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

OVERVIEW

- What is an Open Space Study and Why Now
- Who Was Involved and Process
- The Case for Open Space
- Layer Upon Layer
- Priorities and Approaches
- Q & A

DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

WHAT IS AN OPEN SPACE STUDY?

It is a …

- Tool for Elbert County to better understand areas that contain high open space value in order to protect your region's rural character

- Method of identifying opportunities and guidance for future open space conservation, habitat protection, and recreation connectivity

- Resource for landowners to understand options in face of changing economies and growth pressures

DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

WHAT IS AN OPEN SPACE STUDY?

It is <u>not</u> a ...

- Plan for public acquisition of private lands
- Method of identifying individual parcels
- Means of restricting private property rights or development potential

WHY NOW?

- Community development pressures
  - Predicted to be fastest growing county in Colorado over next 5 years – potentially doubling in population by 2030
  - Residential subdivision development serving Denver, Parker, Castle Rock, and Colorado Springs
- Energy development pressures
  - Largest wind energy project in Colorado – 300-400 turbines (440 ft tall) and 90 miles of transmission lines (130 ft tall) – approximately half in eastern Elbert County
  - Traditional oil and gas exploration (southern end of Niobrara / Denver-Julesburg Basin)
- Opens new funding opportunities and aligned with Comprehensive Plan update process

WHO WAS INVOLVED

- Elbert County Planning Department
- Douglas Land Conservancy (non-profit 501(c)3)
- Design Workshop (planning consultant)
- Stakeholder Focus Groups

DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

WHO WAS INVOLVED

- Douglas Land Conservancy
  - Non-partisan, non-profit land trust dedicated to the protection and conservation of the natural character, habitat, and open space of the central front range region of Colorado, including Douglas County and surrounding areas
  - Made up of concerned citizens and based in Castle Rock since 1987
  - Recognizing the importance of a regional approach in land conservation has recently broadened its focus to support surrounding counties, including Jefferson and Elbert
  - In 2014, awarded a grant by a local family foundation to help develop the open space vision study

FOCUS GROUP MEETINGS (JUNE 2016)

- Recreation, Education, and Activities
  - Peaceful Valley Scout Ranch, Magness Adventure Camp, Plains Conservation Center, Douglas/Elbert Horse Council, 4H

- Agricultural Working Lands and Natural Resources
  - Colorado Cattleman's Association, Farm Bureau, Colorado Open Lands, Colorado Parks and Wildlife, U.S. Soil Conservation Service, NRCS, Conservation Fund, Malone Foundation, Nature Conservancy, Kiowa Conservation Board

- Community Development
  - Town of Elizabeth (Parks and Recreation, Community Development), Kiowa Public Works, Simla Public Works

ELBERT COUNTY

DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

PROCESS

- Data Gathering and Preliminary Analysis
- County Tour and Reconnaissance
- Stakeholder Engagement (Focus Group Meetings)
- Revised Analysis and Development of Priorities
- Documentation of the Study

ELBERT COUNTY

DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

THE CASE FOR OPEN SPACE

AGRICULTURAL WORKING LANDS

RECREATION

WILDLIFE / HABITAT

SCENIC QUALITY

ELBERT COUNTY

DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

THE CASE FOR OPEN SPACE

- Economic
  - Preserve existing agricultural economies
  - Build on equine facilities ($125M between Elbert and Douglas Counties)
  - Maintain or enhance property values (10-15%)
  - Capitalize on recreation/tourism economy ($21B statewide)

- Community
  - Identity and continuation of rural way of life
  - Citizen's health and wellness
  - Connection to nature for children

- Environmental
  - Wildlife habitat
  - Water resources protection (surface and aquifer)
  - Scenic value (open plains, pine forests, Pikes to Longs)

ELBERT COUNTY

DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

LAYER UPON LAYER

- Gather and analyze multiple layers of GIS data and information from local, state, and federal sources
  - Natural Features and Agricultural Working Lands
  - Scenic Quality and Visibility
  - Character of Parcel (size and adjacency)

- Assign ranking of Low, Medium, or High to different characteristics
  - Example: Wildlife Nesting/Calving Sites = High, Winter Range = Medium, Overall Range = Low

- Each layer is individually weighted and "sandwiched" with the others to equal 100%

