

# Comprehensive Master Plan Amendment Staff Report

**Date:** December 31, 2025

**To:** Douglas County Planning Commission

**From:** Matt Jakubowski, AICP, Chief Planner *MJ*  
Curtis J. Weitkunat, AICP, Long Range Planning Manager *CW*  
Steven E. Koster, AICP, Assistant Director of Planning Services *SK*

**Subject:** Chatfield Urban Area Expansion – CMP Land Use Map Amendment

**Project File:** DR2025-011

---

**Planning Commission Hearing:**

**January 12, 2026 @ 6:00 p.m.**

---

## **I. EXECUTIVE SUMMARY**

The request is a public-initiated amendment of the 2040 Douglas County Comprehensive Master Plan (CMP). The proposal amends the CMP Land Use Map (Map 1.1), the Chatfield Urban Area map (Map 2.1), the Rural Communities map (Map 4.1), and the Louviers Rural Community map (Map 4.5) by including approximately 440 acres of land into the Chatfield Urban Area. The property is currently in the Louviers Rural Community Area. The expansion is contiguous with 223 acres of land that were included into the Chatfield Urban Area in March 2025.

The expansion area includes the existing Douglas County Emergency Vehicle Operations Center (EVOC), a portion of the proposed Zebulon Regional Sports Complex (Zebulon), land to be used for County operations, and approximately 185 acres of land to be conserved.

The applicant, Sterling Ranch, is concurrently processing the Sterling Ranch Planned Development, 15<sup>th</sup> Amendment (Project File: ZR2025-014), for rezoning and inclusion of the majority of the expansion area within the Sterling Ranch PD. The EVOC site will retain its existing zoning.

## **II. APPLICATION INFORMATION**

### **A. Applicant**

SR Waterton LLC  
8155 Piney River Avenue  
Littleton, Colorado 80125

**B. Applicant's Representative**

Susan Beckman  
Sterling Ranch Development Company  
8155 Piney River Avenue  
Littleton, Colorado 80125

**C. Request**

The applicant requests a CMP amendment to include approximately 440 acres of land within the Chatfield Urban Area.

**D. Process**

A public initiated amendment of the CMP Land Use Map is processed pursuant to Sections 10-1A and 10-2 of the CMP. The procedural requirements for such an amendment are established in Section 10-2B.

Per Section 10-2B.2a(7), the Planning Commission shall evaluate the application, referral comments, staff report, and public testimony, and take one of the following actions:

- Approve the request.
- Approve the request with conditions.
- Table for further study.
- Continue the request to a time and date certain in order to obtain more information and to take additional public testimony.
- Deny the request.

**E. Location**

The site is located southeast of the intersection of Moore Road and Waterton Road adjacent to the communities of Sterling Ranch, Plum Valley Heights and Louviers. The expansion area generally begins at Moore Road, directly east of the Plum Valley Heights subdivision (which is within the nonurban Chatfield Valley Subarea), and stops at the western boundary of Louviers. Waterton Road bisects the expansion area. The expansion area is contiguous with the 223 acres of land included into the Chatfield Urban Area in March 2025. Areas south and east of the expansion area are within the Louviers Rural Community.

The expansion area includes the existing EVOC facility, a portion of Zebulon, land being considered for Douglas County operations, and approximately 185 acres of land between Louviers and Zebulon to be conserved pursuant to an agreement between the applicant and Douglas County.

A Vicinity Map, Zoning Map, and Aerial Map highlight site location and existing conditions and are provided in the staff report attachments.



#### **F. Site Characteristics**

The expansion area is primarily undeveloped except for the existing EVOC parcel. A mapped 100-year floodplain does exist on a portion of the property. Vegetation on the site consists of grass cover.

### **III. PUBLIC NOTICE AND INPUT**

CMP Section 10-2C requires mailed, published, and posted notice of the public hearing. Courtesy notices of an application in process were sent to all abutting landowners during the referral period. Of the HOAs and community organizations that were sent a referral request, Chatfield Farms 1-A, Highlands Ranch Community Association (HRCA), Louviers Conservation Partnership (LCP), and Roxborough Village First HOA responded.

HRCA had no objection to the proposal. Chatfield Farms 1-A and Roxborough Village First have concerns regarding the traffic impacts generated from future development at Zebulon, particularly related to evacuations in an emergency. Roxborough Village First objected to the development of Zebulon in general, and expressed concerns about adequacy of infrastructure and services. The LCP stated that the conservation easement area should stay in the Louviers Rural Community Area.

All referral agency comments from the review period are included in the Referral Agency Response Report attached to the staff report.

### **IV. STAFF ANALYSIS**

The following is an analysis of the approval criteria in CMP Section 10-2A. All applications must demonstrate:

#### **(1) Consistency with the spirit, intent, goals, objectives, and policies of the CMP.**

*Staff Comment: The applicant's narrative indicates that the proposal is consistent with goals, objectives, and policies in CMP Sections 2 (Urban Land Use), 3 (Nonurban Land Use), 4 (Rural Communities), 5 (Community Resources), 6 (Transportation), 7 (Water Supply), and 9 (Wildlife). The applicant's narrative includes analysis of the goals, objectives, and policies of the Chatfield Urban Area, the Louviers Rural Community, and the nonurban Chatfield Valley Subarea that are specific to the proposal. The applicant's narrative analysis and CMP maps, with the project area identified in relation to CMP designated areas, are attached to the staff report.*

*Goals, objectives, and policies within CMP Section 2 prioritize growth in urban areas with access to infrastructure, services, and community amenities. Section 2 also supports the creation of healthy communities, that include adequate infrastructure development, economic and job growth, recreational opportunities, and a balanced approach toward coexisting with the natural environment. Goals, objectives, and policies applicable to the Chatfield Urban Area emphasize the importance of balancing wildlife and the natural environment with community design, as well as the*

*importance of designing communities to support a mix of land uses and infrastructure to serve community needs.*

*The proposal spans an area between the Sterling Ranch PD and Plum Valley Heights on the west and Louviers on the east. North and west of the expansion area are parcels that were part of the previous Chatfield Urban Area expansion. Upon inclusion of the expansion area in the Chatfield Urban Area, the applicant is proposing to rezone much of the land to Sterling Ranch PD. This will facilitate connection of the area to infrastructure, services, and amenities. Demonstration of physical connection to utilities, services, and infrastructure during future subdivision and site improvement plan processes will be required.*

*The application includes approximately 185 acres of land proposed for conservation within the expansion area. Regardless of CMP designation, the applicant states this conserved land will balance the expansion of urban development by buffering Louviers and preserving a wildlife corridor. The applicant's narrative also states it will participate in the removal and relocation of fencing in the area that currently impedes wildlife movement to and from Plum Creek, thus enhancing wildlife movement and the usefulness of the corridor.*

*Goals, objectives, and policies in Section 3 Nonurban Land Use and Section 4 Rural Communities support land use and design compatibility with the rural character of the Chatfield Valley Nonurban area to the west, and the preservation of the Louviers Rural Community to the north, east, and south. The applicant states in its narrative that thoughtful planning, scaling, and buffering that respects existing development will be required as new development fills in on both the east and west sides of the expansion area.*

*Goals and objectives of Section 5, Community Resources, are supported by the extension of water and sewer infrastructure further to the east, which provides a general community benefit to Louviers and parcels in the Highway 85 corridor.*

*Section 6 addresses the road and transportation network, for which development in the project area is anticipated to pay its fair share of highway system improvements per the requirements of the Sterling Ranch PD. It is anticipated that additional east-west road connections will be possible as part of development in the area.*

*Section 7 addresses the efficient use, conservation, and management of water supplies. Development of this area will support the establishment of water and sewer infrastructure east of Sterling Ranch, providing opportunities to improve water and wastewater service in the area and along the Highway 85 corridor.*

*The CMP Wildlife Resources map (within CMP Section 9, Wildlife) shows the site primarily within Low Habitat Value area. However, some of the northeastern edge of the expansion area is located within Moderate Habitat Value area. See the applicant's*

*Exhibit L in the staff report attachments that shows the expansion area on the CMP Wildlife Resources Map. A portion of the northern end of the expansion area is within a Wildlife Movement Corridor associated with the Plum Creek corridor and floodplain. Mapped CMP Wildlife Movement Corridors generally highlight important migration corridors in the County typically associated with a river, creek, or stream that draw a variety of wildlife. The majority of the expansion area is within an Overland Connection, which represent important open land corridors connecting large blocks of habitat, and conserved and open lands for wildlife to travel. The entirety of the expansion area is designated on the CMP map as within a Wildlife Habitat Conservation Area, or areas distinguished by high value wildlife habitat with interconnected wildlife corridors and overland connections, bridging much larger areas of the County to important open spaces, state parks, and conserved lands.*

*Goals, objectives, and policies in CMP Section 9 prioritize protection and preservation of wildlife habitat and wildlife movement, including linking habitat and minimizing fencing that impedes wildlife movement. As part of its analysis of the expansion area, the applicant completed a wildlife habitat assessment, which is attached to the staff report. Considering nearby development, existing County facilities on the property, and existing roadways, the report found “suboptimal” conditions for wildlife movement. Additionally, the report mapped the locations of “impassable fencing” along Waterton Road as well as on and near the property that impedes wildlife movement. The report recommends design considerations in new development that prioritizes wildlife habitat and movement, and the protection of Plum Creek.*

*As a result of this analysis, the applicant has committed to working to remove or relocate fencing (both onsite and offsite as necessary) to improve wildlife movement within a more defined corridor between Plum Creek and open lands to the south including the conserved Dupont Open Space and the Woodhouse State Wildlife Area, thus supporting the CMP. This has the added benefit of funneling wildlife away from at-grade road crossings (and potential vehicle conflicts) toward the existing underpasses at Waterton Road.*

**(2) Compatibility with surrounding land uses and zoning.**

*Staff Comment: Waterton Road bisects the expansion area in two parts. West of Waterton Road is the existing Douglas County EVOC parcel, a portion of which is undeveloped to the south of the active EVOC site along Waterton Road. Land within the expansion area east of Waterton Road is currently undeveloped and includes the proposed location of Zebulon. Further east of Zebulon is land proposed for conservation bordering Louviers and Plum Creek. The expansion area is currently zoned General Industrial (GI) and Rural Residential (RR) in areas abutting Louviers, Agricultural One (A-1) adjacent to Plum Valley Heights, and RR just south of EVOC. The applicant’s proposed Sterling Ranch PD, 15<sup>th</sup> Amendment, proposes rezoning of the majority of land in the expansion area as PD. The conserved land within the east side*

*of the expansion area is proposed to buffer Louviers from development and provides a benefit in effectively downzoning land currently zoned GI or RR from development.*

*Land abutting the expansion area includes the RR-zoned Plum Valley Heights subdivision, composed of 4- to 7-acre single-family lots, to the west, the A-1 and GI zoned Dyno Nobel facility to the south, RR-zoned land owned by Douglas County within a conservation easement (Dupont South Open Space) also to the south, Suburban Residential-zoned single-family development in Louviers, and GI-zoned and undeveloped parcels to the east. Parcels to the north consist of the previous Chatfield Urban Area expansion. These previous CMP expansion parcels are also proposed for inclusion in the Sterling Ranch PD and as part of Zebulon.*

**(3) Compatibility with existing, natural, and environmental conditions of the site and preservation of important natural features and scenic viewsheds, riparian corridors, wildlife habitat and movement corridors, and historic resources.**

*Staff Comment: The expansion area contains some portions of floodplain along Plum Creek and within the proposed conservation easement area. During future development, the applicant will be required to comply with all Douglas County standards for stormwater to ensure no impacts to Plum Creek occur. The CMP identifies no Class 3 Geologic Hazards on the site. A geotechnical analysis will be required as part of future development of the site.*

*The applicant has indicated that a portion of the site was part of the larger Dupont explosives manufacturing facility. Site cleanup has occurred, and in 2022 the Colorado Department of Public Health and Environment (CDPHE) released the property from a remedial action cleanup plan based upon completed cleanup measures. CDPHE will be provided a referral response request during any future development of the site. The applicant will comply with all applicable CDPHE requirements at the time of future development. Since the site has not been surveyed for cultural resources, a survey of onsite historic and cultural resources may be required with future subdivisions. There are no scenic view sheds to preserve on the site.*

*As discussed in above sections, the expansion area contains some Moderate Value wildlife habitat, is within an Overland Connection, and is entirely within a Wildlife Habitat Conservation Area. It further abuts and in some places is located within a Wildlife Movement Corridor at Plum Creek. The future conservation easement abutting Louviers will support wildlife movement. Additionally, the applicant has committed to the relocation and removal of fencing to assist in creating a more defined movement corridor east of the project area linking Plum Creek and important open space parcels to the south (Dupont Open Space and Woodhouse State Wildlife Area). During future development of the site, site-specific landscaping and design may be considered to further buffer, protect, and enhance wildlife movement.*

**(4) Adequate water supply, water and sewer treatment facilities, transportation networks, access, fire protection, school facilities, and parks and trails for the development.**

*Staff Comment: The applicant submitted correspondence from the Dominion Water and Sanitation District (DWSD) dated October 8, 2024, which is attached to this staff report. DWSD acknowledges the applicant's request to include the Waterton Business Park (which coincides with Zebulon) as part of the DWSD service area. DWSD indicated in its referral comments that this proposal is consistent with District Rules and Regulations. Additionally, as part of the concurrent Sterling Ranch PD, 15<sup>th</sup> Amendment rezoning application, DWSD has indicated that water and sewer service will be available to the expansion area and services can be extended.*

*Transportation improvements are anticipated along with continued development of Sterling Ranch, which includes the widening of Moore Road between Titan Road and Waterton Road. Additional transportation improvements may be necessary along with future development of the property, particularly along Waterton Road. Engineering Services indicated it will continue to work with the applicant to update the Master Traffic Impact Study currently in process.*

*The site lies within the service boundary of South Metro Fire Rescue (SMFR). SMFR has no objection to the CMP Amendment. SMFR will be provided a referral response request for more detailed comments as part of site specific development review.*

*Douglas County Parks and Trails provided a comment of no concern to the referral request. The Douglas County School District stated that growth does not pay its own way when it comes to building schools to accommodate growth, and requested the Planning Commission consider future school needs in reviewing the application. A referral response request will be sent to DCSD and Parks during future development review processes for determination of any necessary land dedication or payment of fees.*

**(5) How existing and planned capabilities of the affected special districts can adequately handle the service demand.**

*Staff Comment: The applicant narrative indicates that the expansion area is anticipated to be connected to all services currently provided to Sterling Ranch residents through the Sterling Ranch Community Authority Board or a new metro district to serve the community. Water and sewer service will be provided via DWSD. Future infrastructure improvements will be made in conjunction with development of the site as necessary.*

**(6) How social, economic, or land use conditions of the County have changed or are in process of changing in such a manner to support the proposed amendment to the CMP.**

*Staff Comment: The applicant identified three major factors resulting in changed conditions in this area of the County that contribute to the suitability of the proposed*

*amendment. First, over the past several years, road infrastructure improvements have been completed connecting Waterton Road through Sterling Ranch to Rampart Range Road. Prior to this connection, Waterton was extended east to Airport Road and Highway 85. These infrastructure connections have opened opportunities for development and support expansion of the urban area as infrastructure fills in.*

*Second, a land exchange between the applicant and Board of County Commissioners resulted in a changed parcel configuration in this area. This includes parcels in the CMP expansion area and the proposed conservation easement area adjacent to Louviers. As the applicant indicated in its narrative, the proposed conservation easement operates as a buffer along the west side of Louviers (also limiting GI-zoned land from possible development) and preserves wildlife movement in the area. The exchange and resulting conserved land improves the suitability of the project area for development. During future development, site design and the balancing of impacts from development on the existing Louviers Rural Community, Louviers Village, and wildlife corridor between Plum Creek and other conserved open space will be important.*

*Third, following the previous CMP expansion in early 2025, the vision for Zebulon began to take shape. Preliminary scoping, preliminary site design considerations, and analysis of the components of Zebulon (including grading, infrastructure, and access) necessitated additional acreage for the overall development. This in turn necessitated the applicant's proposal to expand the CMP once more into parcels adjacent to the previous expansion. As stated, the applicant is also proposing to incorporate the expansion area into the Sterling Ranch PD via the proposed 15<sup>th</sup> amendment.*

**(7) How land proposed for urban development is a logical expansion of the Primary Urban Area (PUA), Separated Urban Area (SUA), or Chatfield Urban Area, as applicable.**

*Staff Comment: Existing and adjacent water, sewer, utility, and transportation infrastructure is located to the west within the Sterling Ranch PD and is available to support the logical expansion of the Chatfield Urban Area. Water and sewer service will be available from DWSD.*

**(8) How the expansion of the PUA, SUA, or Chatfield Urban Area results in a compelling public benefit, as applicable.**

*Staff Comment: Below are the compelling public benefits of the amendment identified by the applicant in the narrative, which is attached in the staff report appendix:*

- *“A wildlife corridor study conducted as a part of this application revealed multiple layers of fencing within the Overland Connection Area identified in the Douglas County Wildlife Resources Map – centered on the Louviers Gulch. These fences, which are a mix of private and County ownership, are all a minimum of 6-feet tall, and topped with 3-strands of barbed wire. As such, they are impassable to big game and are a major disruption to their migration through the corridor – causing them to spread out of the Louviers Gulch and on to Waterton Road, where they*

pose a severe safety hazard to drivers. In order to improve wildlife migration patterns and improve public safety, Waterton Business Park will include a strategy to partner with the County to remove fencing that will allow big game to travel along the overland connection corridor as intended.”

- “The existing Waterton Road corridor through the property is fronted by large debris & rubble operations managed by Douglas County, as well as large gravel piles & heavy equipment storage related to winter roadway treatment. These piles of rubble, winter road treatment material, and heavy equipment will be removed as a part of Waterton Business Park. This will primarily divert the heavy truck traffic that transports this rubble away from this region completely – reducing traffic noise, congestion, and roadway damage. This will also help to repair & heal the landscape to allow for a more pleasant and aesthetic corridor.”
- “With the recent completion of Waterton Road through the Sterling Ranch Planned Development, this major thoroughfare now connects Wadsworth Blvd to Airport Road and US Highway 85, serving a number of Douglas County communities including the Roxborough Suburban Area, the Chatfield Valley Subarea, the Chatfield Urban Area, the Louviers Rural Community, and more. The Waterton Business Park is bisected by Waterton Road, creating an ideal frontage for a number of land uses including commercial, mixed use, sports facility, and light industrial that could serve the greater Douglas County community.”
- “Addressing water and sewer needs in the Highway 85 corridor is an objective that has been identified in the CMP. Expanding the Chatfield Urban Area to include the additional Waterton Business Park area and conservation easement will generate more opportunities to build and connect water and sewer services that will benefit the existing surrounding communities including Louviers and new commercial and residential development along the Waterton Road corridor in a timely manner. The revitalization efforts of the water and wastewater systems in northwest Douglas County are made possible through the revenues generated from water and sewer tap fees from new development, such as the Waterton Business Park. Land use applications such as this one generate opportunities to build and interconnect services and networks that benefit the existing adjacent communities and create opportunities to meet future needs.”
- “Douglas County Sheriff’s Department manages the Emergency Vehicle Operations Center (EVOC). Agencies across Douglas County and the South Metro area representing Emergency Management Services, Fire and Law Enforcement utilize the training facility. EVOC classes are important to help keep emergency responders safe and reduce the risk of accidents and injuries to the responders and law enforcement officers. It is understood that EVOC does not currently have the ability to supply fire suppression flows from hydrants due to lack of nearby water infrastructure. In order to enhance the safety of operations at the EVOC, the

Waterton Business Park will include an extension of water main infrastructure to provide a centralized source for fire-flows. Having access to water will also allow bathrooms and other amenities to be added to the critical training facility.”

- “Including the additional Waterton Business Park acreage and the conservation easement in the Chatfield Urban Area and ultimately the Sterling Ranch Planned Development, residents of the Waterton Business Park and adjacent communities will be able to take advantage of Sterling Ranch trails, recreational facilities, and future regional parks and schools. While the ultimate land uses and site plans for the business park have yet to be determined, Sterling Ranch is anticipating the addition of a Rapid Flash Beacon (a traffic control device designed to increase driver awareness of pedestrians crossing roadways) on Moore Road to facilitate access to the planned Sterling Ranch trail system.”
- “Perhaps one of the most compelling public benefits offered with the inclusion of the Waterton Business Park expansion into the Chatfield Urban Area is the recently created conservation easement dedicated by Sterling Ranch that will form a vital and highly desired community buffer around the Village of Louviers. The conservation easement will also buffer the Waterton Business Park from a larger and more valuable wildlife habitat corridor to the south and east of the site as well as enhance a greater wildlife overland connection area identified by the County. This buffer epitomizes the smart balance of land uses and partnerships sought after in the 2040 CMP. The real estate trade and partnership between Sterling Ranch and Douglas County allowed land more suited for creating meaningful habitat linkages to be used for that purpose while creating a buffered parcel of land more suitable for development that is capable of catering to the economic needs of Douglas County residents, providing clean and reliable water and wastewater, commercial services, and diverse housing opportunities.”

