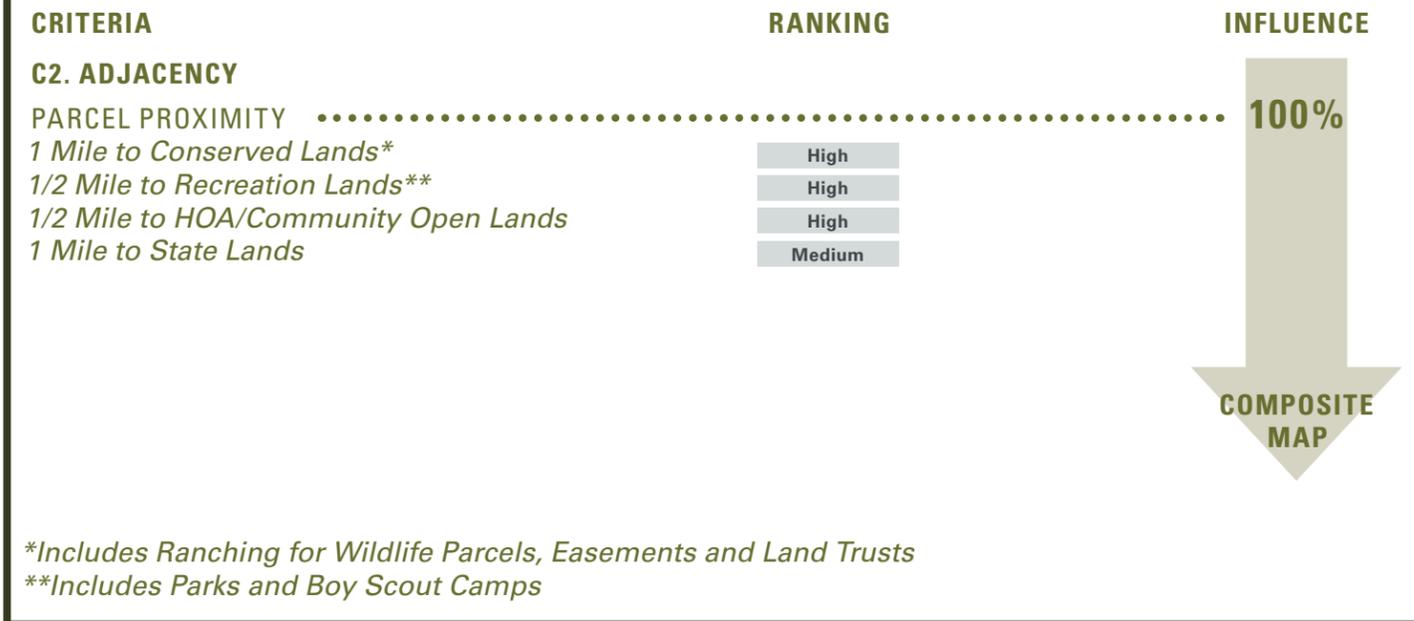


Data Sources: Elbert County, Colorado View, CO Map
 Disclaimer: Data was developed for the County's sole use, and that any use thereof by Licensee or any other person is at the user's sole risk. All GIS data is subject to change, and the accuracy and completeness of the Data cannot be and is not warranted or guaranteed by the County. The Data is distributed "as is." The County makes no warranties or guarantees, "express" or implied, as to the completeness, accuracy, or correctness of the Data, nor shall the County incur any liability from the incorrect, incomplete, or misleading information contained therein. The County makes no warranties, either expressed or implied, of value, design, condition, title, merchantability, or fitness for a particular purpose. The County shall not be liable for any direct, indirect, incidental, consequential, punitive, or special damages, whether foreseeable or unforeseeable, arising out of the authorized or unauthorized use of the Data or the inability to use the Data or out of any breach of warranty whatsoever.

Date: 1/28/2016

C2. ADJACENCY OF PARCEL DETAILED ANALYSIS PROCESS

C. CHARACTER OF PARCEL EVALUATION PROCESS



Elbert County

Local Road

Highway

Interstate

Rail Road

Lakes

Streams

Open Space Type

Camp

County Owned

Easement

HOA

Land Trust

Park

Ranching for Wildlife

State Land

Adjacency

Not Adjacent to Open Lands

Within 1 Mile of State Lands

Within 1 Mile of Conserved Lands or 1/2 Mile of Recreation and Community Open Lands

Within 1 Mile of 1+ Location of State or Conserved Lands or 1/2 Mile of Recreation and Community Open Lands