LAYER UPON LAYER | natural features and agricultural working lands

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

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

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

A3. WORKING AGRICULTURALLANDS — *See Page 30*

A2. LAND CHARACTERISTICS — *See Page 26*

A1. WILDLIFE HABITAT — *See Page 22*

DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

LAYER UPON LAYER | natural features and agricultural working lands

A. NATURAL AND WORKING AGRICULTURAL LANDS COMPOSITE MAP

Elbert County

Local Road

Highway

Interstate

Rail Road

Lakes

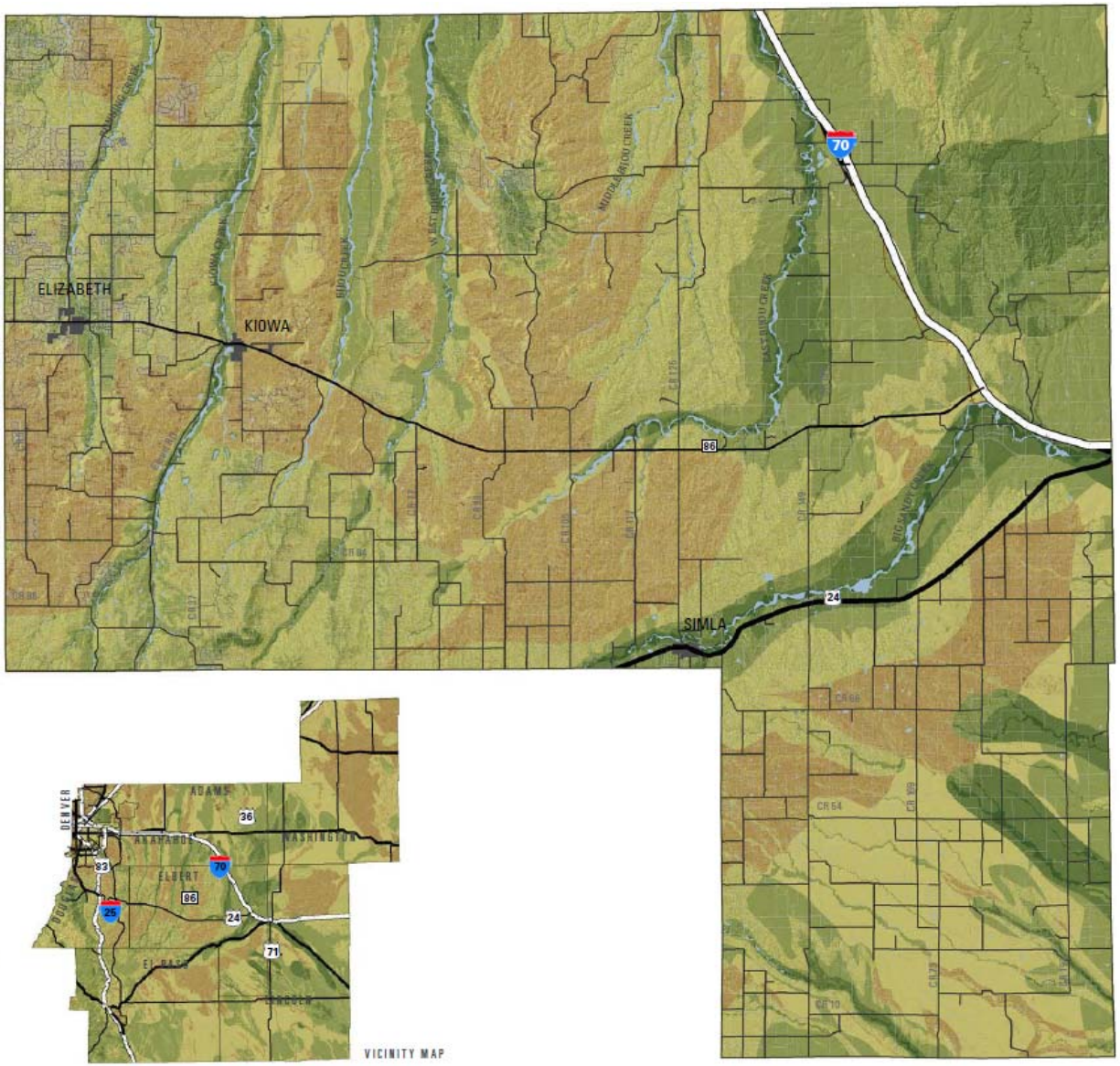
Streams

Natural and Working Lands

Significance

High

Low



VICINITY MAP

1 in = 5 miles

0 2.5 5 10 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: 5/3/2016

ELBERT COUNTY

DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

LAYER UPON LAYER | scenic quality and visibility

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.