*Compelling public benefits may be associated with future Planned Development commitments or subdivision conditions of approval.*

## **V. STAFF ASSESSMENT**

Staff evaluated the request, referral agency comments, applicant responses, public input, approval criteria, and all other information included within this staff report. Should the Planning Commission find that the proposal is consistent with the approval criteria for a Comprehensive Master Plan Land Use Map Amendment, it may approve the request.



<b>ATTACHMENTS</b>	<b>PAGE</b>
Vicinity Map .....	12
Zoning Map .....	13
Aerial Map.....	14
Douglas County Land Use Application .....	15
Applicant’s Narrative, Maps, and Reports.....	16
Referral Agency Response Report .....	259
Referral Response Letters .....	267
Correspondence.....	339
Existing Conditions Map .....	341
CMP Map Amendment Exhibit .....	342

# Comprehensive Master Plan Land Use Reference Map

## Comprehensive Master Plan Areas

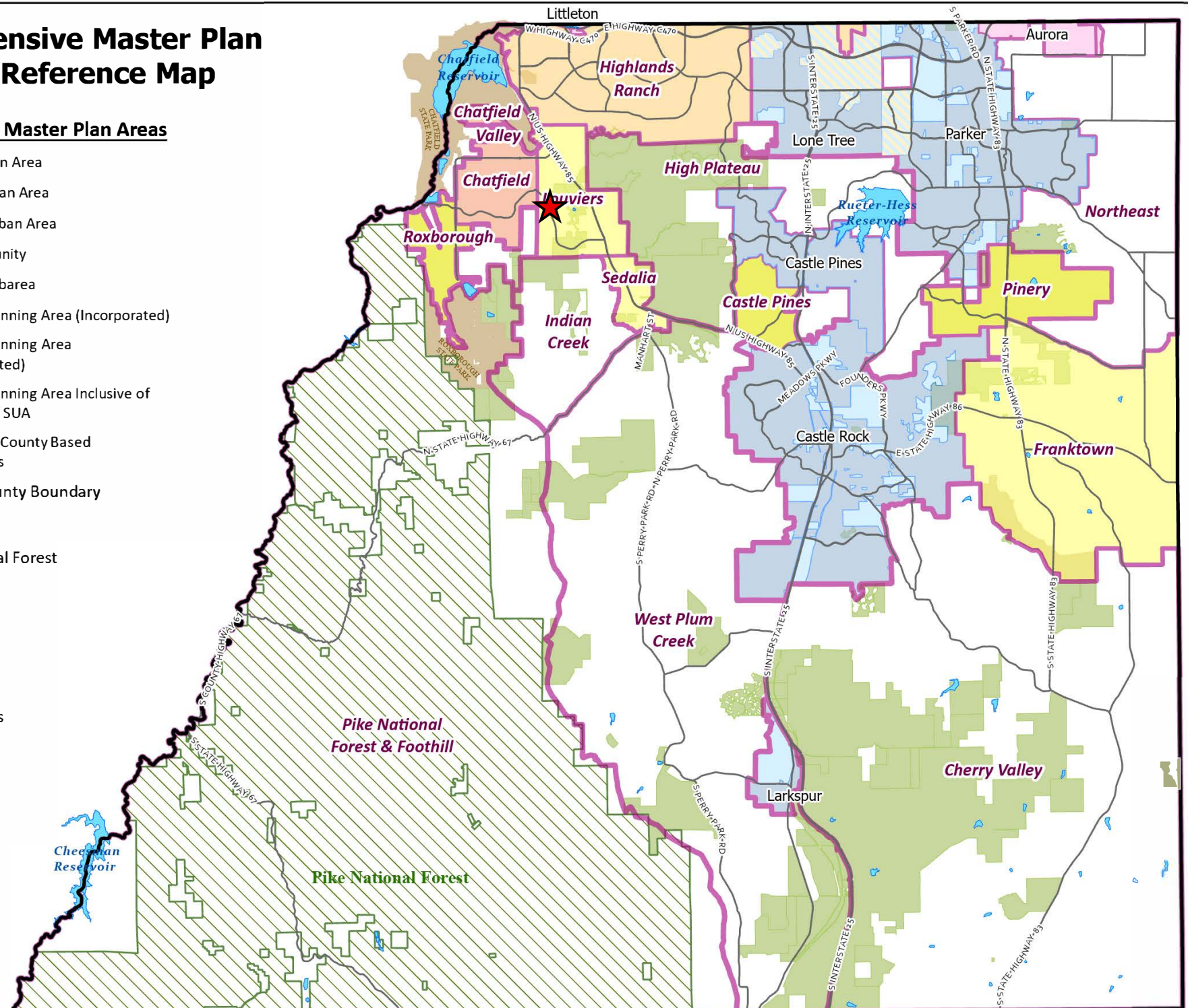
- Primary Urban Area
- Chatfield Urban Area
- Separated Urban Area
- Rural Community
- Nonurban Subarea
- Municipal Planning Area (Incorporated)
- Municipal Planning Area (Unincorporated)
- Municipal Planning Area Inclusive of County PUA / SUA
- Non-Douglas County Based Municipalities
- Douglas County Boundary

## Parks

- Pike National Forest
- State Parks
- Open Space
- Lakes

## Roadways

- Major Roads



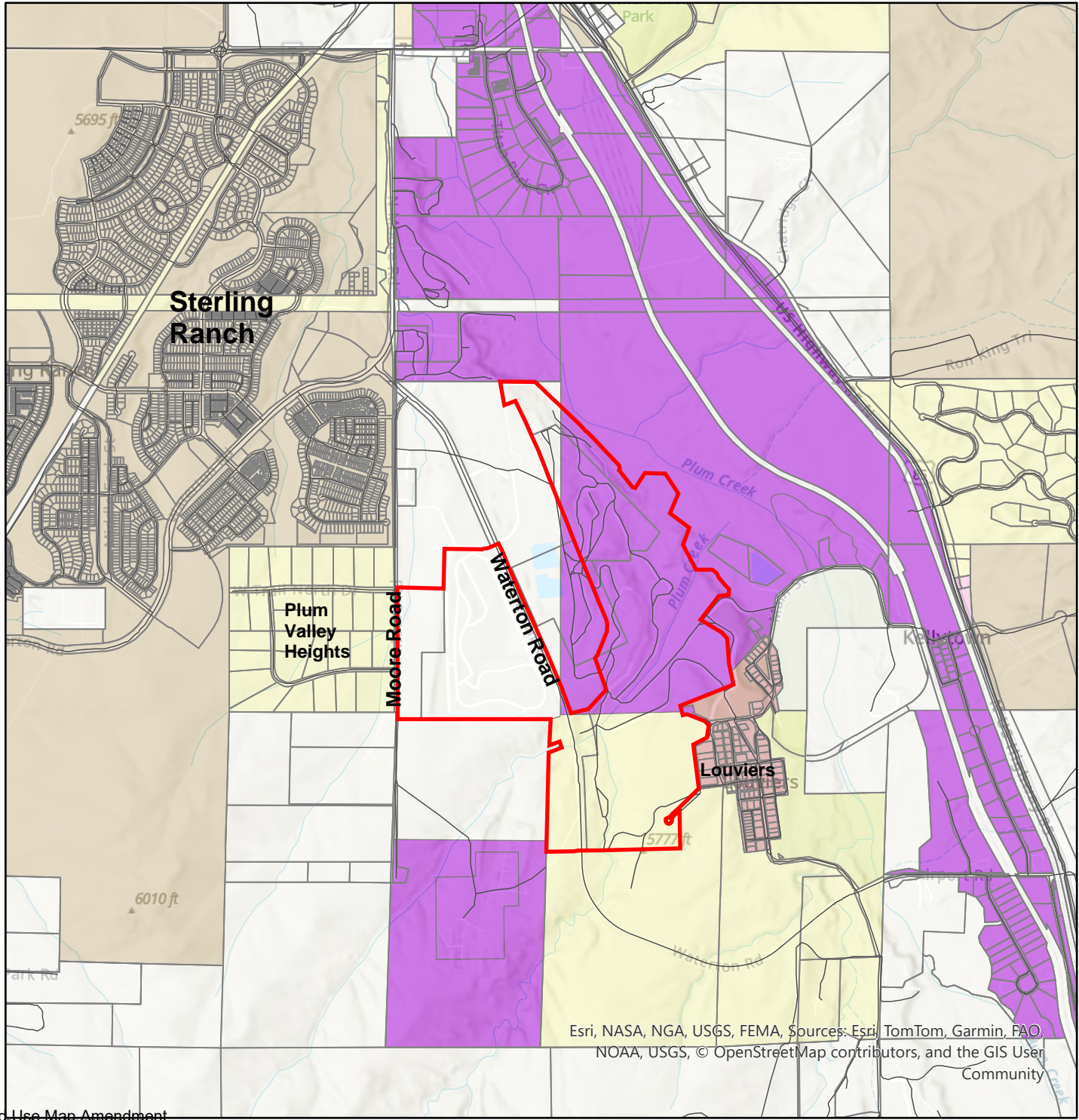


# CHATFIELD URBAN AREA EXPANSION

DR2025-011  
ZONING MAP



- LEGEND
- Major Roads
  - Parcels - PARCELS
  - A1 - AGRICULTURAL ONE
  - LRR - LARGE RURAL RESIDENTIAL
  - RR - RURAL RESIDENTIAL
  - SR - SUBURBAN RESIDENTIAL
  - B - BUSINESS
  - GI - GENERAL INDUSTRIAL
  - PD - PLANNED DEVELOPMENT
  - PROJECT AREA



Esri, NASA, NGA, USGS, FEMA, Sources: Esri, TomTom, Garmin, FAO  
NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



# CHATFIELD URBAN AREA EXPANSION

DR2025-011  
AERIAL MAP



- LEGEND
- Major Roads
  - Parcels - PARCELS
  - PROJECT AREA







## Land Use Application

Please complete, sign, and date this application. Return it with the required items on the Submittal Checklist to [planningsubmittals@douglas.co.us](mailto:planningsubmittals@douglas.co.us). Submittals may also be mailed or submitted in person to Planning Resources.

### PROJECT INFORMATION

**Project Type:** 2040 Comprehensive Master Plan Amendment  
**Marketing Name:** Waterton Business Park (Boundary Adjustment)  
**Presubmittal Review Project Number:**

### PROJECT SITE

**Address:** Metes and Bounds Properties at Waterton Road, east of Moore Road  
**State Parcel Number(s):** 2229-324-00-002, 2229-332-00-002, 2229-333-00-005  
**Subdivision/Block#/Lot# (if platted):** N/A

### PROPERTY OWNER(S)

**Name(s):** SR Waterton LLC  
**Address:** 8155 Piney River Ave., Littleton CO, 80125  
**Phone:** (303) 513-5819  
**Email:** brocks@sterlingranchcolorado.com

### AUTHORIZED REPRESENTATIVE

**Name:** Susan Beckman  
**Company:** Sterling Ranch Development Company  
**Address:** 8155 Piney River Ave., Littleton CO, 80125  
**Phone:** (303) 881-7119  
**Email:** susanb@sterlingranchcolorado.com

*A notarized Letter of Authorization is required from the property owner, unless the owner is acting as the representative.*

### ACKNOWLEDGMENT

To the best of my knowledge, the information contained on this application is true and correct. I have received the County's information sheet regarding the *Preble's Meadow Jumping Mouse*.

Susan Beckman  
Applicant's Signature

11/13/2025  
Date

*NOTICE: Douglas County Planning does not charge "Approval" fees. Douglas County communicates through our official email accounts ending in @douglas.co.us; beware of phishing scams using similar addresses. If you have questions or concerns about the validity of an email or invoice, please call our public outreach and assistance team at 303-660-7460 or email [planning@douglas.co.us](mailto:planning@douglas.co.us).*

**Project Number (Office Use Only):**



# WATERTON BUSINESS PARK

## DOUGLAS COUNTY 2040 COMPREHENSIVE MASTER PLAN AMENDMENT

Prepared for:  
Sterling Ranch Development Company

Prepared by:  
PCS Group

12-17-2025





## CONSULTANT TEAM

### **Property Owner:**

SR WATERTON, LLC  
8155 Piney River Avenue, Suite 200  
Littleton, Colorado 80125  
Brock Smethills  
(303) 202-6800  
[brocks@sterlingranchcolorado.com](mailto:brocks@sterlingranchcolorado.com)

### **Legal:**

Brownstein Hyatt Farber Schreck  
410 Seventeenth Street, Suite 2200  
Denver, Colorado, 80202-4432  
Bruce James  
303-223-1167

### **Land Planner:**

PCS Group, Inc.  
200 Kalamath  
Denver, Colorado 80223  
Curtis Davidson  
(303) 531-4905  
[Curtis@pcsgroupco.com](mailto:Curtis@pcsgroupco.com)

### **Applicant Representative**

Susan Beckman  
Sterling Ranch Development Company  
8155 Piney River Avenue  
Littleton, Colorado 80125  
Susan Beckman  
(303) 881-7119  
[Susanb@sterlingranchcolorado.com](mailto:Susanb@sterlingranchcolorado.com)

### **Environmental Scientist:**

Kimley-Horn  
6200 Syracuse Way, Suite 300  
Greenwood Village, Colorado 80111  
Nan Chavez, PE  
(720) 295-2946  
[nan.chavez@kimley-horn.com](mailto:nan.chavez@kimley-horn.com)

### **Transportation Engineer:**

Fox Tuttle Transportation Group  
1580 Logan Street, 6<sup>th</sup> Floor  
Denver, Colorado 80203  
Cassie Slade, PE, PTOE  
(303) 652-3571  
[cassie.slade@foxtuttle.com](mailto:cassie.slade@foxtuttle.com)

## TABLE OF CONTENTS

A. Introduction and Intent of the Proposed Comprehensive Master Plan Amendment .....	3
B. Consistency with the Intent and Goals of the 2040 Comprehensive Master Plan .....	4
C. Consistency with the 2040 Comprehensive Master Plan Maps .....	17
D. Compatibility with Surrounding Land Uses and Zoning .....	17
E. Existing Environmental Conditions and Hazards .....	18
F. Important Natural Features, Viewsheds, and Wildlife Habitat Corridors .....	19
G. Historic Resources .....	20
H. Impacts on the Existing Road Network .....	21
I. Capabilities of, and Impacts on Special Districts Affected by the Amendment .....	21
J. Water Supply and Provisions of Water and Sanitary Sewage Treatment .....	21
K. Availability of Public Facilities .....	22
L. Conditions that have Changed in the County that Warrant this Amendment .....	23
M. Logical Expansion of the Chatfield Urban Area and Compelling Public Benefit .....	25
N. Approval Criteria Summary .....	26

## EXHIBITS & ATTACHMENTS

<b>Exhibit A:</b>	<i>Douglas County 2040 CMP Land Use Map 1.1</i>
<b>Exhibit B:</b>	<i>Chatfield Urban Area Map 2.1 (Existing Boundary &amp; Proposed Modification)</i>
<b>Exhibit C:</b>	<i>Louviers Rural Community Map 4.5 (Existing Boundary &amp; Proposed Modification)</i>
<b>Exhibit D:</b>	<i>Waterton Business Park Parcels &amp; State Parcel Numbers (SPN)</i>
<b>Exhibit E:</b>	<i>Waterton Business Park – Existing Site Context</i>
<b>Exhibit F:</b>	<i>Existing Zoning on the Waterton Business Park Site &amp; Adjacent Parcels</i>
<b>Exhibit G:</b>	<i>Anticipated Zoning on the Waterton Business Park Site</i>
<b>Exhibit H:</b>	<i>2040 CMP Rural Communities Map 4.1 (Proposed Boundary Modification)</i>
<b>Exhibit I:</b>	<i>2040 CMP Water Supply Zones Map 7.1</i>
<b>Exhibit J:</b>	<i>2040 Class 3 Hazards and Environmental Constraints Map 8.1</i>
<b>Exhibit K:</b>	<i>2040 CMP Steeply Dipping Bedrock Map 8.2</i>
<b>Exhibit L:</b>	<i>2040 CMP Wildlife Resource Map 9.1</i>
<b>Exhibit M:</b>	<i>2030 Parks, Trails, and Open Space Master Plan Protected Lands Map</i>
<b>Exhibit N:</b>	<i>Waterton Business Park - Wildlife Habitat Context</i>
<b>Exhibit O:</b>	<i>Waterton Business Park - Mapped Floodplain</i>
<b>Exhibit P:</b>	<i>Wildfire Hazard Overlay District Map</i>
<b>Exhibit Q:</b>	<i>Dominion Water and Sanitation District Service Area Map</i>
<b>Exhibit R:</b>	<i>Sterling Ranch Existing and Planned Trails Map</i>
<b>Exhibit S:</b>	<i>Legal Description (Aztec)</i>
<b>Exhibit T:</b>	<i>Douglas County Chemours Property Land Exchange Presentation</i>
<b>Exhibit U:</b>	<i>Wildlife Assessment (Kimley Horn)</i>
<b>Exhibit V:</b>	<i>Traffic Memo (Fox Tuttle)</i>
<b>Exhibit W:</b>	<i>Dominion Water and Sanitation District Will Serve Letter</i>
<b>Exhibit X:</b>	<i>Dominion Water &amp; Sanitation District IGA</i>
<b>Exhibit Y:</b>	<i>Sterling Ranch Prairie Conservation Management Plan</i>



## A: Introduction and Intent of the Proposed CMP Amendment

The Applicant, Sterling Ranch LLC, along with its consultant team have prepared this submittal to request an amendment to the Douglas County 2040 Comprehensive Master Plan (CMP) for the subject property referred to herein as the “Waterton Business Park”. Earlier this year the Douglas County Planning Commission unanimously approved a request submitted by Sterling Ranch for a public initiated amendment of the 2040 Douglas County Comprehensive Master Plan (DR DR2024-002) that brought the Waterton Business Park property into the Chatfield Urban Area. A recent change in conditions within Douglas County, which has spurred the current CMP amendment request to expand the Waterton Business Park boundary and bring additional acreage into the Chatfield Urban Area, is the planned regional sports complex. While the majority of the anticipated sports facility footprint fits within the portion of Waterton Business Park that was recently brought into the Chatfield Urban Area, the full anticipated sports facility footprint extends past the existing business park boundary into parcels of land owned by the County and Sterling Ranch. While sport amenities and ball fields were contemplated at the time the Waterton Business Park Boundary was brought into the Chatfield Urban Area, the proposed CMP amendment defines and expands the business park boundary to include the full anticipated footprint of the sports complex within the Chatfield Urban Area.

In addition to the regional sports complex, a potential location for a new Douglas County Sheriff’s training facility has recently been identified on a portion of land between Moore Road and the existing Emergency Vehicle Operations Center (EVOC) facility. The proposed CMP amendment seeks to expand the Waterton Business Park boundary to include the EVOC facility and additional land area between Moore Road and the EVOC facility, which will encompass the potential future Sheriff’s facility along with other uses. While the other uses for this land have not yet been determined, the applicant envisions bringing this new area into the Sterling Ranch PD under D2 zoning with Special Character E (SCZ-E) overlay zoning, the same zoning anticipated with the rest of the Waterton Business Park.

This CMP amendment also seeks to bring the Sterling Ranch Conservation Easement into the Chatfield Urban Area. The purpose and intent of the conservation easement will remain the same with its inclusion into the Chatfield Urban Area which is a preserved open space, a vital wildlife corridor and habitat linkage, and a highly valued open space buffer for Louviers. Bringing these additional parcels of land into the Chatfield Urban Area will make it possible for the applicant to bring some of them into the Sterling Ranch Planned Development (PD) where they will benefit from the existing and expanding water and wastewater infrastructure, water supply, and fire flows. As part of the Sterling Ranch PD, the conservation easement would also benefit by being subject to the Sterling Ranch Prairie Conservation Master Plan (PCMP).

The additional property requested for inclusion into the Waterton Business Park and Chatfield Urban Area totals approximately 427.9 acres in size and is currently within the Louviers Rural Community, directly east of the Chatfield Urban Area and Sterling Ranch Planned Development. The intent of this application is to request an amendment to the Douglas County 2040 Comprehensive Master Plan Map (Map 1.1) (see attached **Exhibit A**) to modify both the Chatfield Urban Area, and Louviers Rural Community boundaries to bring the additional land into the Chatfield Urban Area. The Chatfield Urban Area Map (Map 2.1), the Rural Communities Map (Map 4.1), and Louviers Rural Community Map (Map 4.5) from the 2040 CMP would also need to be amended in order to bring the additional acreage from the Louviers Rural Community into the Chatfield Urban Area (see attached **Exhibits B, C, H**).

The Waterton Business Park sits within the eastern half of Section 32 and the western half of Section 33, Township 6 South, Range 68 West. The additional area being requested for inclusion within the Waterton Business Park and Chatfield Urban Area is comprised of 5 parcels (SPN 2229-324-00-004, 2229-324-00-005, 2229-333-00-006, 2229-332-00-002, and 2229-333-00-007) (see attached **Exhibit D**).