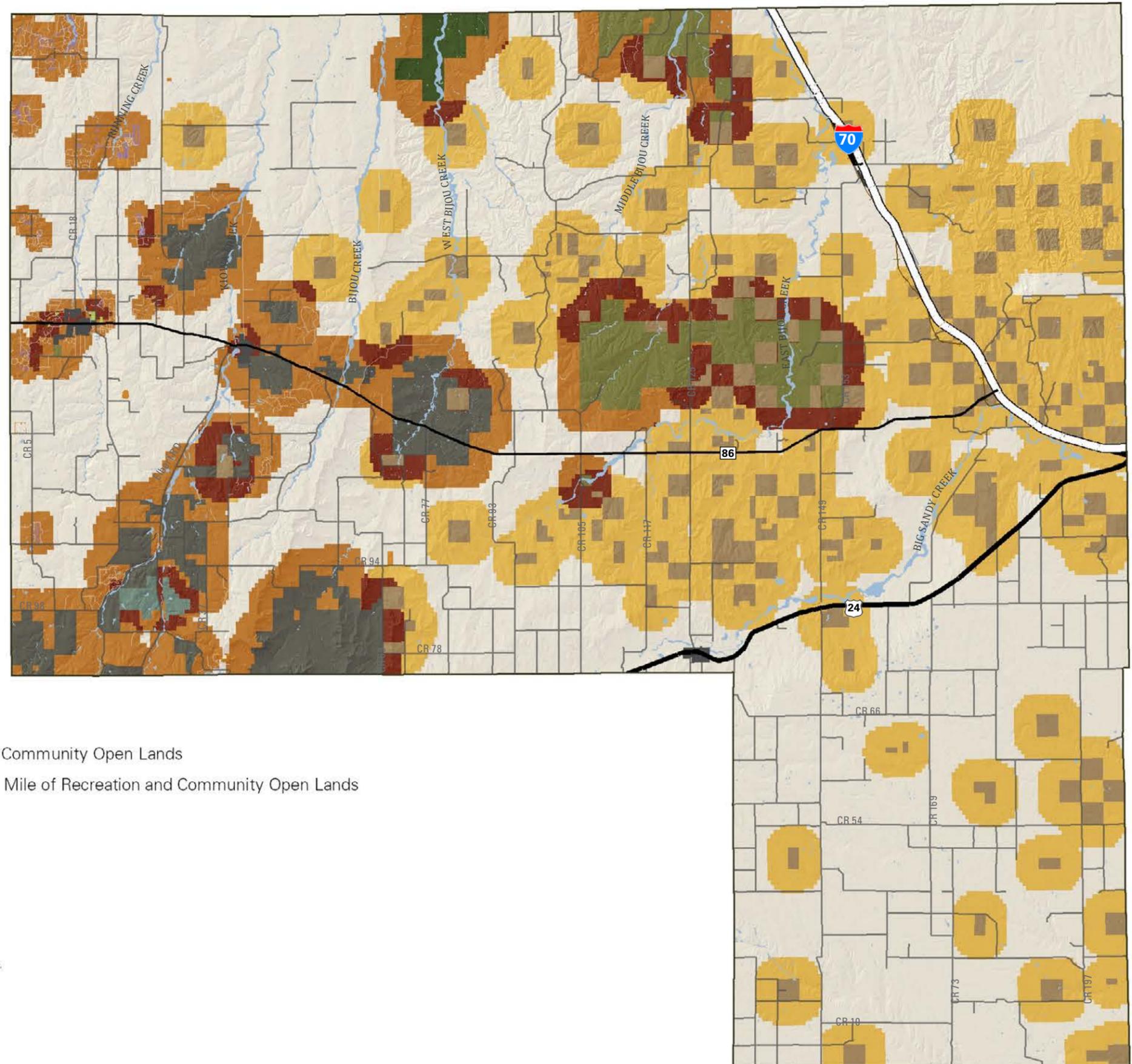
1 in = 5 miles

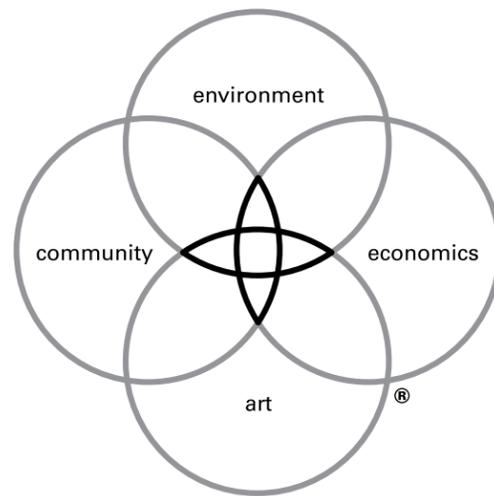


Data Sources: Elbert County, Colorado View, CO Map

Disclaimer: Data was developed for the County's sole use, and that any use thereof by Licensee or any other person is at the user's sole risk. All GIS data is subject to change, and the accuracy and completeness of the Data cannot be and is not warranted or guaranteed by the County. The Data is distributed "as is." The County makes no warranties or guarantees, "express" or implied, as to the completeness, accuracy, or correctness of the Data, nor shall the County incur any liability from the incorrect, incomplete, or misleading information contained therein. The County makes no warranties, either expressed or implied, of value, design, condition, title, merchantability, or fitness for a particular purpose. The County shall not be liable for any direct, indirect, incidental, consequential, punitive, or special damages, whether foreseeable or unforeseeable, arising out of the authorized or unauthorized use of the Data or the inability to use the Data or out of any breach of warranty whatsoever.

Date: 2/29/2016





DW LEGACY DESIGN®

We believe that when environment, economics, art and community are combined in harmony with the dictates of the land and needs of society, magical places result — sustainable places of timeless beauty, significant value and enduring quality, places that lift the spirit.

Design Workshop is dedicated to creating Legacy projects: for our clients, for society and for the well-being of our planet.

DESIGNWORKSHOP

ASHEVILLE • ASPEN • AUSTIN • CHICAGO • DENVER • DUBAI • HOUSTON • LAKE TAHOE • LOS ANGELES • SHANGHAI