CRITERIA	INFLUENCE
B2. SCENIC RESOURCES	
NATURAL	50%
Elevations Greater Than 7,000 ft.	
Ponderosa Stands	
Scenic River Corridors	
Elevations Between 6,000 to 7,000ft.	
Elevations Between 5,000 to 6,000ft.	
CULTURAL AND HISTORIC	50%
Ranches	
Community Separators	
Recreation Areas	
Ghost Towns	

CRITERIA	INFLUENCE
B1. VIEWS	
FREQUENCY SEEN FROM MAJOR ROADS IN ELBERT COUNTY	70%
Visible for 5 or More Miles	
Visible for 3 to 5 Miles	
Visible for 1 to 3 Miles	
FREQUENCY SEEN FROM MAJOR ROADS ADJACENT TO ELBERT COUNTY	30%
Visible for 5 or More Miles	
Visible for 3 to 5 Miles	
Visible for 1 to 3 Miles	

B2. SCENIC RESOURCES

See Page 40

B1. VIEWS

See Page 36

DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

LAYER UPON LAYER | scenic quality and visibility

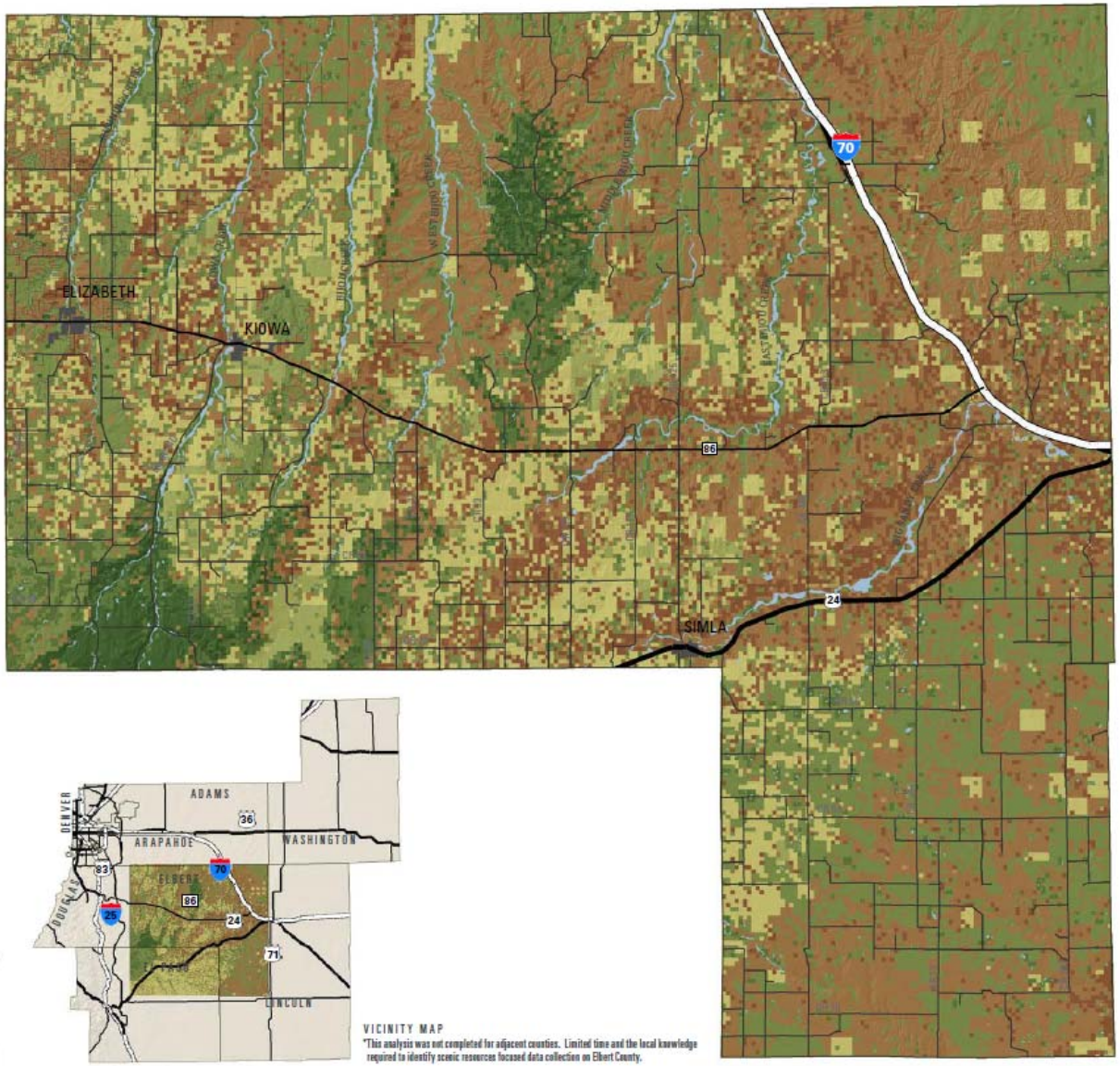
B. SCENIC QUALITY COMPOSITE MAP

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

Scenic Quality Significance

High

Low



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.