The bulk of the western portion of the Waterton Business Park sits directly adjacent to Sterling Ranch Filings 6B and 6C in which 471 single family detached and single family attached homes are currently under construction. The western portion of the additional land being requested for inclusion into the Chatfield Urban Area sits adjacent to Plum Valley Heights, a community of 29 existing Rural Residential home sites. This is the land that is anticipated to be the location of a new Douglas County Sheriff's facility and wildlife helitack structure. Lawrence Construction, a pioneer in heavy highway and bridge construction, forms the General Industrial-zoned northern boundary of the business park (see attached **Exhibit E**).

Douglas County-owned property and the existing Emergency Vehicle Operation Center (EVOC) facility sit on the south side of the business park adjacent to a chain of protected public lands including the 880-acre Woodhouse State Wildlife Area approximately 1 mile to the south. The area immediately east of the existing Waterton Business Park site that is now being proposed for inclusion within the Chatfield Urban Area is a recently created Open Space Conservation area which buffers the rural community of Louviers. The conservation easement owned by Sterling Ranch Conservation LLC separates the business park site and future sports facilities from the town of Louviers and the County-owned Dupont Open Space area, another link in a chain of protected lands that extends from the Highlands Ranch Backcountry Wilderness area to Roxborough State Park and the Pike National Forest.

The following narrative and attachments provide justification for the proposed CMP amendment and demonstrate that this application meets the approval criteria described in Section 10-2A of the 2040 CMP for an amendment to the 2040 CMP.

## **B: Consistency with the Intent and Goals of the 2040 CMP**

The CMP states the desired community vision for the future of Douglas County and establishes the guiding policies needed to achieve sustainable growth over a 20-to-30-year period. The CMP is the foundation for the County's future growth and development and is intended to provide decision makers with *guidance* on how to maintain and improve identified community values. The CMP also states that it evolves over time and through regular updates responds to a changing economy, anticipated growth, and changing needs and values. Furthermore, the CMP itself acknowledges that there are inherent competing values that must be balanced:

***"As a guiding document, the CMP uses language different than that found in regulatory documents such as the zoning resolution and the subdivision resolution. Words like "encourage", "support", "promote", and "ensure" provide flexibility in prioritizing the competing values in the CMP and remind us that the document is not a checklist."***

The applicant team strongly believes that this request to amend the CMP to bring the proposed additional land area into the Waterton Business Park and the Chatfield Urban Area exemplifies the CMP

spirit and intent of balancing competing values. A significant and recent change in Douglas County conditions in the form of a land exchange and working partnership between Douglas County and private landowners (referred to herein as the “Chemours property land exchange”) has created a unique opportunity that allows both the logical expansion of development while creating and preserving a valuable wildlife habitat connection, which we understand and value as a community priority. This land exchange also effectively downzoned a General Industrial area and preserved a community separation buffer around the rural community of Louviers, which is a tremendous community benefit for the entire Louviers community. Additional explanation is provided below in **Section L - Conditions that have Changed in the County that Warrant this Amendment**.

The following is an assessment of how the proposed Waterton Business Park CMP amendment request is consistent with specific goals, objectives, and policies of the CMP.

## **CMP SECTION 2 – URBAN LAND USE**

**GOAL 2-1** IMPROVE AND ENHANCE EXISTING INFRASTRUCTURE; SUPPORT HEALTHY LIVING; REDUCE VEHICLE MILES TRAVELED; MAINTAIN AIR QUALITY STANDARDS; AND CONSERVE OPEN SPACE.

### **Objective 2-1A**

### **Direct Urban Development to Designated Urban Areas.**

Policy 2-1A.1: Limit and direct urban development to the Primary Urban Area (PUA), Separated Urban Areas (SUAs), **Chatfield Urban Area**, and Municipal Planning Areas depicted on the CMP Land Use Map.

Policy 2-1A.2: Prioritize the build-out of existing urban areas over approval of new urban development.

**Applicant Statement:** While the Waterton Business Park abuts the western edge of the Louviers Rural Community boundary, the site is actually much closer in proximity (approximately 60 feet) to Filings 6B and 6C of the Sterling Ranch PD and Plum Valley Heights than it is to any other residential development within the Louviers Rural Community. The village of Louviers is the next-closest development within the CMP Rural Community and it is approximately 1/3 of a mile away from the developable portion of the business park. Given the proximity of the Waterton Business Park to the Sterling Ranch PD, and its existing and funded modern infrastructure, the proposed business park expansion could easily be served without the need to significantly expand infrastructure making this a logical expansion and buildout of the Chatfield Urban Area.

As the Sterling Ranch Planned Development has begun to develop into one of the premier master-planned communities in Douglas County, the development team has heard its residents, as well as those from adjacent communities, voice a need for more retail, restaurants, and commercial facilities. During the Chemours property land exchange, the Douglas County Commissioners voiced enthusiasm for a business park that would support commercial, retail, residential, technology-focused light industrial uses and recreational amenities. Bringing the additional Waterton Business Park land area into the Chatfield Urban area and the Sterling Ranch PD would allow the potential for commercial and mixed-use development to occur, reducing vehicle miles for those who are currently traveling outside the community to meet their needs, and providing much-needed services in proximity to residential development. With the additional land being proposed for inclusion within the business park and

Chatfield Urban Area, the newly envisioned regional sports complex footprint can also be accommodated. This new regional amenity will no doubt support healthy living and lifestyles for Douglas County residents.

**Objective 2-1B**

**Encourage Development That Supports “Healthy Communities”.**

**Policy 2-1B.1:** Encourage health-promoting design through the development review process.

**Policy 2-1B.2:** Support community efforts that provide healthy lifestyle choices.

**Applicant Statement:** While the ultimate land uses for the Waterton Business Park have yet to be determined, the applicant anticipates a mix of commercial, residential, and light industrial uses compatible with those allowed per the Sterling Ranch PD, in addition to the planned regional sports facility. Any development that occurs on the Waterton Business Park property will need to undergo zoning, subdivision, site and construction plan approval which will allow the County numerous opportunities to review site specific development plans for the property.

The CMP maintains that healthy communities are created through a balance of the physical environment, and social and economic influences. The Waterton Business Park achieves a balance of natural and physical environment. A valuable wildlife habitat linkage has been enhanced through an open space conservation easement created as a result of the Chemours property land exchange, a partnership between Sterling Ranch and Douglas County. The conservation easement created through this land exchange changed and downzoned land that was a key missing link in a wildlife habitat corridor from General Industrial to Open Space Conservation. The land exchange essentially made the business park parcel of land suitable for development as it is appropriately buffered by the conservation easement from a larger habitat area managed for wildlife. This exchange epitomizes the balance of urban development with the preservation of valuable habitat. This conservation easement also provides a rural community separation buffer that has been identified as being of great importance to the Louviers Rural Community in the 2040 CMP.

While this proposed amendment seeks to bring the conservation easement into the Chatfield Urban Area, the purpose and intent of the conservation easement will remain the same: to serve as a preserved open space, a vital wildlife corridor and habitat linkage, and a highly valued open space buffer for Louviers. Bringing the conservation easement into the Chatfield Urban Area will allow the applicant the ability to include the parcel into the Sterling Ranch Planned Development (PD) where it will benefit from the existing and expanding water and wastewater infrastructure, water supply, and fire flows. As part of the Sterling Ranch PD, the conservation easement would also benefit by being subject to the Sterling Ranch Prairie Conservation Master Plan (PCMP). The PCMP details Sterling Ranch’s plans for maintaining native prairie ecosystems within the Sterling Ranch community and accommodating wildlife habitats in phased approach. The PCMP outlines goals for 1) promoting a sustainable human community that encourages a healthy and thriving natural landscape, 2) protecting cultural and paleontological resources, 3) building and maintaining positive community and agency relations through sound management and coordination of conservation efforts, 4) minimizing wildlife-human conflicts, and 5) complying with federal and state laws and regulations pertaining to threatened, endangered, and

sensitive species. The PCMP also describes the protocols and policies for prairie dog management, burrowing owl management, migratory bird and raptor management and compliance.

If the additional land area is brought into the Chatfield Urban Area and Sterling Ranch PD, it will also be subject to the Sterling Ranch Water Demand Initiatives which incorporate efficient water conservation measures that promote the responsible and sustainable use of water resources, another benefit to the Douglas County community. Additionally, any future residential uses that are part of the business park would be able to take advantage of the recreational amenities, parks and open spaces, trails, schools, and other amenities that will be present throughout the Sterling Ranch community.

**Objective 2-1C**

**Ensure Development in Designated Urban Areas is consistent with the CMP.**

Policy 2-1C.1: Achieve consistency among land use and development regulations, the Capital Improvements Program, and this Plan through careful review and coordination during the development review process.

Policy 2-1C.2: Determine the actual density or intensity of development at time of subdivision or site improvement plan by considering the potential environmental and visual impacts; availability of community facilities and services; and compatibility with existing, adjacent or planned uses.

Policy 2-1C.3: Support the rezoning of urban zoned lands to be consistent with the Plan's goals, objectives, policies, and Land Use Map.

**Applicant Statement:** The Waterton Business Park will be designed in accordance with the 2040 CMP and Sterling Ranch Planned Development Plan which dictates compliance with the County's land use regulations, consideration of visual and environmental conditions, and availability of community services and infrastructure. Compliance with the above requirements will be vetted through the subdivision, site improvement plan, and zoning process. The applicant is confident that all criteria will be met through the development review process.

**GOAL 2-2** SUPPORT ENVIRONMENTAL SYSTEMS COMPRISED OF WATER, WILDLIFE, WILDLIFE HABITAT, RECREATION AND SENSE OF PLACE.

**Objective 2-2A**

**Balance Development with Preservation of Environmental and Visual Resources.**

Policy 2-2A.1: New development located in proximity to moderate to high value wildlife habitat should include a study and inventory of habitats, movement corridors, and habitat linkages.

Policy 2-2A.2: New development should support, through the provision of significant open space, the conservation of habitats, movement corridors, and habitat linkages as indicated in the study.

Policy 2-2A.3: Any new development should include a comprehensive trail study that considers wildlife, habitat, wetlands, and local and regional connections for all users. Studies should account for off-site conditions and impacts.



**Applicant Statement:** The strategic location of the Waterton Business Park is a result of the recent Chemours Property land exchange between Sterling Ranch and Douglas County and represents a prime example of balancing development with preservation of environmental and visual resources. As part of the land exchange, Douglas County received a combined 275 acres of land for County Public Work's operational needs and open space conservation in exchange for 120 acres of land owned by the County. The conservation easement preserves a prominent elk migration corridor and effectively downzones and preserves a community separation buffer around Louviers that was previously zoned as General Industrial land, which is a significant benefit to the Louviers community. For additional information on the Chemours land exchange please see attached **Exhibit T**.

Through the provision of the open space conservation easement, valuable habitat, a movement corridor, and habitat linkage has been supported and enhanced. Habitat preservation is important to the residents of Douglas County. Because of the land exchange, the Waterton Business Park parcel now sits buffered from the larger Woodhouse Wildlife and Dupont Open Space Areas to the south and east of the site by the County-owned Emergency Vehicle Operations Center and the conservation easement. This buffering helps to make the Waterton Business Park site suitable for development. Please see the attached *Waterton Business Park – Wildlife Habitat Context* exhibit (**Exhibit N**).

While ultimate land uses and site development plans are yet to be determined, in accordance with Policy 2-2A.3, a logical connection point for a trail to the existing and planned Sterling Ranch trail system would most likely occur at the northwestern corner of the property near the intersection of Moore Road and Waterton Road, avoiding wetlands, wildlife movement corridors, and moderate value habitat area. Sterling Ranch is anticipating the addition of a Rapid Flash Beacon (a traffic control device designed to increase driver awareness of pedestrians crossing roadways) on Moore Road to facilitate access to the planned Sterling Ranch trail system providing benefit to the overall County, providing further benefits to the larger Douglas County community.

The Waterton Business Park is located primarily within 'Low Habitat Value' area as identified in the 2040 CMP Wildlife Resources map (Map 9.1) *see attached Exhibit L*. The lower 1/5<sup>th</sup> of the current site is also within 'Overland Connection' area as identified on the same map. The additional conservation easement area being requested for inclusion into the Chatfield Urban area also encroaches into the Overland Connection area, however, this open space will buffer the planned sports facility, enhance the existing adjacent wildlife corridor, and will only augment the Overland Connection area. In accordance with Policy 2-2A.1, Kimley Horn was commissioned to prepare a study evaluating the wildlife on the site given its proximity to the Overland Connection area identified on CMP Map 9.1 and the Wildlife Movement Corridor east of the County-owned parcels that border the business park site. A summary of the findings can be found below in Section F - *Important Natural Features, Viewsheds, and Wildlife Habitat Corridors*. A copy of the Kimley Horn wildlife assessment is also attached for reference (*see attached Exhibit U*).

## **GOALS 2-3, 2-4, & 2-5**

PROVIDE CONNECTED PARKS, TRAILS, AND RECREATIONAL FACILITIES APPROPRIATE TO THE SCALE OF THE DEVELOPMENT (GOAL 2-3). ESTABLISH PUBLIC SPACES OR GATHERING PLACES IN NEW AND EXISTING NEIGHBORHOODS (GOAL 2-4). DESIGN DEVELOPMENT TO COMPLEMENT BOTH THE NATURAL AND HISTORIC LANDSCAPE (GOAL 2-5). ACHIEVE COMPATIBILITY BETWEEN RESIDENTIAL AND NONRESIDENTIAL USES, IN TERMS OF LAND USE AND DESIGN (GOAL 2-6).

**Applicant Statement:** While the majority of CMP Objectives and Policies associated with Goals 2-3 through 2-6 listed above will be addressed during the creation of site-specific development plans and vetted by the County through future development review processes; there are a number of policies that can be addressed at this time in the current context of bringing the additional Waterton Business Park land area and conservation easement into the Chatfield Urban area and Sterling Ranch PD.

Policy 2-3A.2 of the CMP seeks to “Strongly encourage multi-use trails to connect urban residential development to parks, open spaces, schools, recreational facilities, neighborhood and community activity centers, to other neighborhoods, and to a network of public trails.” And “Ensure that amenities such as benches, tables, restrooms, and drinking fountains are provided where appropriate.” As the ultimate land uses and site plans for the business park have yet to be determined, Sterling Ranch anticipates providing a Rapid Flash Beacon on Moore Road to facilitate access to the planned Sterling Ranch trail system and recreational amenities. The Sterling Ranch PD identifies several future trail connections to trails beyond the Sterling Ranch property boundary, however not at the Moore Road location. A crossing at this location would further bolster future regional trail connectivity.

Objective 2-5A and Policy 2-5A.1 of the CMP ask to minimize the impact of development on natural and historic resources, and to locate development away from environmentally and culturally sensitive lands. Policy 2-6B.3 supports the establishment and enhancement of community separators by creating open space buffers and providing habitat. As previously referenced, the Chemours Property land exchange between Sterling Ranch and Douglas County delicately balanced land uses through the creation of a large conservation easement put in place between the developable business park site and the village of Louviers. Once slated for potential General Industrial land use, this easement now serves as open space that conserves more valuable wildlife habitat area adjacent to larger open space conservation areas and buffers the historic rural village of Louviers from future development.

**GOAL 2-6**      ACHIEVE COMPATIBILITY BETWEEN RESIDENTIAL AND NONRESIDENTIAL LAND USES, IN TERMS OF LAND USE AND DESIGN.

**Objective 2-6E**      **Ensure Nonresidential Development is Compatible with Surrounding Land Uses and the Natural Environment.**

- Policy 2-6E.1:      Locate nonresidential development in the PUA, SUAs, Chatfield Urban Area, and the municipalities. Concentrate this development in nodes, clusters, or centers. Strip or isolated development is inconsistent with this Plan.
- Policy 2-6E.2:      Encourage uses such as office, institutional, and open space as a transition area between residential and major commercial or industrial areas.
- Policy 2-6E.3:      Locate and design intensive nonresidential land uses to minimize conflicts with residential developments, agricultural uses, wildlife areas, and environmentally or visually-sensitive areas.

**Objective 2-6F**      **Ensure Residential and Nonresidential Building Design, Scale, and Orientation are Compatible with the Natural and Built Environment.**

**Applicant Statement:** Goal 2-6 and associated Objectives and Policies encourage compatibility between residential and non-residential land uses. These objectives and policies address aspects of detailed design that have not yet been determined for the Waterton Business Park site, however, the general principles will apply to future site planning and design. Land uses and layout within the site will consider the adjacent industrial site to the north (Lawrence Construction), the Emergency Vehicle Operation Center to the south, the County-owned property to the east which is currently anticipated to be the future home of County Public Works material and equipment storage, and adjacency to open space conservation area. The implementation of nonresidential development such as commercial or light industrial land uses within the business park will be concentrated to be able to take advantage of easy access from Waterton Road which bisects the property. Any residential land uses in the business park would be adequately buffered from these more intensive uses by the implementation of landscape buffers, other transitional land uses, or a combination of both. In accordance with Objective 2-6F all residential and nonresidential building design, scale, orientation, and aesthetics will be heavily scrutinized by the Sterling Ranch Design Review Committee (DRC) to ensure that the architecture is compatible with the natural and built environment.

## **GOALS 2-7, 2-8, & 2-9**

FOSTER A BALANCED COMMUNITY AND ROBUST ECONOMY (GOAL 2-7). CONSERVE RESOURCES (GOAL 2-8). ENSURE DEVELOPMENT OCCURS CONCURRENTLY WITH ESSENTIAL SERVICES AND INFRASTRUCTURE (GOAL 2-9).

<b><u>Objective 2-7A</u></b>	<b>Promote Development Patterns and Community Design that Meets the Needs of Residents.</b>
<u>Policy 2-7A.1:</u>	Encourage a variety of housing that fits different lifestyles and needs.
<u>Policy 2-7A.2:</u>	Incorporate mixed-use development in new and existing communities.
<b><u>Objective 2-7C</u></b>	<b>Promote Economic Development and Employment Opportunities.</b>
<b><u>Objective 2-9A</u></b>	<b>Encourage Urban Development in Areas with Existing and Planned Capacity in Services and Infrastructure.</b>
<u>Policy 2-9A.1:</u>	Evaluate the capacity of existing services and facilities to support development.
<u>Policy 2-9A.2:</u>	Ensure that new development mitigates impacts to existing services and infrastructure.

**Applicant Statement:** While the conservation easement established through the Chemours land exchange addresses many goals, objectives, and policies related to preserving open space, enhancing habitat connectivity, and creating community separation; the Waterton Business Park site is the parcel of land that is aptly located to address the second half of a ‘competing objectives’ equation (the balancing of open space preservation with development and economy) in spirit with CMP Objectives and Policies, such as those identified in Goals 2-7, 2-8, and 2-9 listed above.

Consistent with Policy 2-7A.1 which encourages a variety of housing that fits different lifestyles and needs, and Policy 2-7A.2 which encourages the incorporation of mixed-use development in new and



existing communities; redesignating the business park to be within the Chatfield Urban Area will support future site-specific development applications that could provide a variety of housing types, including workforce housing as well as mixed-use development. The CMP amendment that brought the Waterton Business Park into the Chatfield Urban area was a necessary first step in proposing significant residential or mixed-use development on the property that could help meet the demand for a variety of housing types in the northern part of the County. As discussed in detail in subsequent sections of this narrative, development in the Waterton Business Park will also contribute to the extension of water, sewer and roadway infrastructure for the site as well as for the surrounding communities. With the additional land being requested for inclusion into the Chatfield Urban Area with this CMP amendment, the full anticipated boundary of the future planned regional sports amenities will be accommodated. In accordance with CMP Objectives 2-7A and 2-7C, the planned regional sports facility will help meet the healthy lifestyle and recreational needs of Douglas County Residents. It will no doubt be an economic driver and create employment opportunities, both for the facility itself as well as for adjacent anticipated commercial uses that will support the sport facility visitors.

**GOAL 2-10** UTILIZE ENVIRONMENTAL SYSTEMS COMPRISED OF WATER, WILDLIFE AND WILDLIFE HABITAT, RECREATION, AND SENSE OF PLACE AS THE BASIS FOR COMMUNITY FORM WITHIN THE CHATFIELD URBAN AREA.

**Objective 2-10A**      **Balance, Conserve, and Preserve Sensitive Environmental and Visual Resources as Open Space in Areas Adjacent to and within Proposed Urban Areas.**

Policy 2-10A.1: Any new development within the Chatfield Urban Area should include a comprehensive study and inventory of valley-wide, interconnected habitats, wildlife movement corridors, and habitat linkages.

Policy 2-10A.2: Any new development within the Chatfield Urban Area shall support, through the provision of significant open space, the conservation of those habitats, wildlife movement corridors, and habitat linkages and indicated in the study.

Policy 2-10A.4: Any new development within the Chatfield Urban Area shall provide appropriate trail improvements and significant open space.