1 in = 5 miles

0 2.5 5 10 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: 5/18/2016

ELBERT COUNTY

DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

LAYER UPON LAYER | character of parcel

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.

CRITERIA	INFLUENCE
C2. ADJACENCY	
PROXIMITY *Parcel Proximity to Parks and Conserved Lands* *Parcel Proximity to Recreation Opportunities* *Parcel Proximity to Community Development*	100%

CRITERIA	INFLUENCE
C1. SIZE	
PARCEL SIZE *Greater Than 1,000 Acres* *Between 500 to 1,000 Acres* *Between 100 to 500 Acres* *Between 50 to 100 Acres* *Between 20 to 50 Acres* *Less Than 20 Acres*	100%

C2. PARCEL ADJACENCY

See Page 48

C1. PARCEL SIZE

See Page 46

DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

LAYER UPON LAYER | character of parcel

C. CHARACTER OF PARCEL COMPOSITE MAP

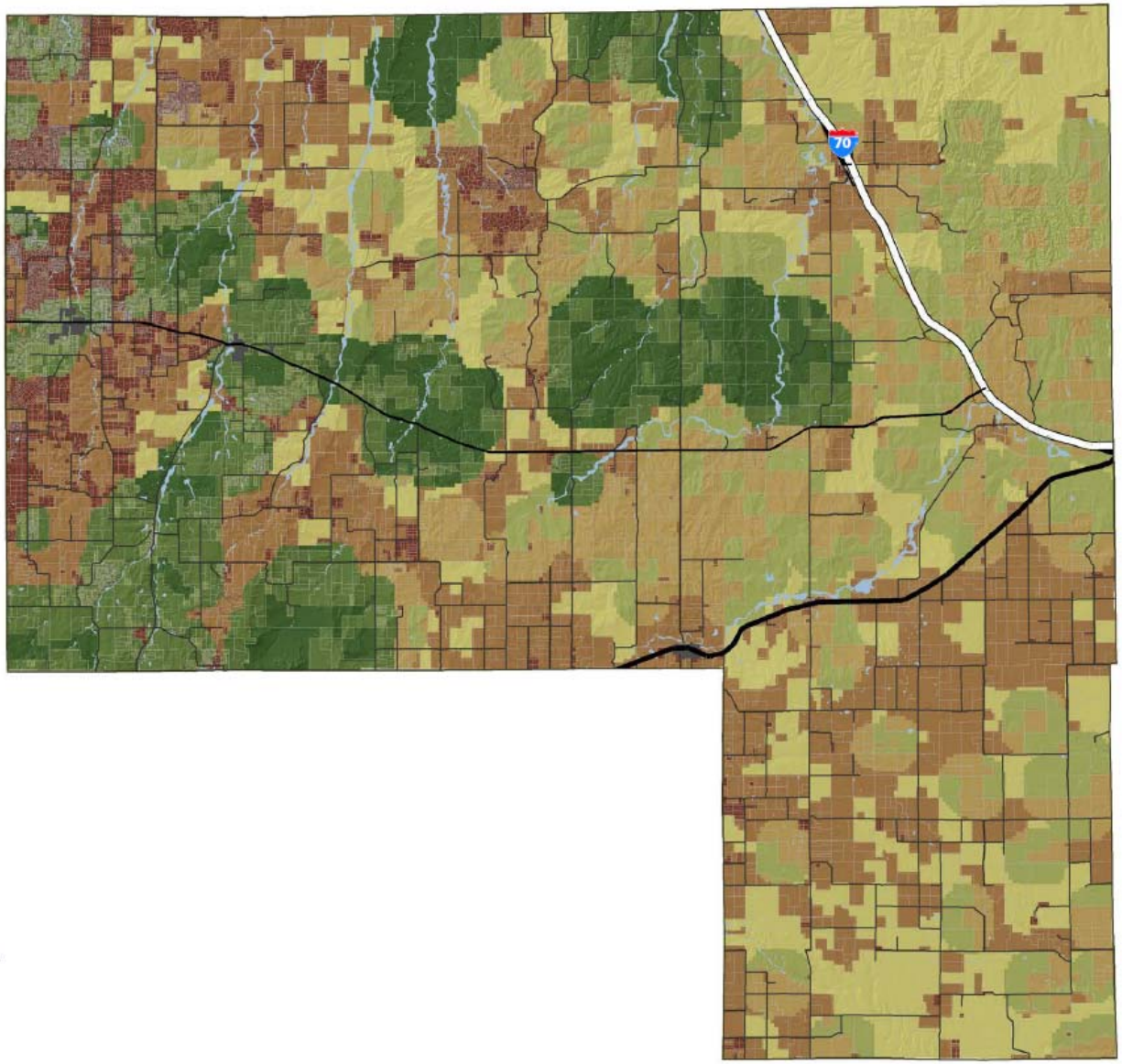
- Elbert County
- Parcels
- Local Road
- Highway
- Interstate
- Rail Road
- Lakes
- Streams

Character of Parcel

Significance

High

Low



1 in = 5 miles

0 2.5 5 10 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: 5/3/2016

ELBERT COUNTY

DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

LAYER UPON LAYER | open space suitability composite

ANALYSIS OF LANDSCAPE CHARACTER details p. 18

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

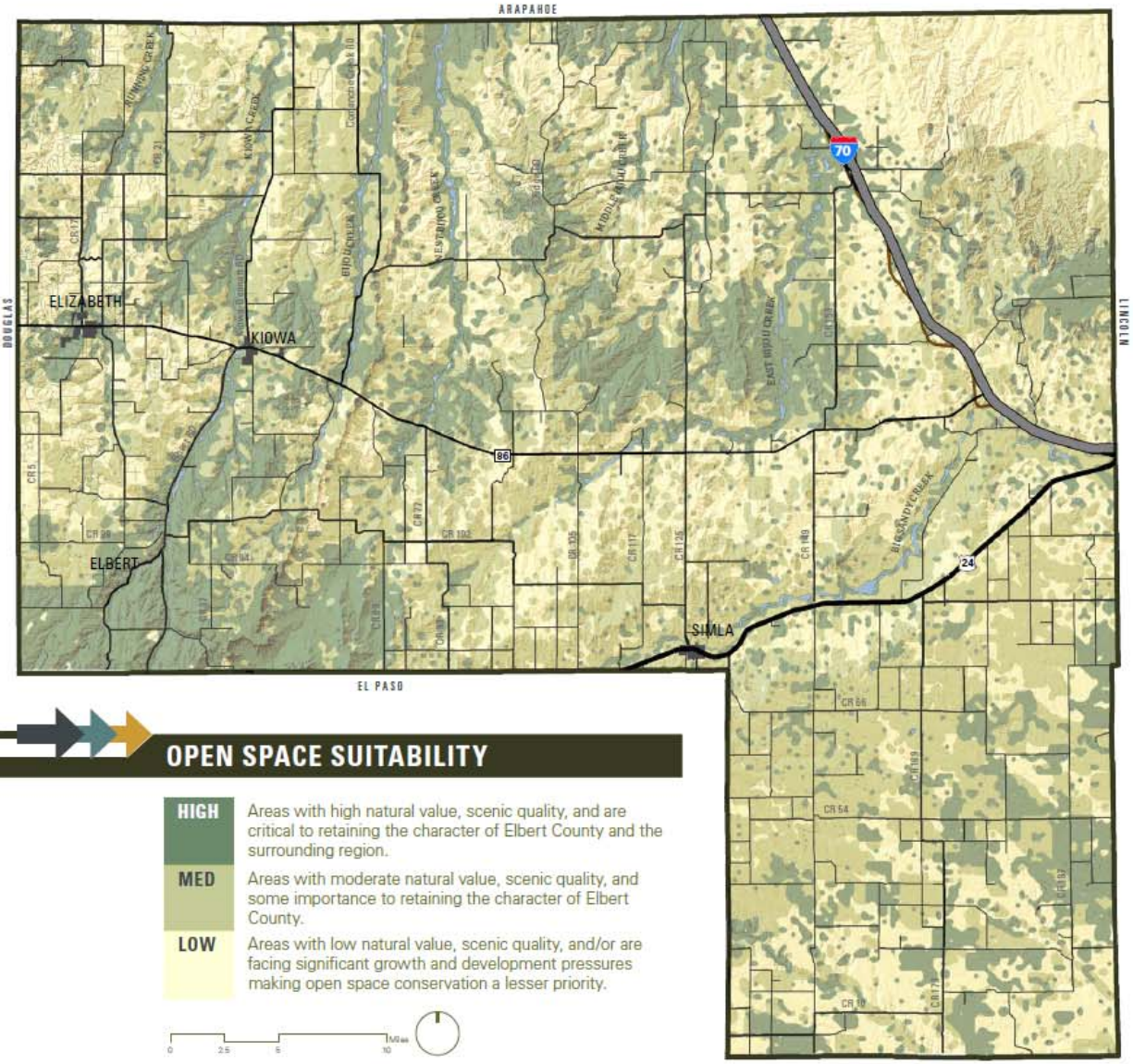
Goal *Identify lands that are highly visible and where open space would preserve scenic areas or views to surrounding features.*