**Applicant Statement:** The Waterton Business Park site became part of the Chatfield Urban Area through a CMP amendment unanimously approved by the Planning Commission earlier this year. Similar to the prior amendment, bringing the additional requested land area into the urban boundary would be compatible with the objectives and policies associated with Goal 2-10. In harmony with Objective 2-10A and Policy 2-10A.2 the abovementioned real estate exchange between Sterling Ranch and Douglas County converted approximately 204 acres of General Industrial zoned land into open space. Under General Industrial zoning, this land that once could have supported intensive industrial uses providing no value to wildlife or habitat connectivity, now buffers and augments existing larger wildlife habitat linkages and movement corridors, as well as providing important buffering to the existing Louviers community and providing a much more compatible future land use.

In conformance with Policy 2-10A.1, recognizing the business park's adjacency to Overland Connection area and Wildlife Movement Corridors as identified on CMP Map 9.1, a detailed study was conducted by Kimley Horn to assess potential habitat for state and federally listed species, migratory birds, and big game on the property. The study is attached to this narrative for reference. While no mule deer or elk migration corridors are mapped within the project site, the study did find that the presence of existing impassable fences on and south of the site are likely severing wildlife movement between Plum Creek and the west and could potentially be forcing elk to use the Waterton Road corridor. Sterling Ranch is committed to working with the County and CPW to modify the impassable fences obstructing natural migration patterns, which we understand is an important issue for Douglas County residents. Improving public safety by reducing the risk of collisions between vehicles and wildlife, as well as enhancing the movement corridor for wildlife, are compelling public benefits. As mentioned previously, Sterling Ranch intends to implement a trail crossing with a rapid flash beacon at an appropriate location along Moore Road to contribute to overall regional trail connectivity in concert with Policy 2-10A.4.

**GOAL 2-11** DESIGN DENSITY-APPROPRIATE DEVELOPMENT TO COMPLEMENT BOTH THE NATURAL AND HISTORIC LANDSCAPE.

**Objective 2-11A**

**Use Density-Sensitive Design Techniques and Land Use Elements to Provide Compatibility Between Residential and Nonresidential Uses, Create a Sense of Community Identity, and Avoid Overburdening the Infrastructure that the Area can Reasonably Support.**

Policy 2-11A.2: Support the establishment and enhancement of community separators by creating open space buffers, utilizing natural landforms and significant vegetative plantings to help screen views and provide wildlife habitat in the Chatfield Urban Area.

Policy 2-11A.3: Protect the integrity of the Chatfield Basin by promoting dark-sky practices for residential and commercial development.

Policy 2-11A.5 As an aid to controlling infrastructure costs within this Area, the County should promote cooperation between stakeholders for the creation of scalable infrastructure including, but not limited to, central water with sustainable sources, central sewage, road capacity, and multi-modal transportation alternatives, all designed to be capable of being expanded economically to serve the future needs of the Area.

Policy 2-11A.6 Encourage development within this Area to offer existing and future residents the benefits of a multi-faceted community that can provide the residential, commercial, medical, recreational, and educational services that they require, while preserving the open spaces, viewsheds, and wildlife corridors characteristic of the area.

**Applicant Statement:** Providing compatibility between residential and nonresidential land uses is a common theme throughout the 2040 CMP. As noted above under compliance with Goal 2-6, some of the objectives and policies associated with Goal 2-11 address aspects of detailed design that have not yet been determined for the Waterton Business Park site, however, the general principles will apply to

future site planning and design. In accordance with Policy 2-11A.2, the previously mentioned conservation easement dedicated by Sterling Ranch creates a highly desirable community separator for the Village of Louviers and also buffers the business park from more sensitive wildlife areas.

In compliance with Policy 2-11A.3, if included within the Chatfield Urban Area, the additional business park area and conservation easement could become part of the Sterling Ranch PD and would therefore be subject to its requirement that all exterior lighting fixtures be dark-sky compliant. All exterior lighting fixtures will need to be presented to the Sterling Ranch DRC for review and approval.

As described in more detail in Section J of this narrative, in 2024 the Douglas County Board of County Commissioners voted to allow \$20 million of the Federal American Rescue Plan Act Dollars (ARPA) to be spent to improve water and wastewater infrastructure in Northern Douglas County. This partnership between Douglas County, Plum Creek Reclamation Authority, Sterling Ranch Community Authority Board, and Dominion Water and Sanitation District will provide for a centralized renewable water system and wastewater system for the town of Louviers and new development along the Waterton Road Corridor, which is in concert with Policy 2-11A.5.

In accordance with Policy 2-11A.6, while the ultimate land uses and site design have yet to be determined, the vision for the Waterton Business Park is to include a mix of uses, including but not limited to a regional sports complex, a diverse supply of housing types and commercial services that are needed in the area.

**GOAL 2-12** PROVIDE DENSITY-APPROPRIATE CONNECTED PARKS, TRAILS, AND RECREATIONAL FACILITIES.

**Objective 2-12A**

**Demonstrate Adequate Provision of Neighborhood and Community Parks, Trails, and Recreational Facilities for the Use of All Segments of the Population.**

**Policy 2-12A.1:** Within proposals for urban development in the Chatfield Urban Area, ensure that community-wide recreational opportunities are provided.

**Applicant Statement:** With the inclusion of the additional requested land into the Chatfield Urban Area, the Waterton Business Park footprint will be able to accommodate the planned regional sports facility. This sports facility will be a major County asset and recreational amenity for the use of all segments of the population. Not currently knowing all of the ultimate land uses, their relative proportions, and their specific locations within the property, it is not practical to commit to a certain acreage of park land or trail dedication at this time. However, upon inclusion into the Chatfield Urban Area and the Sterling Ranch PD, the additional land area being requested for inclusion will be subject to the requirements outlined in the PD for park dedication which are based on the number of residential dwelling units and nonresidential buildings created by Final Plans and County-issued building permits. The required park dedication acreage is based on the sum of the following formulas from the Sterling Ranch PD: the number of SFDUs x 0.045 acres, plus the number of MFDUs x 0.03285 acres, plus 3% of gross site area of nonresidential buildings. The required park dedication will be provided via either acres of park land, regional trail acres, cash-in-lieu, recreational facility improvement value, or a combination of the above.

As mentioned above, the Waterton Business Park is already providing a significant open space conservation easement and is also willing to implement a trail connection at Moore Road to provide access to the planned trails and recreational amenities at Sterling Ranch.

**GOAL 2-13** ENSURE THE COHESIVE IMPLEMENTATION OF COMMUNITY-IDENTIFIED VALUES IN THE CHATFIELD URBAN AREA AS EXPRESSED BY THIS PLAN.

**Objective 2-13A** Evaluate Development Proposals Based on the Key Determinants of Community Character.

**Policy 2-13A.2:** Any land use proposal within the Chatfield Urban Area shall respect community-identified values through integration of natural system elements including, but not limited to wildlife corridors and habitat areas, land character, sense of place, and significant community view corridors.

**Applicant Statement:** As described above, the conservation easement dedicated by Sterling Ranch will augment an identified overland connection area and habitat linkage, as well as create a community separation buffer, both of which are values identified throughout the 2040 CMP.

### **CMP SECTION 3 – NONURBAN LAND USE**

**GOAL 3-2** ENSURE LAND USE AND DESIGN IS COMPATIBLE WITH THE NATUAL AND RURAL CHARACTER OF THE NONURBAN AREA.

**Objective 3-2A** Ensure the Character and Intensity of Development is Appropriate for the Nonurban Area.

**Policy 3-2A.2:** Where possible, fencing should be wildlife-friendly, in accordance with standards recommended by the Colorado Division of Wildlife.

**Objective 3-2D** Encourage rural development that supports healthy communities.

**Policy 3-2D.3:** Develop local trail systems and a regional, interconnected system of multi-use trails that links communities, recreation areas, open space, neighborhood trails, and trail systems, including those outside of Douglas County.

**Policy 3-3A.8:** Development within the Chatfield Valley Subarea should conserve a buffer around the communities of Louviers, Roxborough, and Sedalia.

**Applicant Statement:** Although the Waterton Business Park site is not being proposed for inclusion within the Nonurban area, the Chatfield Valley Subarea (including Plum Valley Heights) abuts the southwestern side of the property. Consideration will be given to appropriate transitional uses and/or landscape buffers should higher density uses be realized in the business park adjacent to the Chatfield Valley Subarea. As noted above, with the inclusion of the business park into the Chatfield Urban Area, Sterling Ranch is committed to providing a rapid flash beacon for a trail crossing at an appropriate location along Moore Road that will help facilitate interconnected trail systems.

## **CMP SECTION 4 – RURAL COMMUNITIES**

**GOAL 4-2** PRESERVE AND PROTECT THE HISTORIC AND UNIQUE CHARACTER OF THE LOUVIERS RURAL COMMUNITY AND BALANCE DEVELOPMENT, INFRASTRUCTURE, OPEN SPACE, AND RECREATIONAL NEEDS, WHILE RECOGNIZING CONSTRAINTS AND OPPORTUNITIES.

**Objective 4-2A** Establish Community Separators Around the Louviers Village Area to Maintain Community Identity and Sense of Place.

**Policy 4-2A.1:** Maintain community separation for Louviers Village through appropriate location of development. New land uses that do not maintain community separation are inconsistent with this Plan.

**Policy 4-2D.4:** Encourage the designation of permanent open space to preserve the Front Range Mountain Backdrop viewshed from and along US Highway 85.

**Objective 4-2F** Address Water and Sewer Service Needs in the US Highway 85 Corridor.

**Objective 4-2J** Support and Preserve Existing Wildlife Movement Corridors that Connect Existing Open Space and Wildlife Habitat Areas.

**Applicant Statement:** The rural communities identified in the 2040 CMP encompass much of the County's unique frontier settlement history and are designated on the County Land Use Map (Map 1.1), and Rural Communities Map (Map 4.1) to "represent the historic rural town pattern of development within a *general* boundary, and to draw attention to the desire of these rural village residents to preserve their heritage as unique entities within the County's nonurban area. The applicant team recognizes the importance of balancing the values, needs, and resources that are unique to these distinctive land use areas and believes that expanding the Chatfield Urban Area to include the additional Waterton Business Park acreage and the conservation easement can be done in a manner that balances the economic development of the urban area with the preservation and protection of the historic and unique character of the Louviers Rural Community.

In concert with CMP Objective 4-2A and Policy 4-2A.1 listed above, establishing a community separator between the Waterton Business Park and the Louviers Village Area is critical in the endeavor to preserve the historic and unique character of the rural community. Just east of the proposed Waterton Business Park and directly west of the Louviers Village Area, the Chemours land exchange partnership between Sterling Ranch and Douglas County turned a parcel of land that was previously zoned as General Industrial into an Open Space Conservation area, establishing a community separator in perpetuity between Louviers and the Waterton Business Park (see *attached Exhibit E*).

Not only does this open space conservation easement serve as a community separator for Louviers; it also bridges the two larger Dupont Open Space areas to the north and south, providing a significant wildlife corridor and habitat linkage addressing Policies 4-2D.4, and 4-2G.1 and Objective 4-2J listed above (see *attached Waterton Business Park – Wildlife Habitat Context Exhibit N*). Bringing the conservation easement into the Chatfield Urban Area will not change the intent and commitment of the open space conservation easement, which is to remain undeveloped and serve as a habitat corridor and

community separator for Louviers. Bringing it into the Chatfield Urban area and eventually the Sterling Ranch PD will allow the area to take advantage of the expanding water infrastructure and management practices outlined in the Sterling Ranch Prairie Conservation Management Plan.

## **CMP SECTION 5 – COMMUNITY RESOURCES**

**GOAL 5-1** ENSURE THE PROVISION OF ADEQUATE COMMUNITY RESOURCES IN AN EFFICIENT AND COST-EFFECTIVE MANNER.

**Objective 5-1B** Maintain a Development Pattern of Contiguous and Logical Extensions of Community Resources and Infrastructure.

**Policy 5-1B.1:** Encourage new development to be contiguous to existing development and infrastructure.

**Applicant Statement:** As previously mentioned, the Waterton Business Parks sits directly adjacent to Filings 6B and 6C of the Sterling Ranch PD and is contiguous with the Chatfield Urban Area. The modern water and wastewater infrastructure can easily be expanded to serve the future residents and tenants of the business park as well as to provide a water supply and fire flows to public facilities along Waterton Road including Douglas County’s Emergency Vehicle Operation Center, and a planned future Douglas County Sheriff’s facility. Additional information relating to water supply and provision of water and sanitary sewage treatment can be found below in Section J of this narrative.

## **CMP SECTION 6 – TRANSPORTATION**

**GOAL 6-2** DEVELOP AND MAINTAIN AN EFFICIENT AND SAFE ROAD NETWORK IN HARMONY WITH NATURAL FEATURES AND EXISTING NEIGHBORHOODS.

**Objective 6-2B** Ensure New Development Pays Its Fair Share.

**Policy 6-2B.2:** Ensure that developers cause construction of, or provide fair-share financial contributions to, development-required public capital improvements and facilities.

**Applicant Statement:** As required by the Sterling Ranch Planned Development (PD) agreement, Sterling Ranch currently pays a pro rata share of the cost to construct improvements to the highway system, including Highway 85 and Highway 121. Sterling Ranch currently pays a developer-specific amount of \$3,942.00 in highway fees per residential lot (the fee increases annually based upon CPI). Any residential lots within the Waterton Business Park and included within the Chatfield Urban area and Sterling Ranch PD will be subject to the same highway fees that are applied to other developments along Highway 85, which will provide necessary funds for improvements that benefit Douglas County residents.

## **CMP SECTION 7 – WATER SUPPLY**

**GOAL 7-1** PROLONG THE LIFE OF WATER RESOURCES.

**Objective 7-1C** Support Long-Term Water Supply Planning.



**Applicant Statement:** The inclusion of the expanded Waterton Business Park and conservation easement area within the Chatfield Urban Area will help bring water infrastructure further east. The Douglas County Board of County Commissioners has made significant efforts to improve water and wastewater infrastructure in Northern Douglas County. Partnerships between Douglas County, Plum Creek Reclamation Authority, Sterling Ranch Community Authority Board, and Dominion Water and Sanitation District will provide for a centralized renewable water system and wastewater system for the town of Louviers and new development along the Waterton Road Corridor. Centralizing these systems would provide the town of Louviers with access to a safe and clean renewable water supply and provide a connection to the Sterling Ranch Community Authority Board distribution and collection system. This effort will provide water supply and fire flows to future retail, commercial, housing and light industrial development along the Waterton Corridor. It will also provide a water supply and fire flows to public facilities along Waterton Road including Douglas County’s Emergency Vehicle Operation Center, and future Sheriff’s facility. Additional information relating to water supply and provision of water and sanitary sewage treatment can be found below in Section J of this narrative.

## **CMP SECTION 9 – WILDLIFE**

**GOAL 9-1** PROTECT AND ENHANCE WILDLIFE HABITAT AND MOVEMENT CORRIDORS AND FOSTER WILDLIFE CONSERVATION.

**Objective 9-1A** **Maintain Healthy Ecosystems within the County by Establishing, Maintaining, Buffering, and Improving a Set of Core Habitat Areas, such as Habitat, Conservation Areas (HCAs), Connected by Movement Corridors and Overland Connections as Shown in the Wildlife Resources Map .**

**Policy 9-1A.3:** Protect important wildlife habitat, habitat conservation areas (HCAs), movement corridors and overland connections.

**Objective 9-1B** **Minimize Impacts to Wildlife by Ensuring that Development and Land Use are Compatible with Wildlife, Wildlife Habitat, and Movement Corridors.**

**Policy 9-1B.1:** Identify important wildlife habitat, habitat conservation areas (HCAs), movement corridors, and overland connections, as designated on the Wildlife Resources Map in applicable land use applications. Evaluate the potential impact of the proposed change in land use on wildlife and habitat. The identified design solutions should be appropriate to the scale and intensity of the proposed land use.

**Policy 9-1B.2:** Consider wildlife opportunities on neighboring lands, as well as a countywide scale, when evaluating land use applications.

**Policy 9-1B.3:** Link wildlife habitat and movement corridors, wherever possible.

**Policy 9-1B.4:** Locate development outside of important wildlife habitat and movement corridors.

Policy 9-1B.5: Balance the location and design of transportation infrastructure with accommodation of wildlife habitat and movement values.

Policy 9-1B.6: Minimize fencing that is exclusionary or dangerous to wildlife, except when necessary for human safety, commercial and industrial uses, protection of at-risk crops, and domestic animal containment. All other fencing should be wildlife friendly.

**Applicant Statement:** As the Waterton Business Park sits within a Wildlife Habitat Conservation Area and is partially within Overland Connection area as identified on CMP Wildlife Resources Map 9.1, Sterling Ranch commissioned Kimley Horn to conduct a wildlife evaluation on the site. The study has been attached to this narrative as an exhibit for reference. The study notes that 1) no elk or mule deer migration corridors are mapped within the project site, 2) the northern portion of the site provides suboptimal conditions for migration due to fencing and moderate levels of traffic on Waterton Road and Moore Road, and 3) the central portion of the site provides suboptimal conditions for migration due to the approximately 50-acres of Douglas County storage of materials and machinery as well as fencing on both sides of Waterton Road. The southern portion of the site also presents limited suitable conditions due to impassable fencing that begins east of the site and continues south along Waterton Road. In compliance with the Objectives and Policies above, the Waterton Business Park project proposes to facilitate big game movement to the proposed conservation easement dedicated by Sterling Ranch south of the project site by working with the County and CPW to remove impassable fencing to allow for more suitable travel paths to and along Plum Creek.

The proposed conservation easement will permanently protect approximately 204 acres of land as open space and as an elk migration corridor, which was at risk for general industrial development per its previously designated zoning classification. The open space will also augment habitat connectivity with the much larger Dupont Conservation Easement east of the business park site.

## C: Consistency with Maps Contained in the CMP

- Map 1.1 Land Use: The expanded Waterton Business Park acreage and open space conservation easement is designated as “Rural Communities”. The proposed amendment would change the Land Use Map for this additional area to “Chatfield Urban Area” (see *attached Exhibit A*).
- Map 2.1 Chatfield Urban Area: The proposed amendment would modify the Chatfield Urban Area boundary to include the additional Waterton Business Park acreage, the EVOC facility, and the conservation easement (see *attached Exhibit B*).
- Map 4.1 Rural Communities: The proposed amendment would modify the Rural Communities boundary to exclude the additional Waterton Business Park acreage, EVOC, and conservation easement from the Louviers Rural Community (see *attached Exhibit H*).
- Map 4.5 Louviers Rural Community: The proposed amendment would modify the Louviers Rural Community area boundary to exclude EVOC, the expanded Waterton Business Park acreage, and conservation easement (see *attached Exhibit C*).



- Map 7.1 NA - Water Supply Zones: The Waterton Business Park site straddles the Margin A – Denver Formation, and Margin B – Denver Formation (*see attached Exhibit I*). The amendment will not change this. The Property will be served by the Dominion Water and Sanitation District, which will be evidenced in the future by a Will Serve letter.
- Map 8.1 NA - Class 3 Hazards and Environmental Constraints: The Waterton Business Park does not fall within any Class 3 Hazards as identified on Map 8.1 of the 2040 CMP (*see attached Exhibit J*).
- Map 8.2 NA - Steeply Dipping Bedrock: The site is not located in the areas of steeply dipping bedrock identified on Map 8.2 of the 2040 CMP (*see attached Exhibit K*).
- Map 9.1 Wildlife Resources: The Waterton Business Park site is located within a ‘Wildlife Habitat Conservation Area’ and the southern 1/5 of the site falls within an area designed as ‘Overland Connection’ as identified on Map 9.1 of the CMP. A ‘Wildlife Movement Corridor’ associated with Plum Creek is depicted near the northeast corner of the business park on Map 9.1 as well (*see attached Exhibit L*). In response to the business park site being located in the areas described above, a wildlife assessment of the site was conducted by Kimley Horn in November of 2025. A memorandum was prepared detailing their findings (*see attached Exhibit U*).

## D: Compatibility with Surrounding Land Uses and Zoning

The Waterton Business Park site is currently zoned A1 – Agricultural One, and General Industrial. The majority of the land immediately west of the site is zoned PD (Sterling Ranch Planned Development) and is part of the *Chatfield Urban Area*. A portion of the western site boundary is also shared with Plum Valley Heights which is zoned Rural Residential and is part of the *Chatfield Valley Subarea*. The area immediately east of the site is comprised of a Douglas County-owned parcel zoned as General Industrial. Further east of the County parcel is a recently created Open Space Conservation area which buffers the rural community of Louviers. A very small portion of the site at its southern end is adjacent to land zoned Rural Residential, however the majority of the land to the south of the site is zoned as A1- Agricultural One and is owned by the Douglas County Board of County Commissioners (BOCC). This A1 land is currently home to the Douglas County Emergency Vehicle Operation Center (EVOC). The land to the north of the Waterton Business Park site is currently zoned General Industrial and is home to Lawrence Construction.