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.

0 2.5 5 10 Miles

ELBERT COUNTY

DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

PRIORITIES AND APPROACHES

- Categories of conservation priorities were evaluated and assigned to each area of high value (not exclusive of each other)

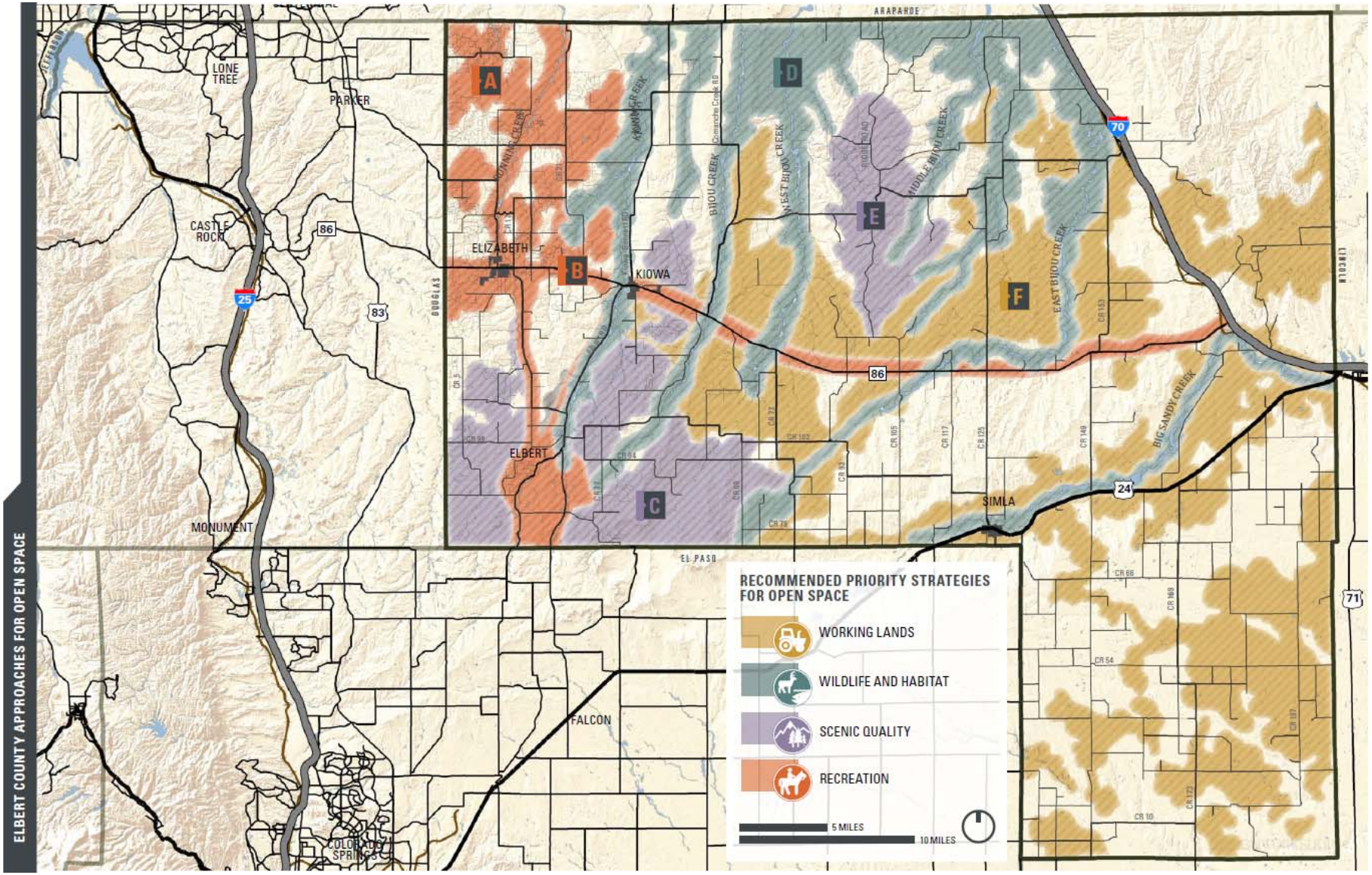
- Various suggested approaches to achieve the priorities are recommended

ELBERT COUNTY

DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

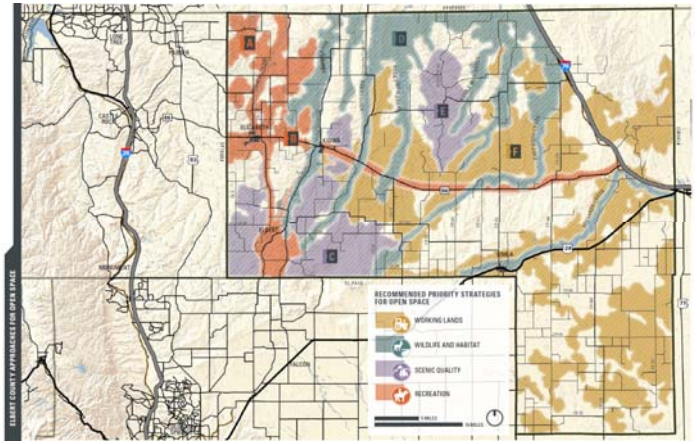
PRIORITIES AND APPROACHES



DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

PRIORITIES AND APPROACHES



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

- 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.

- Restrict development on ridgetops and highly visible areas.
- Create community separators.

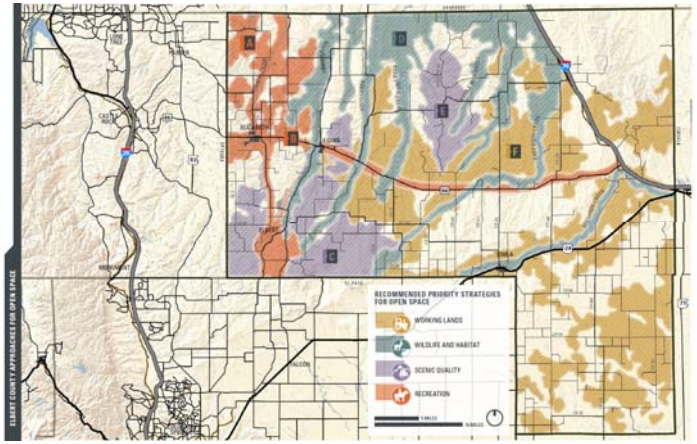
- Exclude development a minimum of 100' from stream edges.

ELBERT COUNTY

DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

PRIORITIES AND APPROACHES



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

- 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.

- Restrict development on ridgetops and highly visible areas.
- Create community separators.

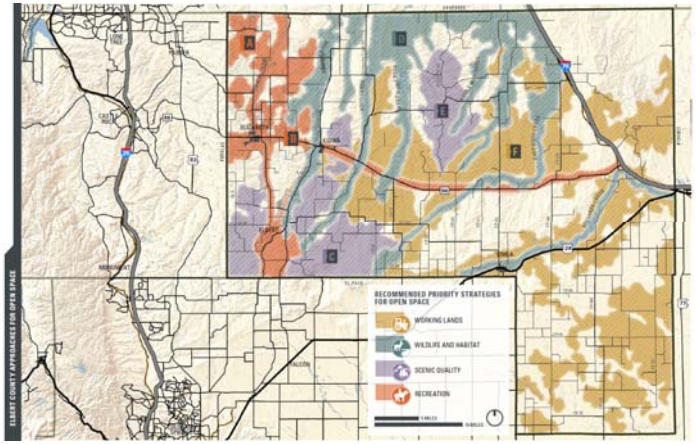
- Cluster development to preserve working agricultural lands adjacent to residential development.

ELBERT COUNTY

DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

PRIORITIES AND APPROACHES



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

- Restrict development on ridgetops and highly visible areas.
- Cluster development to preserve open spaces adjacent to residential development.
- Preserve agricultural views through community separators.