With the proposed inclusion into the Chatfield Urban Area, the expanded Waterton Business Park’s land use options would align with the urban PD land uses associated with Sterling Ranch. While the ultimate land uses and development patterns for the site have yet to be determined, the applicant currently anticipates bringing the property into the Sterling Ranch PD zoning as D2 Planning Area with Character Zone C5 and Special Character Zone E overlays which would support a mix of commercial, retail, residential, sport facility, and technology-focused light industrial uses. It is anticipated that the EVOC site that is utilized for the training of the Douglas County Sheriff Department officers could benefit from the proximity of the commercial uses anticipated within the Waterton Business Park and both the EVOC site and the commercial uses could be symbiotic economic drivers.

Taking into account the business park's proximity to the land uses described above and the CMP's wildlife and habitat conservation goals, future development will be required to respect the adjacent residential properties to the west and open spaces to the east and southeast through thoughtful land use planning, scale and buffering, which will be determined through future zoning and subdivision applications.

## E: Environmental Conditions and Hazards Existing on Site

As noted above under Section C – *Consistency with Maps Contained in the CMP*, the Waterton Business Park does not fall within any Class 3 Hazards as identified on Map 8.1 of the 2040 CMP. A portion of the Waterton Business Park site was, however, part of a larger 1,520-acre former Dupont explosives manufacturing facility which was created in response to market demands for area mines and quarries at the turn of the 20<sup>th</sup> century. The Village of Louviers was originally developed by Dupont to attract long-term employees for the dynamite plant. Production at the facility stopped in the 1980's and the land was subsequently managed by The Chemours Company.

At the conclusion of the explosive manufacturing operations, the Colorado Department of Health Care Policy and Finance worked to clean up the site and establish a remedial action cleanup plan. In 2022 CDPHE released the property from the remedial action cleanup plan based on cleanup measures that had been completed. There are enforceable requirements for redevelopment of the site including development restrictions indexed at the Douglas County Clerk and Recorder.

In December 2023, CDPHE approved the site closure and development. The site closure included conditions for any potential redevelopment including the restricted use of groundwater. The 225 acres identified in the previous CMP map amendment have only one small area identified that requires mitigation or has special soil treatment precautions. Future development plans for this area will have mitigation requirements that will include bringing additional fill dirt to the site. Sterling Ranch will comply with all of the Douglas County development requirements and will continue to work closely with CDPHE.

As noted above, the site is not located within an area identified in the CMP as having steeply dipping bedrock, however, further geological and geotechnical study and review will be provided in subsequent planning phases to further classify any geologic and geotechnical hazards within the property. Mitigation measures identified in the studies will be identified and implemented in later planning phases, including view, grading, and landform preservation.

According to FEMA Map 08035C0132F (Effective Date: 9/29/2005), and Douglas County GIS data, the business park site does not include a mapped floodplain. The open space conservation does contain a mapped floodplain. However, as open space conservation area, this land will not be developed. Grading or drainage improvements in the easement (if any) will be in accordance with all local, state, and federal regulations (*see attached Exhibit O*). Review of the *Douglas County Wildfire Hazard-Overlay District Map* (dated 10-11-2003) indicates that the Waterton Business Park is included within the Wildfire Hazard Overlay District where Wildfire Hazard Assessment is required before development per Section 17 of the Douglas County Zoning Resolution (*see attached Exhibit P*).

Controlling water pollution is essential to protect public health and welfare as well as to protect aquatic life, wildlife habitats, vegetation and aesthetics. The Waterton Business Park is located just west of Plum

Creek within the Chatfield Watershed. The business park will be developed in accordance with Douglas County Storm Drainage Standards, including the likely implementation of water quality control features through stormwater attenuation facilities to ensure surface water quality. Additionally, the appropriate State permitting & standards will be followed per the Colorado Department of Public Health and Environment regarding stormwater impoundment and discharge.

An important consideration in designating the Property to the Chatfield Urban Area and the associated Urban classification will be respecting any existing environmental or hazard areas on the Property. Future land planning and development applications will ensure land uses are mindful of any hazard areas and that environmental conditions are observed.

## **F: Important Natural Features, Scenic Viewsheds, Riparian Corridors, and Wildlife Habitat Movement Corridors**

The Waterton Business Park site primarily consists of disturbed grassland, with a large portion of the site being utilized for Douglas County material storage including machinery, a soil stockpile, materials for winter roadway treatment, and demolished concrete and asphalt rubble. The balance of the site consists of vacant grassland, a detention pond, unimproved roads, and an ephemeral stream running along the southwestern boundary. The southwest side of the Waterton Business Park site sits higher in elevation and primarily drains northeast towards Plum Creek, a wetland complex and riparian corridor east of the site that runs north into the South Platte River.

The business park site is identified as 'Low Habitat Value' area; however, it sits on the inside edge of a 'Wildlife Habitat Conservation Area' and the southeastern 1/5<sup>th</sup> of the business park property extends into 'Overland Connection Area' as identified on the CMP Wildlife Resources Map (Map 1.9) (see *attached Exhibit L*). The CMP defines 'Overland Connection' as "A broad area to facilitate wildlife movement, typically within or between large blocks of wildlife habitat. Overland connections are generally non-linear, not precisely defined, and may include various types of topography and vegetation". The Overland Connection area is approximately 1.5 miles wide in the vicinity of the business park with the majority of the overland connection area being to the south and east on neighboring County properties and the Dupont Open Space and DOW Woodhouse Wildlife parcel further to the south.

In response to the business park's proximity to the Overland Connection and Wildlife Habitat Conservation Area, a wildlife assessment of the site was conducted by Kimley Horn in August and September of 2024. A memorandum was prepared detailing their findings and recommendations regarding wildlife habitat. Recommendations included 1) further coordination with Colorado Parks and Wildlife (CPW) and Douglas County to verify elk migration information around the site, and 2) modification of existing impassable fences that are obstructing natural migration patterns adjacent to the site (see *attached Exhibit U*). As noted in the memorandum:

*"No elk migration corridors are mapped within the project site by CPW SAM Data or CNHP CODEX. The nearest CPW-mapped elk migration corridor is located 0.44 miles south of the project site. No wildlife migrations corridors are mapped within the project site by Douglas County's Wildlife Mapping. The nearest Douglas County-mapped wildlife corridor is located 0.01 miles east of the project site. An overland connection is mapped within the southern 1/5<sup>th</sup> of the project site by Douglas County. However,*

*this data is not representative due to the impassable fences that sever movement between Plum Creek and the west.”*

Protection and enhancement of wildlife habitat and habitat connectivity in the business park vicinity has occurred through the recent Chemours land exchange and partnership between Douglas County and Sterling Ranch. The open space conservation easement that was created along the southern and eastern property boundary effectively buffers the Waterton Business Park site from the larger contiguous Dupont and DOW Woodhouse wildlife areas and movement corridors. The site is also currently buffered from these larger contiguous habitat areas by the Emergency Vehicle Operation Center and County-owned parcels directly adjacent to the southern and eastern site boundaries.

Further protection and enhancement of on-site habitat and the abovementioned adjacent habitat corridors can be successfully implemented within the proposed urban designation through thoughtful site planning as well as the implementation of the Sterling Ranch *Prairie Conservation Management Plan* (PCMP) (see attached **Exhibit Y**). The PCMP details Sterling Ranch’s plans for creating native prairie ecosystems within the Sterling Ranch community and accommodating wildlife habitats in phased approach as development proceeds. The PCMP outlines goals for 1) promoting a sustainable human community that encourages a healthy and sustainable natural landscape, 2) protecting cultural and paleontological resources, 3) building and maintaining positive community and agency relations through sound management and coordination of conservation efforts, 4) minimizing wildlife-human conflicts, and 5) complying with federal and state laws and regulations pertaining to threatened, endangered, and sensitive species. The PCMP also describes the protocols and policies for prairie dog management, burrowing owl management, migratory bird and raptor management and compliance.

## G: Historic Resources

As noted above, a portion of the Waterton Business Park site was part of a larger 1,520-acre former Dupont explosives manufacturing facility that was in operation until the 1980’s. However, the site is not known to contain any historically significant features or structures. Although there are no known archeological items with the property, protocols for managing the discovery of any cultural resources will be implemented per the Sterling Ranch Prairie Conservation Management Plan, the Colorado Geological Survey, and the Denver Museum of Nature & Science guidelines and requirements.

## H: Impacts on the Existing Road Network

Please see the enclosed Transportation Review by Fox Tuttle Transportation Group (**Exhibit V**).

The primary access to the Waterton Road Business Park will be Moore Road, Titan Road/Titan Parkway, Waterton Road, and Highway 85. As part of the Sterling Ranch full buildout, several roadways will be upgraded, improved, or added to provide a robust network into and through the Chatfield Basin. To date improvements have been made to Titan Road and new roadways have been constructed including Waterton Road from Moore Road to Rampart Range Road, Waterton Road from Moore Road to Highway 85 (Southern Connector), and several other collector and local roadways. In the near future, Moore Road

between Titan Road and Waterton Road will be widened and improved to accommodate additional vehicular and non-auto traffic.

Sterling Ranch is committed to preparing further Traffic Impact Studies in partnership with Douglas County specific to the Waterton Business Park to plan and evaluate the proposed internal and external roads/connections needed to the regional roadways. The Sterling Ranch team understands the need to update the Sterling Ranch MTS due to the changes in development, implementation of the new roadway network, and potential additional developable land. In partnership with Douglas County, the methodology for the updated MTS will be defined at the initial stage. New count data will be collected to update the baseline conditions and account for newly built homes throughout the Chatfield Basin.

## **I: Capabilities Of, and Impacts On, Existing or Planned Special Districts Affected by the Amendment**

The Waterton Business Park is within the following taxing and special districts and will be served by: Douglas County Re-1 School District, Douglas County Government, South Metro Fire Rescue Fire Protection District, Douglas County Schools, Douglas County Law Enforcement, Douglas Public Library District, and the Mile High Flood District. With the inclusion of the business park into the Chatfield Urban Area, the site will be annexed into the Sterling Ranch Community Authority Board (CAB) or a new metro district that will be formed at the time of zoning and will provide the same services to the Waterton Business Park that are currently provided to the Sterling Ranch community including water, sewer, trash collection and recreational amenities. Land dedications or cash-in-lieu will be provided for school and fire districts based on the ultimate proposed land uses.

## **J: Water Supply and Provision of Water and Sanitary Sewage Treatment**

The Waterton Business Park is located within Margin A (Denver Formation) and Margin B (Denver formation) Water Supply Zones according to CMP Map 7.1 (*see attached Exhibit I*). A renewable water supply is generally required for land uses proposed within Margin A and a new development may only be served by renewable water supplies or Denver Basin aquifer water underlying open space within Margin B.

In 2024 the Douglas County Board of County Commissioners voted unanimously to allow \$20 million of the Federal American Rescue Plan Act Dollars (ARPA) to be spent to improve water and wastewater infrastructure in Northern Douglas County. This partnership between Douglas County, Plum Creek Reclamation Authority, Sterling Ranch Community Authority Board, and Dominion Water and Sanitation District will provide for a centralized renewable water system and wastewater system for the town of Louviers and new development along the Waterton Road Corridor.

The benefits of centralizing these systems include 1) providing the town of Louviers access to a safe and clean renewable water supply after being stranded on groundwater for over 60 years and 2) providing a



connection to the Sterling Ranch Community Authority Board distribution and collection system which will allow for the decommissioning of the antiquated sewer lagoon in Louviers.

To provide for a regional solution and to bring Louviers off of groundwater that has quality issues, Douglas County Commissioners have dedicated \$20 million to the Dominion Water and Sanitation District who has committed to build a new state-of-the-art wastewater treatment facility, a renewable waterline to deliver clean and safe water to Louviers, a lift station that will allow for the wastewater to be pumped to the new wastewater treatment plant, allowing the antiquated sewer lagoon to be decommissioned.

This revitalization effort provides a connection to renewable and reliable water supply in a timely manner. This water supply is available today and a connection can be completed for emergency supplies in 1 to 2 years. This effort will provide a water supply, treated at the Larry D. Moore Water Treatment Plant jointly owned by Roxborough Water and Sanitation District and Dominion Water and Sanitation District, and fire flows to future retail, commercial, housing and light industrial development along the Waterton Corridor. It will also provide a water supply and fire flows to public facilities along Waterton Road including Douglas County's Emergency Vehicle Operation Center.

The Douglas County Commissioners identified the significant public benefit for this proposal and understood that the significant improvements will only happen with the additional new development. Please see the attached *Dominion Water and Sanitation District Service Area Map (Exhibit Q)*, the attached *Dominion Water and Sanitation District Wholesale Water and Wastewater Service Commitment for Waterton Business Park (Exhibit W)*, and the attached *Amended and Restated Intergovernmental Agreement between Dominion Water & Sanitation District Acting through its Sterling Ranch Water Enterprise Fund and Douglas County for the Northern Highway 85 Wastewater Collection and Treatment Systems, The Louvers Renewable Waterline, Master Meter and Corrosion Study (Exhibit X)*.

## **K: Availability of Public Facilities Such as Schools, Parks, and Trails, Libraries, Fire Stations, Etc.**

Sterling Ranch is currently served by the Douglas County Library District branch library in Roxborough. In the future, Sterling Ranch has identified a premium location for a new library at the southwest intersection of Titan Road and Taylor River Circle. This location is easily accessible for all residents of the Chatfield Urban Area, including future residents of the Waterton Business Park. Sterling Ranch and the Douglas County Library Board of Trustees are currently working on a memorandum of understanding whereby Sterling Ranch would donate a portion of land for the construction of the new library facility. The Library Board of Trustees approval of this memorandum of understanding would give staff direction to negotiate a land contribution agreement and to start budgeting for design costs with the goal of building a new library at Sterling Ranch within the next 5 years.

The Waterton Business Park will be served by the South Metro Fire District. It also has the benefit of being adjacent to the Douglas County-funded aerial support wildfire helicopter. This Type 2 helicopter is capable of delivering 300 gallons of water to the front lines for fires and will be standing ready to respond.

As part of the Sterling Ranch PD, residents of the Waterton Business Park would have access to all of the existing and planned parks and trails within the 3,400-acre planned development which will include 3 regional parks, an anticipated 30 miles of community trails, and a host of local parks with amenities such as playgrounds, pools, and sport courts (*see attached Exhibit R*).

Currently, the Douglas County School District has capacity in various Roxborough and Highlands Ranch schools for Sterling Ranch students to attend. The Douglas County School District has recently passed a bond initiative that is dedicated to building a school in Sterling Ranch. Concept designs for the school have been completed with an estimated opening date of August 2027. Sterling Ranch and the Douglas County School District are committed to building neighborhood or charter schools in Sterling Ranch.

## **L: Conditions that have Changed in the County to Warrant the CMP Amendment**

In September of 2023, thanks to a partnership between Sterling Ranch Acquisitions, Douglas County, and American chemical company Chemours FC, LLC, a real estate trade was unanimously approved by the Board of Douglas County Commissioners resulting in the preservation of approximately 204 acres of open space via a conservation easement. Sterling Ranch Acquisitions purchased the property from Chemours and will own and maintain the land in accordance with the voluntary legal agreements between Sterling Ranch and Douglas County. The agreements restrict how the land may be used specifically for the purpose of conservation. In addition to the conservation easement that Douglas County received, they also acquired 48 additional acres that is anticipated to serve as an operations and material storage facility for Douglas County Public Works. In exchange, Sterling Ranch received approximately 120 acres of land owned by Douglas County on the west side of the conservation easement which is a large part of the Waterton Business Park (*see attached Exhibit T*).

The conservation easement created an important community buffer for Louviers, setting land aside in perpetuity for conservation directly adjacent to the village and separating it from the developable portion of the Waterton Business Park parcel. This conservation easement that now serves as an open space buffer for the town of Louviers was previously zoned for general industrial use. The creation of this open space buffer represents a recent change in conditions that made bringing the Waterton Business Park into the Chatfield Urban area for development compatible with the goals and intent of the 2040 master plan. Specifically, this buffer meets CMP Goal 4-2, Objective 4-2A -*Establish community separators around the Louviers Village Area to maintain community identity and sense of place*, and Policy 4-2A.1 – *Maintain community separation for Louviers Village through appropriate location of development*.

Not only does the conservation easement facilitate the desired separation for Louviers Village, but this open space helps to support a critical missing link in a vital wildlife migration corridor identified as ‘Overland Connection’ area on Map 9.1 – *Wildlife Resources* of the CMP. The Overland Connection area is primarily comprised of the Woodhouse State Wildlife Area, Douglas County’s Plateau Ranch, the Pike National Forest, Roxborough State Park, Sharptail Ridge, Red Mesa, Dupont Open Space, Highlands Ranch Backcountry Wilderness, and together with other properties, creates a valuable wildlife corridor stretching from the Pike National Forest to the Highlands Ranch Backcountry Wilderness (*see attached Exhibits M, N*).

Several partners including but not limited to Colorado Parks and Wildlife, DuPont, Cherokee Ranch and Castle Foundation, Highlands Ranch Community Association, and the Colorado Department of Transportation, have made significant contributions over the past decades – both financial and in kind – to ensure the preservation of this habitat corridor.

The recent addition of the conservation easement enhanced the open space corridor between the Waterton Business Park and the larger 843-acre Woodhouse State Wildlife Area 1 mile south of the business park that is owned and managed by Colorado Parks and Wildlife solely for wildlife habitat and strictly prohibits public access. Resident Elk herds frequent the Woodhouse SWA which has been identified by Colorado Parks and Wildlife as crucial habitat and an elk production area in which calving occurs annually.

Along with the EVOC facility to the south and County-owned material storage parcel to the east of the business park site, the conservation easement essentially creates a buffer between the Waterton Business Park and the larger contiguous protected Dupont Open Space and Plum Creek to the east. This ‘change in condition’ was a special circumstance that made bringing the Waterton Business Park into the Chatfield Urban Area compatible with the goals and objectives of the 2040 CMP, specifically Objective 2-10A – *Balance, conserve, and preserve sensitive environmental and visual resources as open space in areas adjacent to and within proposed urban areas*, Policy 2-10A.2 – *Any new development within the Chatfield Urban Area shall support, through the provision of significant open space, the conservation of those habitats, wildlife movement corridors, and habitat linkages*.

An additional change in conditions within Douglas County that warranted bringing the Waterton Business Park into the Chatfield Urban Area was the recent completion of the Waterton Road extension through the Sterling Ranch planned development. Douglas County’s 2040 Transportation Master Plan identified the need for a regional solution to give those in Roxborough Village, Chatfield Farms, Roxborough Downs, River Canyon, and Sterling Ranch an alternative to Titan Road for access to US 85. Douglas County and Sterling Ranch partnered to make major improvements to Waterton Road. Phase 1 of the Waterton Road project, called the Southern Connector, was a 2.8-mile, two-lane roadway between Airport Road and Moore Road that was completed by Douglas County in 2020. Phase 2 of the Waterton Road project was the construction of the 4-lane portion of Waterton Road that was finalized in 2022. This 2.5-mile extension from Rampart Range Road to Moore Road completed the connection to the Southern Connector, and ultimately US Highway 85. Phase 2 of the project was accelerated by a partnership agreement between Douglas County and the Sterling Ranch Community Authority Board that allowed the County to fund the construction portion of Phase 2 and allowed Sterling Ranch to repay that funding through an additional fee of \$4161.00 per single family dwelling unit within Sterling Ranch.

With the completion of these Waterton Road construction phases and a new east-west connection from Wadsworth Blvd to US 85, an arterial roadway frontage has been created that is ideal for development and can provide much needed and easily accessed commercial services to the greater Douglas County community in spirit with Chatfield Urban Area Policy 2-11A.6 – *Encourage development within this Area to offer existing and future residents the benefits of a multi-faceted community that can provide the residential, commercial, medical, recreational, and educational services that they require, while preserving the open spaces, viewsheds, and wildlife corridors characteristic of the area*.

The most recent change in conditions within Douglas County, which has spurred the current CMP amendment request to expand the Waterton Business Park boundary and bring additional acreage into



the Chatfield Urban Area, is the planned regional sports facility. While the majority of the anticipated sports facility footprint fits within the portion of Waterton Business Park that was recently brought into the Chatfield Urban Area, the full anticipated sports facility footprint extends past the existing business park boundary into parcels of land owned by the County and Sterling Ranch. While sport amenities and ball fields were contemplated at the time the Waterton Business Park Boundary was brought into the Chatfield Urban Area, the proposed CMP amendment defines and expands the business park boundary to include the full anticipated footprint of the sports complex within the Chatfield Urban Area.

In addition to the regional sports complex, a potential location for a new Douglas County Sheriff's Facility has recently been identified on a portion of land between Moore Road and the EVOC facility. The proposed CMP amendment seeks to expand the Waterton Business Park boundary to include the EVOC facility and additional land area between Moore Road and the EVOC facility which will encompass the potential future Sheriff's facility along with other uses not yet determined. While the other potential uses for this land area have not yet been defined, the applicant envisions bring this new area into the Sterling Ranch PD under D2 zoning with Special Character E (SCZ-E) overlay zoning, the same zoning anticipated with the rest of the Waterton Business Park.

## **M: Evidence to Support How Land Proposed for Urban Development is a Logical Expansion of the Chatfield Urban Area (Approval Criteria 10-2A(7), and How the Expansion of the Chatfield Urban Area Results in a Compelling Public Benefit (Approval Criteria 10-2A(8) of the CMP**

As mentioned above, the Waterton Business Park sits on the western boundary of the *Louviers Rural Community* and directly abuts the *Chatfield Urban Area* on the west side of Moore Road. While the business park is within the boundary of the Louviers Rural Community, the site and the proposed expansion area is actually much closer in proximity (approximately 60 feet) to Filings 6B and 6C of the Sterling Ranch PD and Plum Valley Heights than it is to any other residential development within the *Louviers Rural Community*. The Town of Louviers is the next closest development within the rural community approximately 1/3<sup>rd</sup> of a mile away to the southeast. Given the proximity of the Waterton Business Park to the Sterling Ranch PD and its existing modern infrastructure, the business park could easily be served without the need to significantly expand infrastructure, making this a logical expansion of the *Chatfield Urban Area*. Because of the direct adjacency of the business park to the Chatfield Urban Area, expanding the urban area boundary to include the additional business park area would not result in a patchwork pattern of different zoning designations. Additional information describing water supply and provision of water and sanitary sewage treatment for the business park site and neighboring community is included above in Section J.

Expanding the Chatfield Urban Area to include the additional Waterton Business Park and conservation easement acreage would result in compelling public benefit for a number of reasons. With the recent completion of Waterton Road through the Sterling Ranch Planned Development, this major thoroughfare now connects Wadsworth Blvd to Airport Road and US Highway 85, serving a number of Douglas County communities including the Roxborough Suburban Area, the Chatfield Valley Subarea, the Chatfield Urban Area, the Louviers Rural Community, and more. The Waterton Business Park is bisected by Waterton

Road, creating an ideal frontage for a number of land uses including commercial, mixed use, light industrial, and sports/recreational uses that could serve the greater Douglas County community and bring much needed services to the area.

Including the expanded Waterton Business Park and conservation easement acreage in the Chatfield Urban Area and ultimately the Sterling Ranch Planned Development, residents of the Waterton Business Park and adjacent communities will gain access to Sterling Ranch trails, recreational facilities, and future regional parks and schools. While the ultimate land uses and site plans for the business park have yet to be determined, Sterling Ranch is also anticipating the addition of a Rapid Flash Beacon, a traffic control device designed to increase driver awareness of pedestrians crossing roadways, on Moore Road to facilitate access to the planned Sterling Ranch trail system and recreational facilities.

The existing Waterton Road corridor through the property is fronted by large debris & rubble operations managed by Douglas County, as well as large gravel piles & heavy equipment storage related to winter roadway treatment. These piles of rubble, winter road treatment material, and heavy equipment will be removed as a part of Waterton Business Park. This will primarily divert the heavy truck traffic that transports this rubble away from this region completely – reducing traffic noise, congestion, and roadway damage. This will also help to repair & heal the landscape to allow for a more pleasant and aesthetic corridor.

Addressing water and sewer needs in the Highway 85 corridor is an objective that has been identified in the CMP. Expanding the Chatfield Urban Area to include the additional Waterton Business Park and conservation easement acreage will generate more opportunities to build and connect water and sewer services that will benefit the existing surrounding communities and meet future needs. As mentioned above, in 2024 the Douglas County Board of County Commissioners voted unanimously to allow \$20 million of the Federal American Rescue Plan Act dollars (ARPA) to be spent on improving water and wastewater infrastructure in Northern Douglas County. This partnership between Douglas County, the Sterling Ranch Community Authority Board, Dominion Water and Sanitation District will provide for a centralized renewable water system and wastewater system for Louviers and new commercial and residential development along the Waterton Road corridor in a timely manner. It will also provide water supply and fire flows to adjacent public facilities including Douglas County's Emergency Vehicle Operation Center. The revitalization efforts of the water and wastewater systems in northwest Douglas County are made possible through the revenues generated from water and sewer tap fees from new development, such as the Waterton Business Park. Land use applications such as this one generate opportunities to build and interconnect services and networks that benefit the existing adjacent communities and create opportunities to meet future needs.

Douglas County Sheriff's Department manages the Emergency Vehicle Operations Center (EVOC). Agencies across Douglas County and the South Metro area representing Emergency Management Services, Fire and Law Enforcement utilize the training facility. EVOC classes are important to help keep emergency responders safe and reduce the risk of accidents and injuries to the responders and law enforcement officers. It is understood that the Douglas County Emergency Vehicle Operations Center (EVOC) does not currently have the ability to supply fire suppression flows from hydrants due to lack of nearby water infrastructure. In order to enhance the safety of operations at the EVOC, Waterton Business Park will include an extension of water main infrastructure to provide a centralized source for fire-flows. Having access to water will also allow bathrooms and other amenities to be added to the

critical training facility. Should the envisioned Douglas County Sheriff's facility be realized at the location west of EVOC on Moore Road, it would also benefit from the extension of water main infrastructure and fire suppression flows.

A wildlife corridor study conducted as a part of this application revealed multiple layers of fencing within the Overland Connection Area identified in the Douglas County Wildlife Resources Map – centered on the Louviers Gulch. These fences, which are a mix of private and County ownership, are all a minimum of 6-feet tall, and topped with 3-strands of barbed wire. As such, they are impassable to big game and are a major disruption to their migration through the corridor – causing them to spread out of the Louviers Gulch and on to Waterton Road, where they pose a severe safety hazard to drivers. In order to improve wildlife migration patterns and improve public safety, Waterton Business Park will include a strategy to partner with the County to remove fencing that will allow big game to travel along the overland connection corridor as-intended, which again is a significant safety improvement and a significant benefit to Douglas County residents.

Perhaps one of the most compelling public benefits realized with the inclusion of the Waterton Business Park into the Chatfield Urban Area is the recently created conservation easement dedicated by Sterling Ranch that will form a highly desired community buffer around the Village of Louviers in conformance with 2040 CMP goals. The rezoning of this buffer area from General Industrial to Open Space represents a significant downzoning and brings the allowed uses for the buffer area into conformance with the desires of the adjacent communities, a significant benefit to the Louviers community. The conservation easement will also buffer the Waterton Business Park from a larger and more valuable wildlife habitat corridor to the south and east of the site as well as support and enhance a greater wildlife overland connection area identified by the County. This buffer epitomizes the smart balance of land uses and exemplifies the partnerships sought after in the 2040 CMP to balance inherent competing values. The real estate trade and partnership between Sterling Ranch and Douglas County allows land more suited for creating meaningful habitat linkages to be used for that purpose while creating a buffered parcel of land more suitable for development that is capable of catering to the economic needs of Douglas County residents, providing clean and reliable water and wastewater infrastructure, commercial services, and diverse housing opportunities.

In summary, including the expanded Waterton Business Park areas and the conservation easement within the Chatfield Urban Area represents a logical expansion of the urban area and would allow the business park boundary to be adjusted to accommodate the full anticipated sports facility footprint, the EVOC facility, and the anticipated Douglas County Sheriff's facility. The improvements in water and wastewater infrastructure that only happen with the revenues generated from new development, public access that will be provided to the trails, parks, schools, and amenities that are part of the Sterling Ranch PD, as well as the recently created conservation easement that will buffer the village of Louviers while enhancing a vital wildlife corridor and improving public safety are all compelling benefits that result from this expansion of the Chatfield Urban Area. We humbly request your support in balancing the inherent competing values of urban development and open space preservation that can be achieved through this CMP amendment to expand the Chatfield Urban Area to include the Waterton Business Park.

## N: APPROVAL CRITERIA SUMMARY

**Section 10-2A** of the 2040 Comprehensive Master Plan identifies 8 criteria that shall be considered by the Planning Commission when approving or disapproving CMP amendment requests. The following is a summary of how this application demonstrates compliance with the 8 criteria identified in Section 10-2A.

### 1. Consistency with the spirit, intent, goals, objectives, and policies of the CMP.

- This application is consistent with the following CMP goals, objectives, and policies:
  - **Goals:** 2-1, 2-2, 2-3, 2-4, 2-5, 2-6, 2-7, 2-8, 2-9, 2-10, 2-11, 2-12, 2-13 3-2, 4-2, 5-1, 6-2, 7-1, 9-1
  - **Objectives:** 2-1A, 2-1B, 2-1C, 2-2A, 2-5A, 2-6E, 2-6F, 2-7A, 2-7C, 2-9A, 2-10A, 2-11A, 2-12A, 2-13A, 3-2A, 3-2D, 4-2A, 4-2F, 4-2J, 5-12B, 6-2B, 7-1C, 9-1A, 9-1B
  - **Policies:** 2-1A.1, 2-1A.2, 2-1B.1, 2-1B.2, 2-1C.1, 2-1C.2, 2-1C.3, 2-2A.1, 2-2A.2, 2-2A.3, 2-3A.2, 2-5A.1, 2-6B.3, 2-6E.1, 2-6E.2, 2-6E.3, 2-7A.1, 2-7A.2, 2-9A.1, 2-9A.2, 2-10A.1, 2-10A.2, 2-10A.4, 2-11A.2, 2-11A.3, 2-11A.5, 2-11A.6, 2-12A.1, 2-13A.2, 3-2A.2, 3-2D.3, 3-3A.8, 4-2A.1, 4-2D.4, 5-12B.1, 6-2B.2, 9-1A.3, 9-1B.1, 9-1B.2, 9-1B.3, 9-1B.4, 9-1B.5, 9-1B.6
- For a detailed explanation of consistency with specific goals, objectives, and policies please refer to **Section B** in the above narrative.

### 2. Compatibility with surrounding land uses and zoning.

- The Waterton Business Park site is surrounded by the following land uses and zoning:
  - West of Site:
    - PD Land Use (Sterling Ranch PD), *Chatfield Urban Area*
    - Rural Residential Land Use (Plum Valley Heights), *Chatfield Valley Subarea*
  - North of Site:
    - General Industrial (Lawrence Construction), *Louviers Rural Community*
  - East of Site:
    - General Industrial (Douglas County BOCC), *Louviers Rural Community*
    - Conservation Easement (Sterling Ranch LLC), *Louviers Rural Community*
  - South of Site:
    - A1-Agricultural One (Douglas County BOCC), *Louviers Rural Community*
- With the proposed inclusion into the Chatfield Urban Area, the Waterton Business Park's land use options would align with the adjacent urban PD land uses associated with Sterling Ranch and create a more welcoming front door for the residential community than would otherwise be achievable under the existing General Industrial zoning. While the ultimate land uses and development patterns for the business park site have yet to be determined, the applicant currently anticipates bringing the property into the Sterling Ranch PD zoning as D2 Planning Area with Character Zone C5 and Special Character Zone E overlays which would support a mix of commercial, retail, residential, technology-focused light industrial uses, and sports facilities. It is

anticipated that the adjacent EVOC site that is utilized for the training of the Douglas County Sheriff Department officers could benefit from the proximity of the commercial uses anticipated within the Waterton Business Park and both the EVOC site and the commercial uses could be symbiotic economic drivers.

- While not directly adjacent to the business park site, larger tracts of land designated for open space exist further east and south of the site including the Dupont Open Space and Woodhouse Wildlife Area. Taking into account the business park's proximity to both the adjacent land uses noted above as well as the non-adjacent larger open space tracts, future development will be required to respect the adjacent residential properties to the west and open spaces further east and south through thoughtful land use planning, scale and buffering in concert with the CMP's wildlife and habitat conservation goals. Specific measures will be determined through future zoning and subdivision applications once the ultimate land uses and development patterns for the site have been determined. For additional information regarding the surrounding land uses and zoning please refer to **Section D** in the above narrative.

### **3. Compatibility with existing, natural, and environmental conditions of the site and preservation of important natural features and scenic viewsheds, riparian corridors, wildlife habitat and movement corridors, and historic resources.**

- The Waterton Business Park does not fall within any Class 3 Hazards as identified on Map 8.1 of the 2040 CMP.
- While a portion of the Waterton Business Park site was part of a larger 1,520-acre former Dupont explosives manufacturing facility, the Colorado Department of Health Care Policy and Finance (CDPHE) worked to clean up the site and in 2022 CDPHE released the property from a remedial action cleanup plan based on completed cleanup measures and there are now enforceable requirements for redevelopment of the site including development restrictions indexed at the Douglas County Clerk and Recorder. Sterling Ranch will comply with all of the Douglas County development requirements and will continue to work closely with CDPHE.
- The business park site is not located within an area identified in the CMP as having steeply dipping bedrock, however, further geological and geotechnical study and review will be provided in subsequent planning phases to further classify any geologic and geotechnical hazards within the property. Mitigation measures identified in the studies will be identified and implemented in later planning phases, including view, grading, and landform preservation.
- The business park site does not include a mapped floodplain, however the conservation easement does. As such, any grading or drainage improvements within the conservation easement will comply with all local, state and federal requirements. Review of the *Douglas County Wildfire Hazard-Overlay District Map* (dated 10-11-2003) indicates that the site is included within the Wildfire Hazard Overlay District where Wildfire Hazard Assessment is required before development per Section 17 of the Douglas County Zoning Resolution.
- Controlling water pollution is essential to protect public health and welfare as well as to protect aquatic life, wildlife habitats, vegetation and aesthetics. The Waterton Business Park is located just west of Plum Creek within the Chatfield Watershed. The business park will be developed in accordance with Douglas County Storm Drainage Standards, including the likely implementation



of water quality control features through stormwater attenuation facilities to ensure surface water quality. Additionally, the appropriate State permitting & standards will be followed in accordance with the Colorado Department of Public Health and Environment regarding stormwater impoundment and discharge.

- The business park site is identified as 'Low Habitat Value' area; however, it sits on the inside edge of a 'Wildlife Habitat Conservation Area' and the southeastern 1/5<sup>th</sup> of the business park property extends into 'Overland Connection Area' as identified on the CMP Wildlife Resources Map. The CMP defines 'Overland Connection' as *"A broad area to facilitate wildlife movement, typically within or between large blocks of wildlife habitat. Overland connections are generally non-linear, not precisely defined, and may include various types of topography and vegetation"*. The Overland Connection area is approximately 1.5 miles wide in the vicinity of the business park with the majority of the overland connection area being to the south and east on neighboring County properties and the Dupont Open Space and DOW Woodhouse Wildlife parcel further to the south.
- In response to the business park's proximity to the Overland Connection and Wildlife Habitat Conservation Area, a wildlife assessment of the site was conducted by Kimley Horn in November of 2025. A memorandum was prepared detailing their findings and recommendations regarding wildlife habitat. Recommendations included 1) further coordination with Colorado Parks and Wildlife (CPW) and Douglas County to verify elk migration information around the site, and 2) modification of existing impassable fences that are obstructing natural migration patterns adjacent to the site.
- No elk migration corridors are mapped within the project site by CPW SAM Data or CNHP CODEX, and no wildlife migrations corridors are mapped within the project site by Douglas County's Wildlife Mapping. An overland connection is mapped within the southern 1/5<sup>th</sup> of the developable business park site by Douglas County. However, this data is not representative due to the impassable fences that sever movement between Plum Creek and the west.
- Protection and enhancement of wildlife habitat and habitat connectivity in the business park vicinity has occurred through the recent Chemours land exchange and partnership between Douglas County and Sterling Ranch. The open space conservation easement that was created along the southern and eastern property boundary effectively buffers the Waterton Business Park site from the larger contiguous Dupont and DOW Woodhouse wildlife areas and movement corridors. The site is also currently buffered from these larger contiguous habitat areas by the Emergency Vehicle Operation Center and County-owned parcels directly adjacent to the southern and eastern site boundaries.
- Further protection and enhancement of on-site habitat and the abovementioned adjacent habitat corridors can be successfully implemented within the proposed urban designation through thoughtful site planning as well as the implementation of the Sterling Ranch *Prairie Conservation Management Plan* (PCMP) which outlines goals for 1) promoting a sustainable human community that encourages a healthy and sustainable natural landscape, 2) protecting cultural and paleontological resources, 3) building and maintaining positive community and agency relations through sound management and coordination of conservation efforts, 4) minimizing wildlife-human conflicts, and 5) complying with federal and state laws and regulations pertaining to threatened, endangered, and sensitive species. The PCMP also

describes the protocols and policies for prairie dog management, burrowing owl management, migratory bird and raptor management and compliance.

- Although there are no known historically significant features, structures, or other archeological items within the property, protocols for managing the discovery of any cultural resources will be implemented per the Sterling Ranch Prairie Conservation Management Plan, the Colorado Geological Survey, and the Denver Museum of Nature & Science guidelines and requirements.
- For additional information on compatibility with existing, natural, and environmental conditions, preservation of important natural features and scenic viewsheds, riparian corridors, wildlife habitat and movement corridors, and historic resources please refer to **Sections E,F,G** in the above narrative.

#### **4. Adequate water supply, water and sewer treatment facilities, transportation networks, access, fire protection, school facilities, and parks and trails for the development.**

- **Water Supply, Water and Sewer Treatment Facilities:** In 2024 the Douglas County Board of County Commissioners voted unanimously to allow \$20 million of the Federal American Rescue Plan Act Dollars (ARPA) to be spent to improve water and wastewater infrastructure in Northern Douglas County. This partnership between Douglas County, Plum Creek Reclamation Authority, Sterling Ranch Community Authority Board, and Dominion Water and Sanitation District will provide for a centralized renewable water system and wastewater system for the town of Louviers and new development along the Waterton Road Corridor.
- The benefits of centralizing these systems include 1) providing the town of Louviers access to a safe and clean renewable water supply after being stranded on groundwater for over 60 years and 2) providing a connection to the Sterling Ranch Community Authority Board distribution and collection system which will allow for the decommissioning of the antiquated sewer lagoon in Louviers.
- To provide for a regional solution and to bring Louviers off of groundwater that has quality issues, Douglas County Commissioners have dedicated \$20 million to the Dominion Water and Sanitation District who has committed to build a new state-of-the-art wastewater treatment facility, a renewable waterline to deliver clean and safe water to Louviers, a lift station that will allow for the wastewater to be pumped to the new wastewater treatment plant, allowing the antiquated sewer lagoon to be decommissioned.
- This revitalization effort provides a connection to renewable and reliable water supply in a timely manner. This water supply is available today and a connection can be completed for emergency supplies in 1 to 2 years. This effort will provide a water supply, treated at the Larry D. Moore Water Treatment Plant jointly owned by Roxborough Water and Sanitation District and Dominion Water and Sanitation District, and fire flows to future retail, commercial, housing and light industrial development along the Waterton Corridor. It will also provide a water supply and fire flows to public facilities along Waterton Road including Douglas County's Emergency Vehicle Operation Center.
- Please see the attached *Dominion Water and Sanitation District Wholesale Water and Wastewater Service Commitment for Waterton Business Park (Exhibit W)*.
- **Traffic:** Please see the enclosed Transportation Review by Fox Tuttle Transportation Group dated 11-25-2024 (**Exhibit V**).



- The primary access to the Waterton Road Business Park will be Moore Road, Titan Road/Titan Parkway, Waterton Road, and Highway 85. As part of the Sterling Ranch full buildout, several roadways will be upgraded, improved, or added to provide a robust network into and through the Chatfield Basin. To date improvements have been made to Titan Road and new roadways have been constructed including Waterton Road from Moore Road to Rampart Range Road, Waterton Road from Moore Road to Highway 85 (Southern Connector), and several other collector and local roadways. In the near future, Moore Road between Titan Road and Waterton Road will be widened and improved to accommodate additional vehicular and non-auto traffic.
- Sterling Ranch is committed to preparing a Traffic Impact Study specific to Waterton Business Park to plan and evaluate the proposed internal and external roads/connections needed to the regional roadways. The Sterling Ranch team understands the need to update the Sterling Ranch MTS due to the changes in development, implementation of the new roadway network, and potential additional developable land. In partnership with Douglas County, the methodology for the updated MTS will be defined at the initial stage. New count data will be collected to update the baseline conditions and account for newly built homes throughout the Chatfield Basin.
- Please see the above narrative for additional information on water and wastewater (**Section J**) and traffic/transportation networks (**Section H**).

**5. How existing and planned capabilities of the affected special districts can adequately handle the service demand.**

- The Waterton Business Park is within the following taxing and special districts and will be served by: Douglas County Re-1 School District, Douglas County Government, South Metro Fire Rescue Fire Protection District, Douglas County Schools, Douglas County Law Enforcement, Douglas Public Library District, and the Mile High Flood District. With the inclusion of the business park into the Chatfield Urban Area, the site will be annexed into the Sterling Ranch Community Authority Board (CAB) or a new metro district that will be formed at the time of zoning and will provide the same services to the Waterton Business Park that are currently provided to the Sterling Ranch community including water, sewer, trash collection and recreational amenities. Land dedications or cash-in-lieu will be provided for school and fire districts based on the ultimate proposed land uses.