- Preserve forests and vegetation of the High Plains through livestock regulations that benefit wildlife.
- Exclude development a minimum of 100' from stream edges.

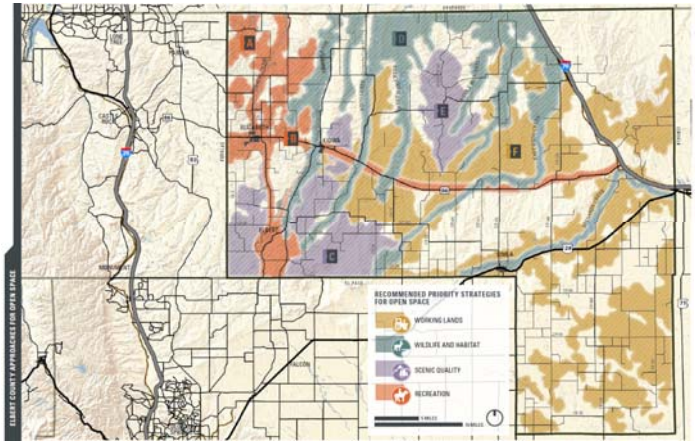
- Develop recreation greenways within undeveloped ridgeline corridors.

ELBERT COUNTY

DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

PRIORITIES AND APPROACHES



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

- 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.

- Restrict development on ridgetops and highly visible areas.
- Cluster development to preserve natural areas adjacent to residential development.

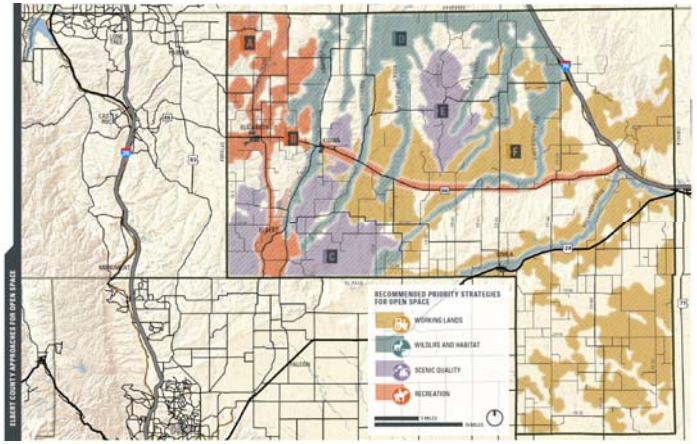
- Limit subdivision of land to larger parcels to support contiguous working agricultural lands and wildlife habitat.

ELBERT COUNTY

DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

PRIORITIES AND APPROACHES



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

- Restrict development on ridgetops and highly visible areas.
- Cluster development to preserve open spaces adjacent to residential development.
- Preserve agricultural views through community separators.

- Require new community development set aside land for publicly accessible open spaces.
- Develop community hiking and equestrian trails.

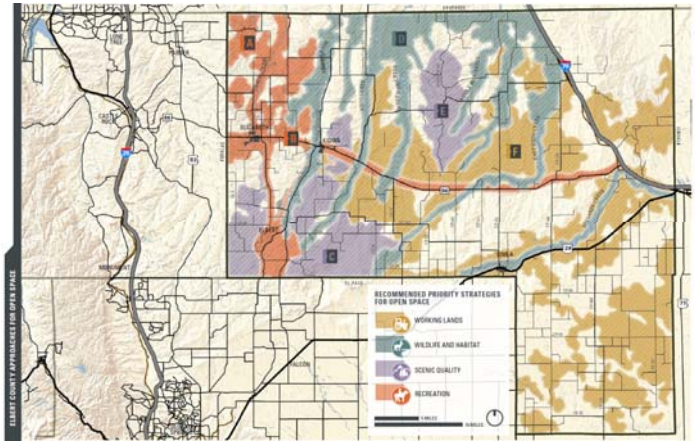
- Cluster development to preserve working agricultural lands adjacent to residential development.

ELBERT COUNTY

DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

PRIORITIES AND APPROACHES



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

- 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.
- Restrict development on ridgetops and highly visible areas.
- Cluster development to preserve working agricultural lands adjacent to residential development.
- Use best management practices that protect stream edges for agricultural and grazing impacts.

ELBERT COUNTY

DOUGLAS LAND CONSERVANCY

DESIGNWORKSHOP

ELBERT COUNTY

OPEN SPACE STUDY