**6. How social, economic, or land use conditions of the County have changed or are in the process of changing in such a manner to support the proposed amendment to the CMP.**

- In September of 2023 a real estate trade was unanimously approved by the Board of Douglas County Commissioners resulting in the preservation of approximately 204 acres of open space via a conservation easement in accordance with voluntary legal agreements between Sterling Ranch and Douglas County. The agreements restrict how the land may be used specifically for the purpose of conservation. In addition to the conservation easement that Douglas County received, they also acquired 48 additional acres that is anticipated to serve as an operations and material storage facility for Douglas County Public Works. In exchange, Sterling Ranch received approximately 120 acres of land owned by Douglas County on the east side of the conservation

easement which is a large part of the Waterton Business Park. It was understood that when this buffer was in place, the business park would be suitable for development.

- The conservation easement will create an important community buffer for Louviers, setting land aside in perpetuity for conservation directly adjacent to the village and separating it from the Waterton Business Park parcel. This conservation easement that will now serve as an open space buffer for the town of Louviers was previously zoned for general industrial use. The creation of this open space buffer represents a recent change in conditions that makes bringing the expanded Waterton Business Park and conservation easement acreage into the Chatfield Urban area for development compatible with the goals and intent of the 2040 master plan.
- Not only does the conservation easement facilitate the desired separation for Louviers Village, but this open space helps to support a critical missing link in a vital wildlife migration corridor identified by the County as 'Overland Connection' area which is comprised of the Woodhouse State Wildlife Area, Douglas County's Plateau Ranch, the Pike National Forest, Roxborough State Park, Sharptail Ridge, Red Mesa, Dupont Open Space, and Highlands Ranch Backcountry Wilderness.
- The conservation easement essentially creates a buffer between the Waterton Business Park and the larger contiguous protected Dupont Open Space and Plum Creek to the east. This change in condition is a special circumstance that makes bringing the Waterton Business Park into the Chatfield Urban Area compatible with the goals and objectives of the 2040 CMP, specifically Objective 2-10A – *Balance, conserve, and preserve sensitive environmental and visual resources as open space in areas adjacent to and within proposed urban areas*, Policy 2-10A.2 – *Any new development within the Chatfield Urban Area shall support, through the provision of significant open space, the conservation of those habitats, wildlife movement corridors, and habitat linkages*.
- An additional change in conditions within Douglas County that warrants bringing the additional Waterton Business Park acreage into the Chatfield Urban Area is the recent completion of the Waterton Road extension through the Sterling Ranch planned development. Douglas County's 2040 Transportation Master Plan identified the need for a regional solution to give those in Roxborough Village, Chatfield Farms, Roxborough Downs, River Canyon, and Sterling Ranch an alternative to Titan Road for access to US 85. With the completion of Waterton Road and a new east-west connection from Wadsworth Blvd to US 85, an arterial roadway frontage has been created that is ideal for development and can provide much needed and easily accessed commercial services to the greater Douglas County community in spirit with Chatfield Urban Area Policy 2-11A.6 – *Encourage development within this Area to offer existing and future residents the benefits of a multi-faceted community that can provide the residential, commercial, medical, recreational, and educational services that they require, while preserving the open spaces, viewsheds, and wildlife corridors characteristic of the area*.
- The most recent change in conditions in Douglas County that warrants bringing the additional acreage into the Chatfield Urban Area is the addition of the planned regional sports facility, the EVOC facility, and a potential new Douglas County Sheriff's facility. Bringing the additional acreage into the Chatfield Urban Area will allow the full anticipated footprint of the sports facility to be included within the urban area. When the original Waterton Business Park boundary was brought into the Chatfield Urban Area earlier this year, the ultimate footprint of the sports facility and the potential Sheriff's facility were not yet identified. Bringing the

additional land into the urban area to accommodate the sports facility and potential Sheriff's facility is compatible with many of the CMP goals and objectives related to creating opportunities for improved health, safety, and recreational amenities.

**7. How land proposed for urban development is a logical expansion of the Primary Urban Area (PUA), Separated Urban Area (SUA), or Chatfield Urban Area, as applicable.**

- The Waterton Business Park sits on the western boundary of the *Louviers Rural Community* and directly abuts the *Chatfield Urban Area* on the west side of Moore Road. While the business park is within the boundary of the Louviers Rural Community, the site is actually much closer in proximity (approximately 60 feet) to Filings 6B and 6C of the Sterling Ranch PD and Plum Valley Heights than it is to any other residential development within the *Louviers Rural Community*. The Town of Louviers is the next closest development within the rural community at approximately 1/3<sup>rd</sup> of a mile away to the southeast. Given the proximity of the Waterton Business Park to the Sterling Ranch PD and its existing modern infrastructure, the business park could easily be served without the need to significantly expand infrastructure. Because the business park is directly adjacent to Sterling Ranch and the Chatfield Urban Area, expanding the Chatfield Urban Area boundary to include the additional business park acreage and conservation easement acreage would not result in a zoning patchwork but rather a continuous, logical expansion of the *Chatfield Urban Area*.

**8. How the expansion of the PUA, SUA, or Chatfield Urban Area results in a compelling public benefit, as applicable.**

- A wildlife corridor study conducted as a part of this application revealed multiple layers of fencing within the Overland Connection Area identified in the Douglas County Wildlife Resources Map – centered on the Louviers Gulch. These fences, which are a mix of private and County ownership, are all a minimum of 6-feet tall, and topped with 3-strands of barbed wire. As such, they are impassable to big game and are a major disruption to their migration through the corridor – causing them to spread out of the Louviers Gulch and on to Waterton Road, where they pose a severe safety hazard to drivers. In order to improve wildlife migration patterns and improve public safety, Waterton Business Park will include a strategy to partner with the County to remove fencing that will allow big game to travel along the overland connection corridor as-intended.
- The existing Waterton Road corridor through the property is fronted by large debris & rubble operations managed by Douglas County, as well as large gravel piles & heavy equipment storage related to winter roadway treatment. These piles of rubble, winter road treatment material, and heavy equipment will be removed as a part of Waterton Business Park. This will primarily divert the heavy truck traffic that transports this rubble away from this region completely – reducing traffic noise, congestion, and roadway damage. This will also help to repair & heal the landscape to allow for a more pleasant and aesthetic corridor.
- With the recent completion of Waterton Road through the Sterling Ranch Planned Development, this major thoroughfare now connects Wadsworth Blvd to Airport Road and US Highway 85,

serving a number of Douglas County communities including the Roxborough Suburban Area, the Chatfield Valley Subarea, the Chatfield Urban Area, the Louviers Rural Community, and more. The Waterton Business Park is bisected by Waterton Road, creating an ideal frontage for a number of land uses including commercial, mixed use, sports facility, and light industrial that could serve the greater Douglas County community.

- Addressing water and sewer needs in the Highway 85 corridor is an objective that has been identified in the CMP. Expanding the Chatfield Urban Area to include the additional Waterton Business Park area and conservation easement will generate more opportunities to build and connect water and sewer services that will benefit the existing surrounding communities including Louviers and new commercial and residential development along the Waterton Road corridor in a timely manner. The revitalization efforts of the water and wastewater systems in northwest Douglas County are made possible through the revenues generated from water and sewer tap fees from new development, such as the Waterton Business Park. Land use applications such as this one generate opportunities to build and interconnect services and networks that benefit the existing adjacent communities and create opportunities to meet future needs.
- Douglas County Sheriff's Department manages the Emergency Vehicle Operations Center (EVOC). Agencies across Douglas County and the South Metro area representing Emergency Management Services, Fire and Law Enforcement utilize the training facility. EVOC classes are important to help keep emergency responders safe and reduce the risk of accidents and injuries to the responders and law enforcement officers. It is understood that EVOC does not currently have the ability to supply fire suppression flows from hydrants due to lack of nearby water infrastructure. In order to enhance the safety of operations at the EVOC, the Waterton Business Park will include an extension of water main infrastructure to provide a centralized source for fire-flows. Having access to water will also allow bathrooms and other amenities to be added to the critical training facility.
- Including the additional Waterton Business Park acreage and the conservation easement in the Chatfield Urban Area and ultimately the Sterling Ranch Planned Development, residents of the Waterton Business Park and adjacent communities will be able to take advantage of Sterling Ranch trails, recreational facilities, and future regional parks and schools. While the ultimate land uses and site plans for the business park have yet to be determined, Sterling Ranch is anticipating the addition of a Rapid Flash Beacon (a traffic control device designed to increase driver awareness of pedestrians crossing roadways) on Moore Road to facilitate access to the planned Sterling Ranch trail system.
- Perhaps one of the most compelling public benefits offered with the inclusion of the Waterton Business Park expansion into the Chatfield Urban Area is the recently created conservation easement dedicated by Sterling Ranch that will form a vital and highly desired community buffer around the Village of Louviers. The conservation easement will also buffer the Waterton Business Park from a larger and more valuable wildlife habitat corridor to the south and east of the site as well as enhance a greater wildlife overland connection area identified by the County. This buffer epitomizes the smart balance of land uses and partnerships sought after in the 2040 CMP. The real estate trade and partnership between Sterling Ranch and Douglas County allowed land more suited for creating meaningful habitat linkages to be used for that purpose while creating a buffered parcel of land more suitable for development that is capable of catering to

the economic needs of Douglas County residents, providing clean and reliable water and wastewater, commercial services, and diverse housing opportunities.



Map 1.1 Land Use  
Comprehensive Master Plan 2040

Comprehensive Master Plan Areas

- Non-Douglas County Based Municipalities
- Chatfield Urban Area
- Primary Urban Area (PUA)
- Rural Communities
- Non-Urban Area
- Separated Urban Area (SUA)

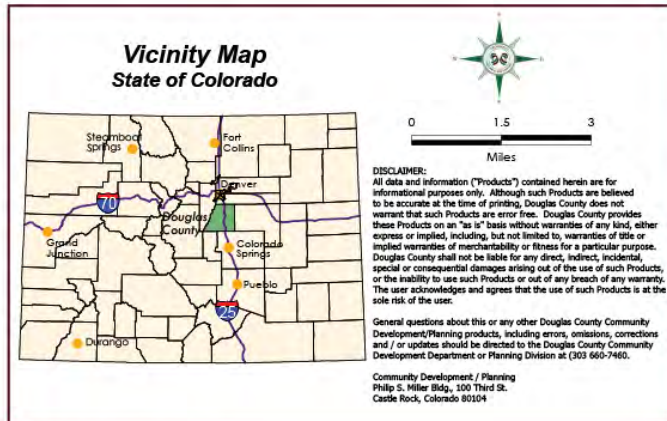
Municipal Planning Areas

- Municipal Planning Area (Incorporated)
- Municipal Planning Area (Unincorporated)
- Municipal Planning Area Inclusive of County PUA/SUA

Open Space & Parks

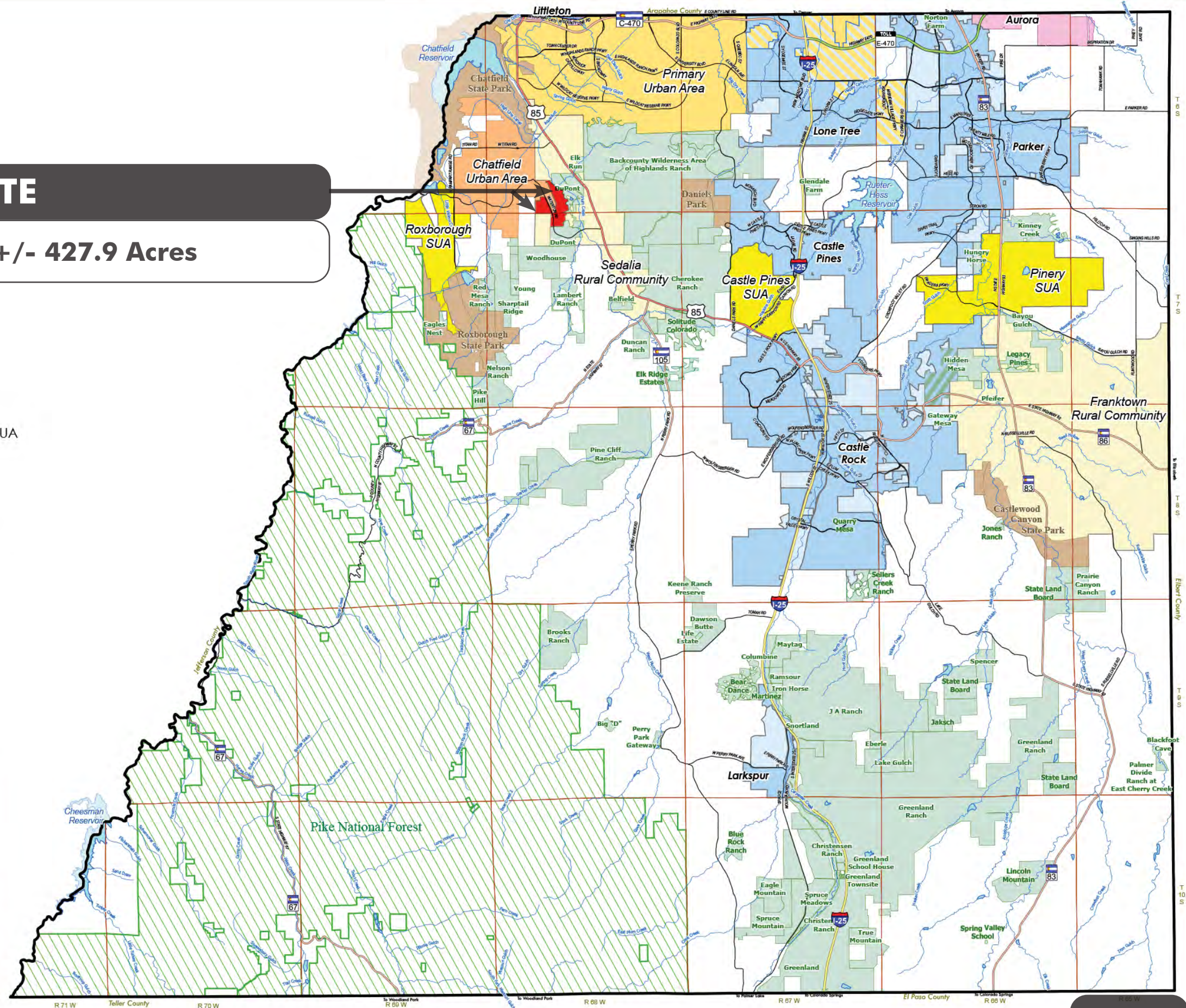
- Open Space
- County Open Space Within Incorporated Areas
- Parks
- Pike National Forest

- Townships
- Lakes
- Streams
- Interstate
- US Highway
- State Highway
- Toll Highway
- Major Road

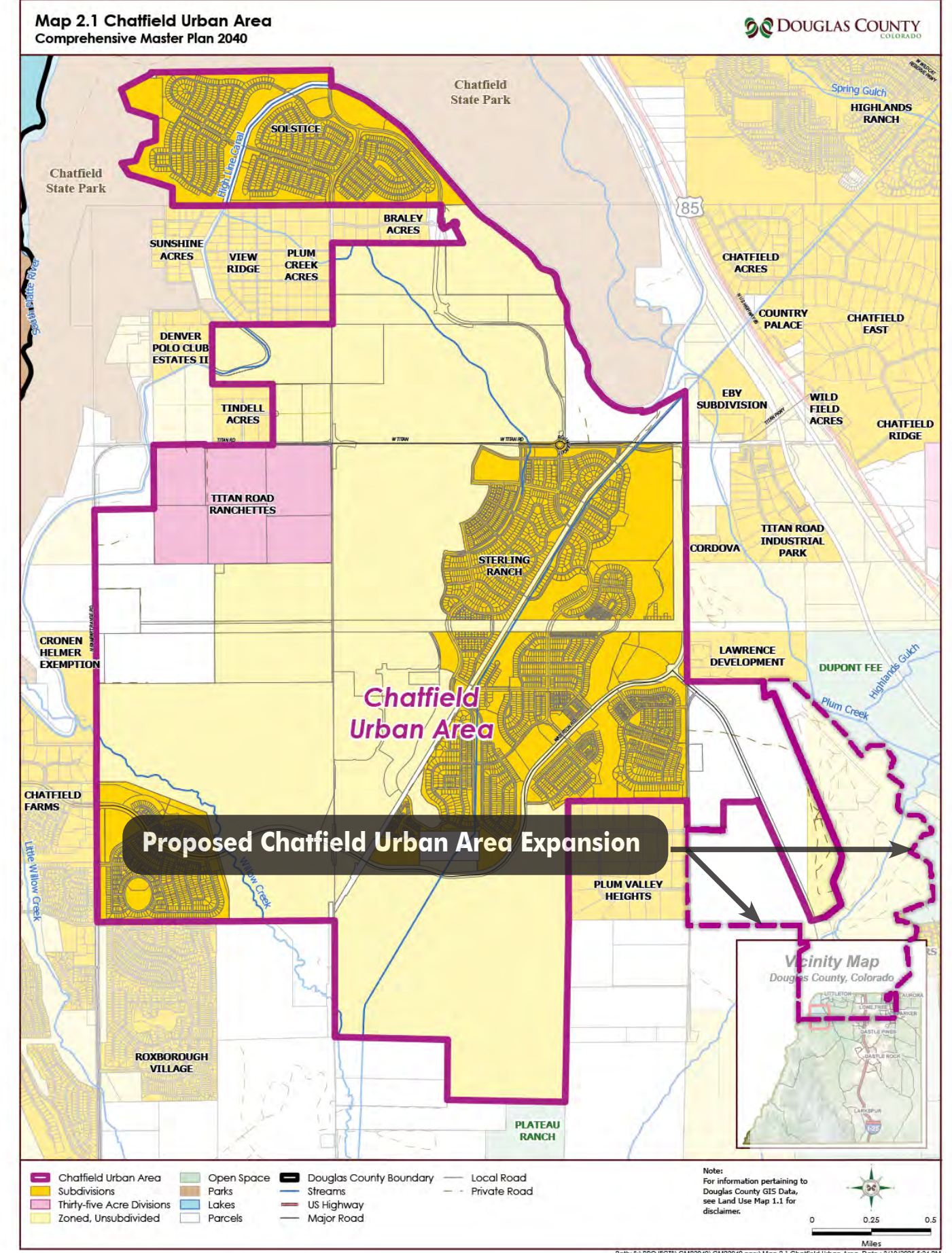
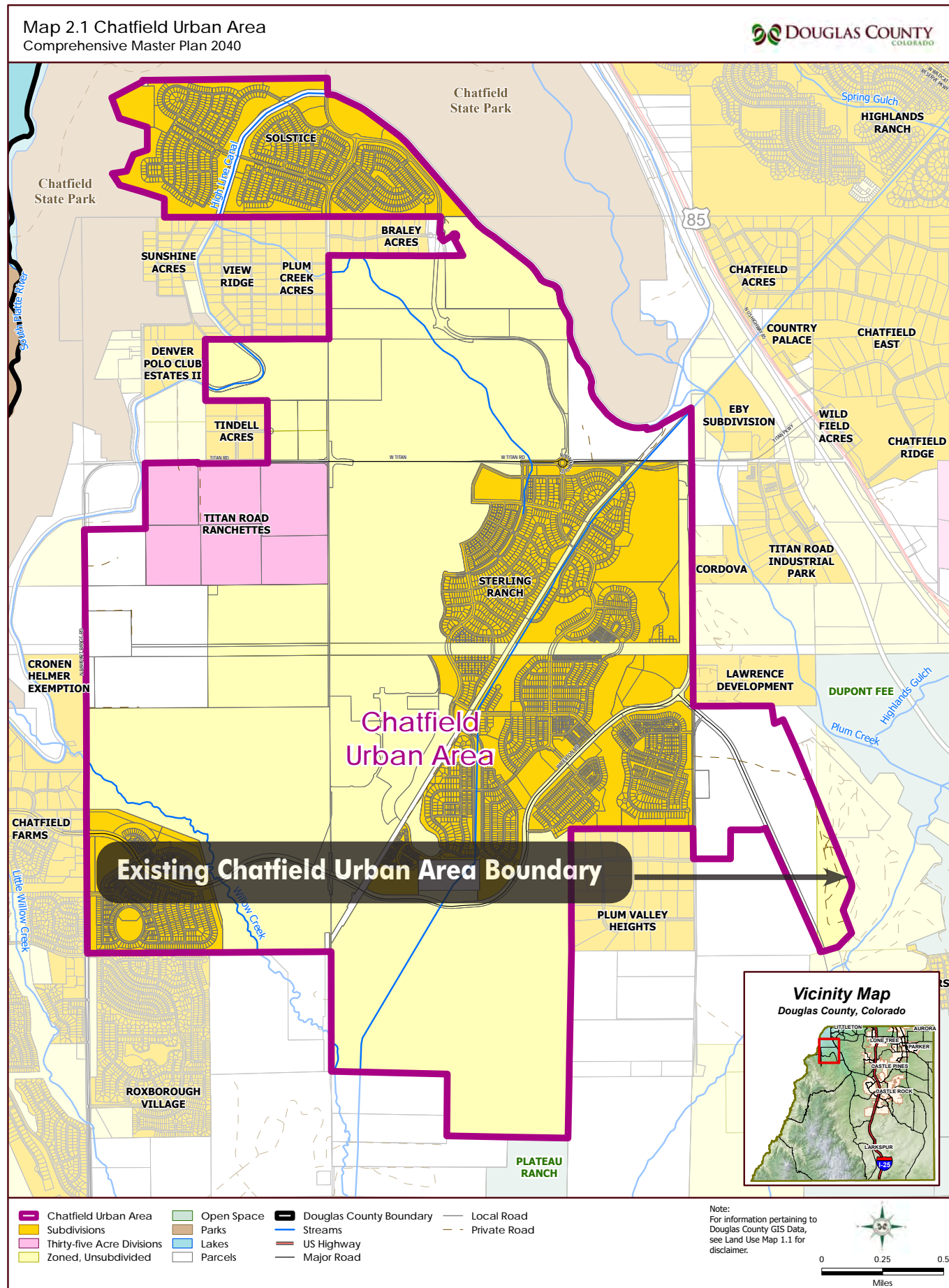


**SITE**

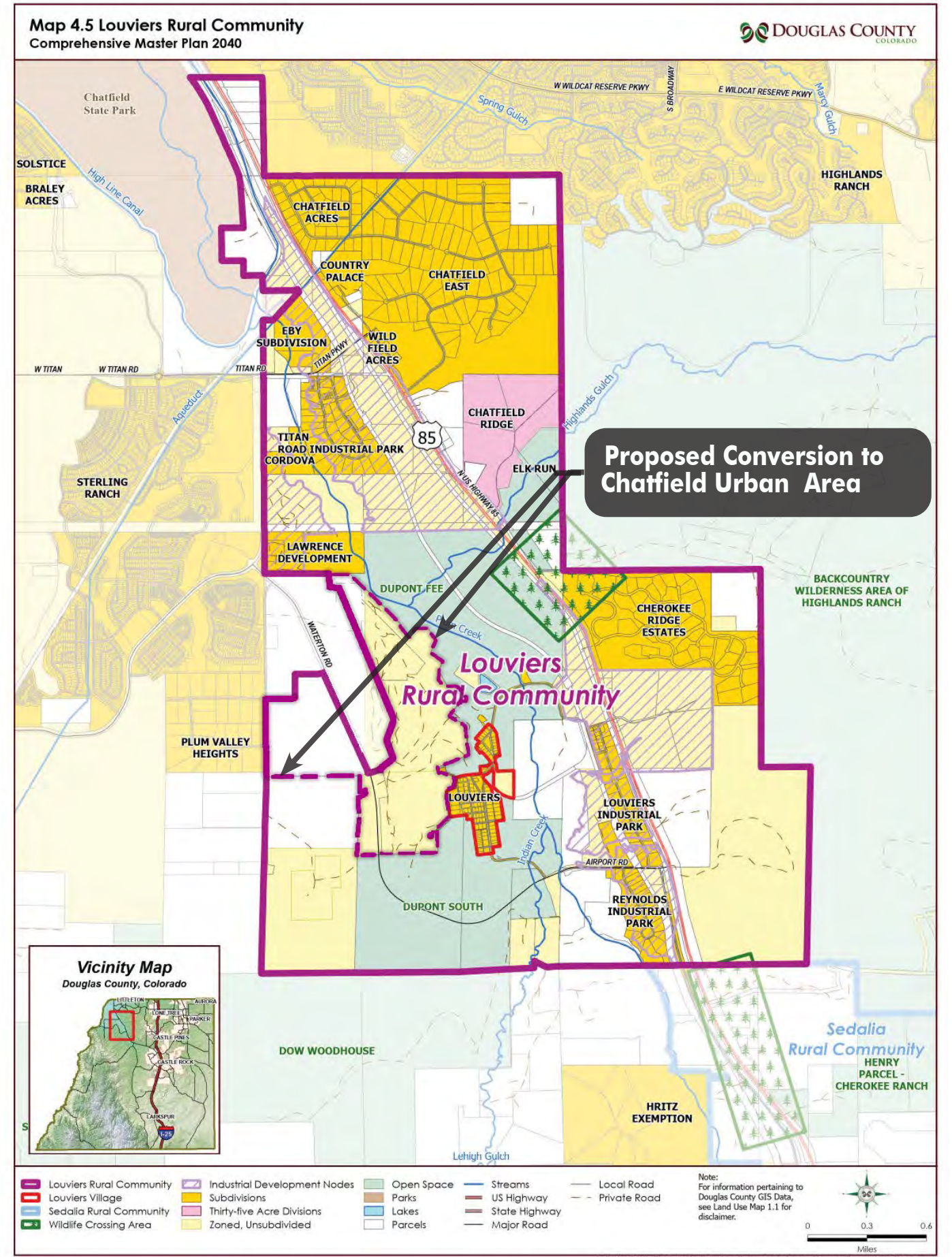
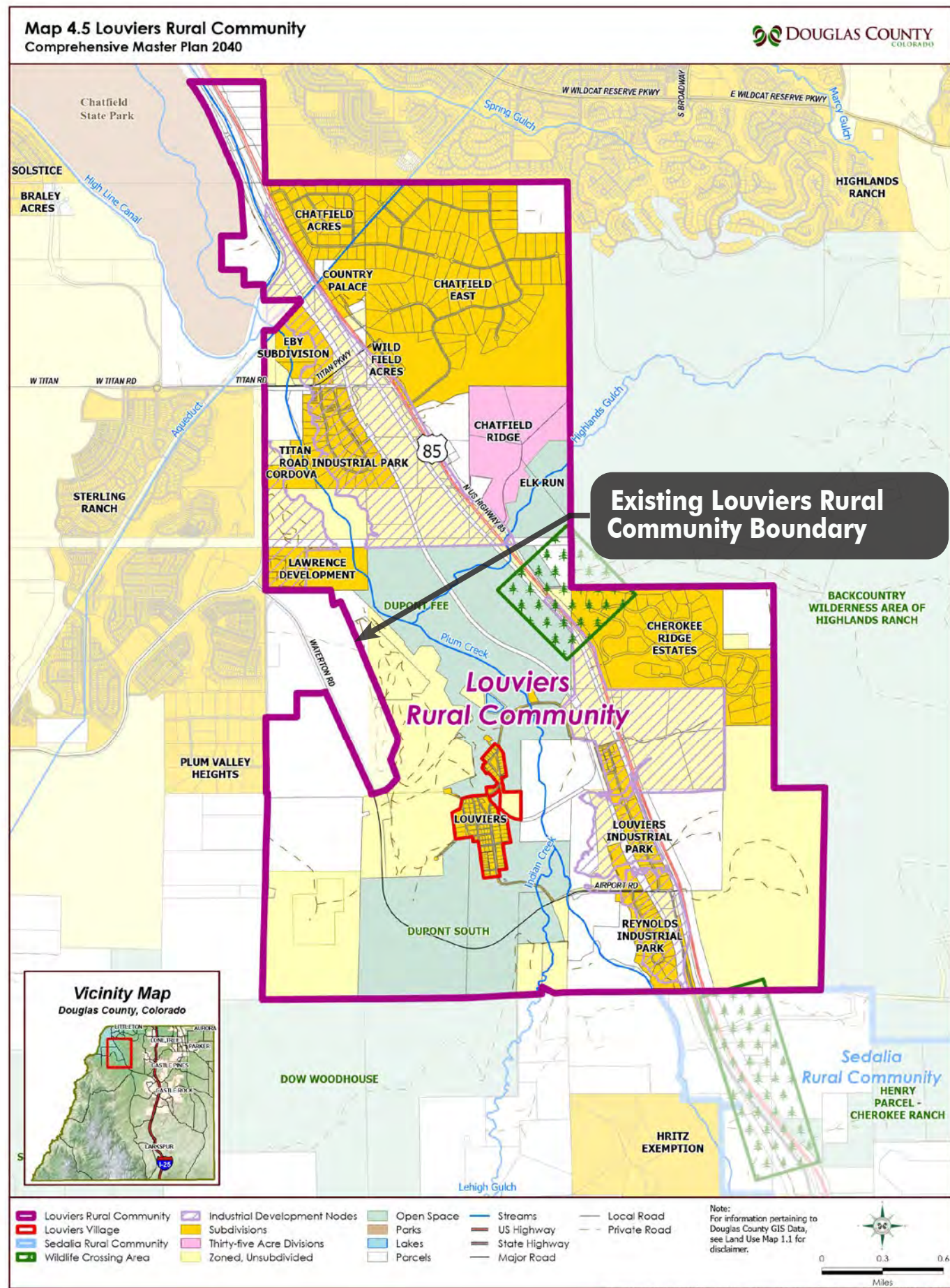
• +/- 427.9 Acres



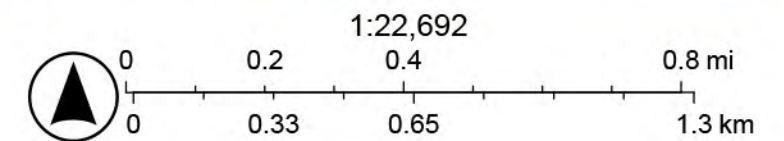
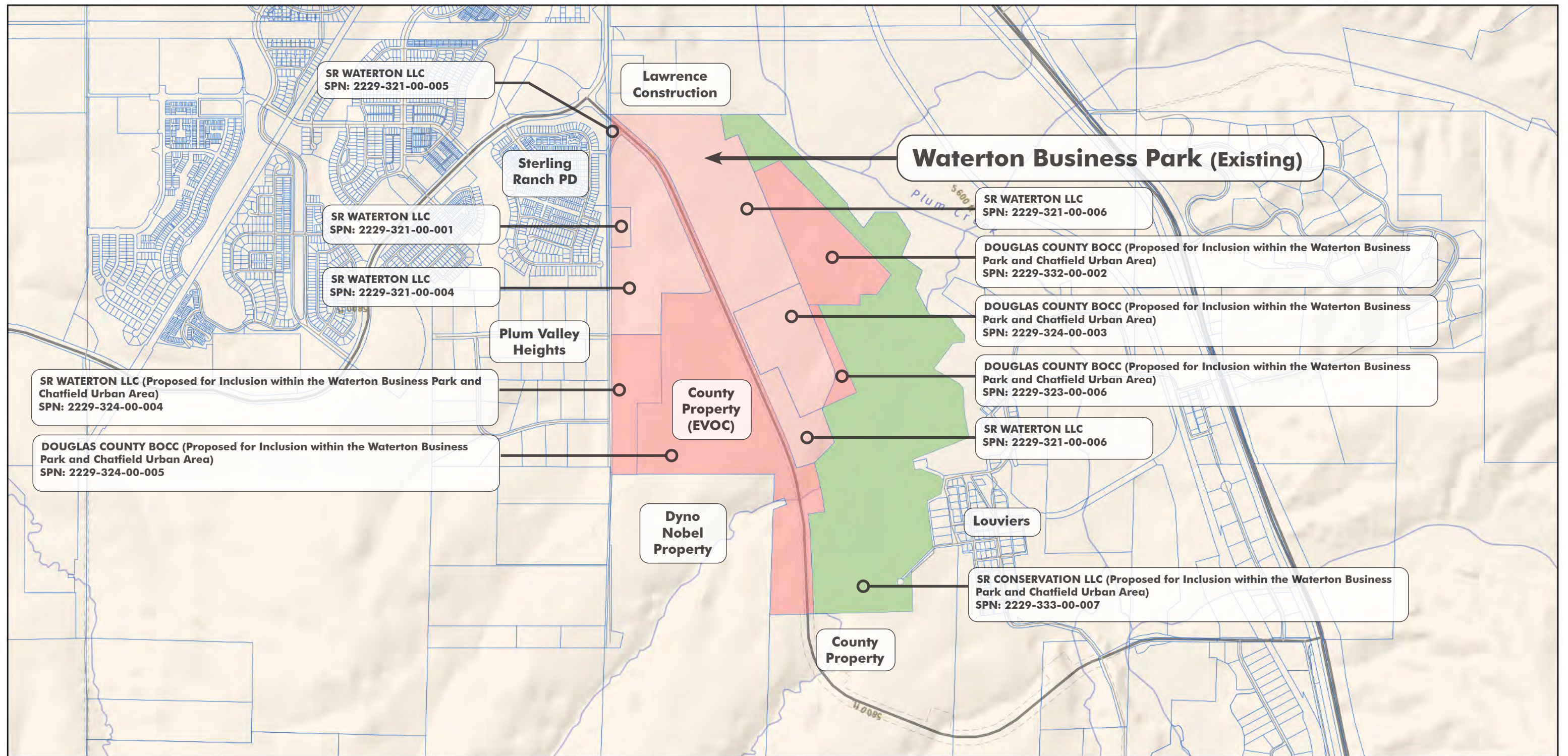






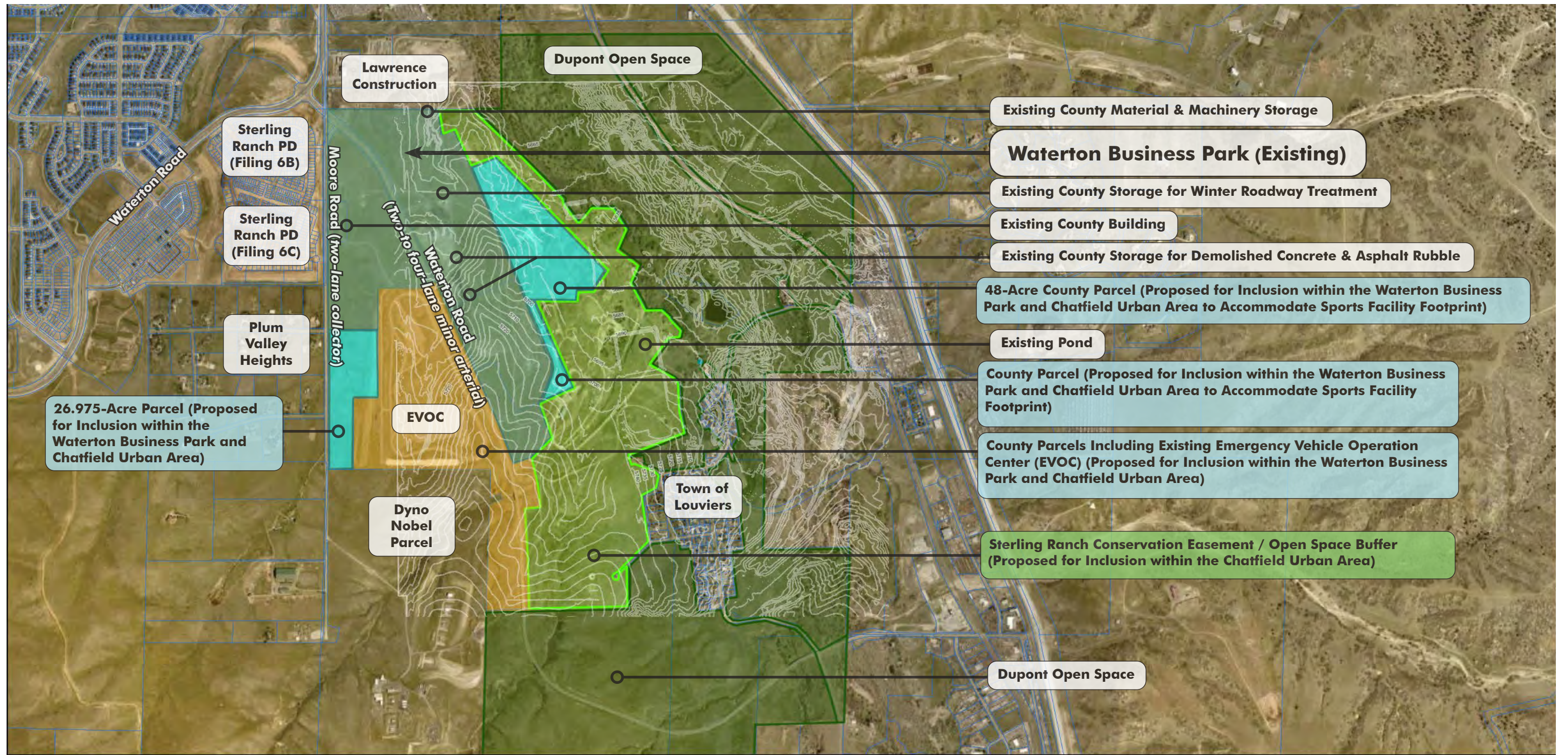




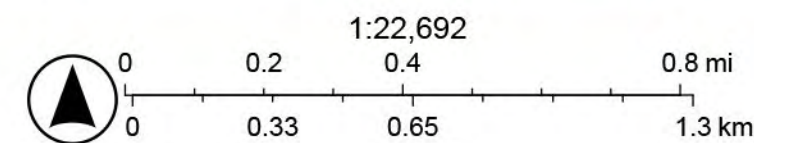


# WATERTON BUSINESS PARK PARCELS & ASSOCIATED STATE PARCEL NUMBERS (SPN)





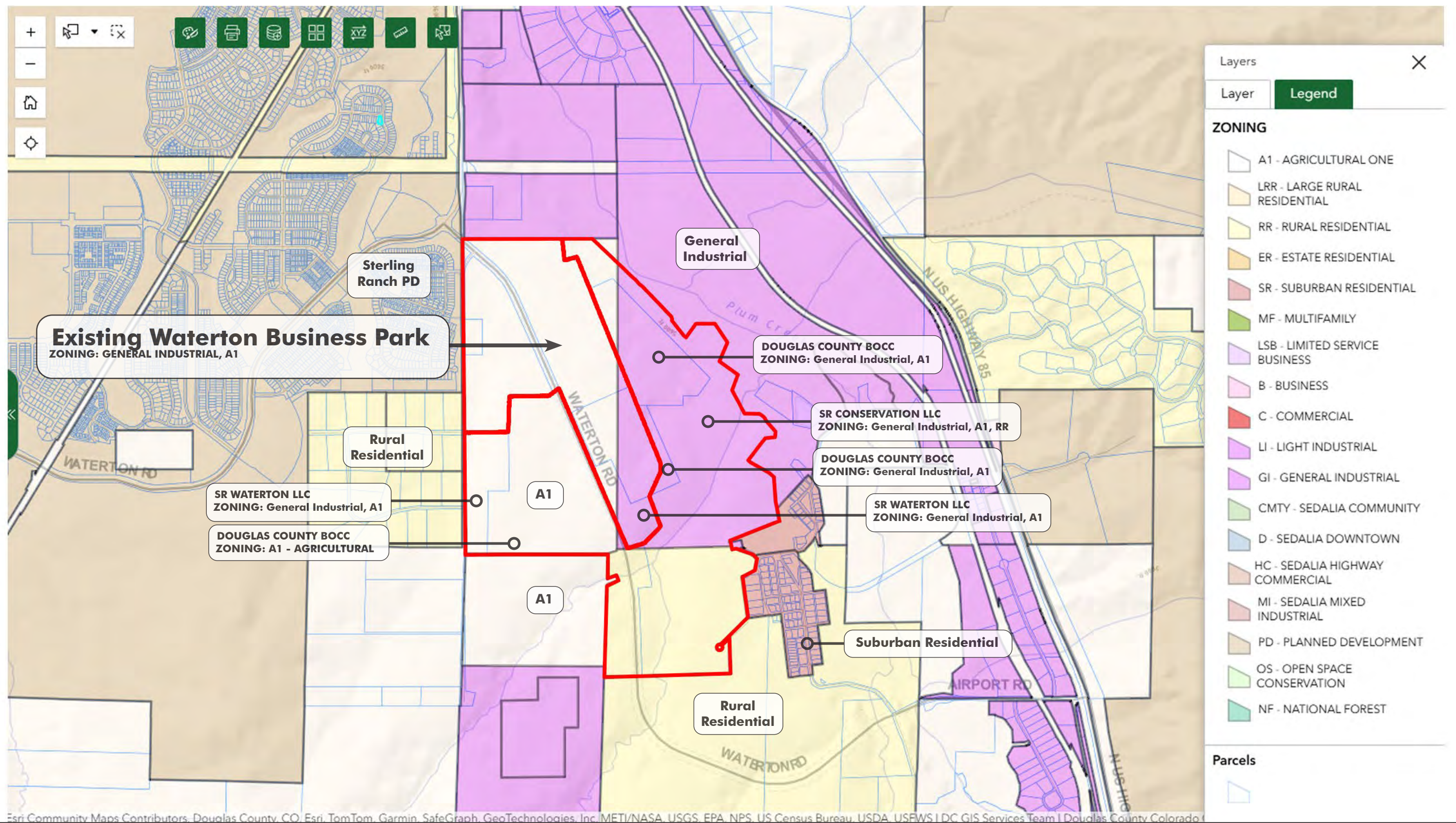
12/16/2025, 11:59:16 AM



## WATERTON BUSINESS PARK - EXISTING SITE CONTEXT

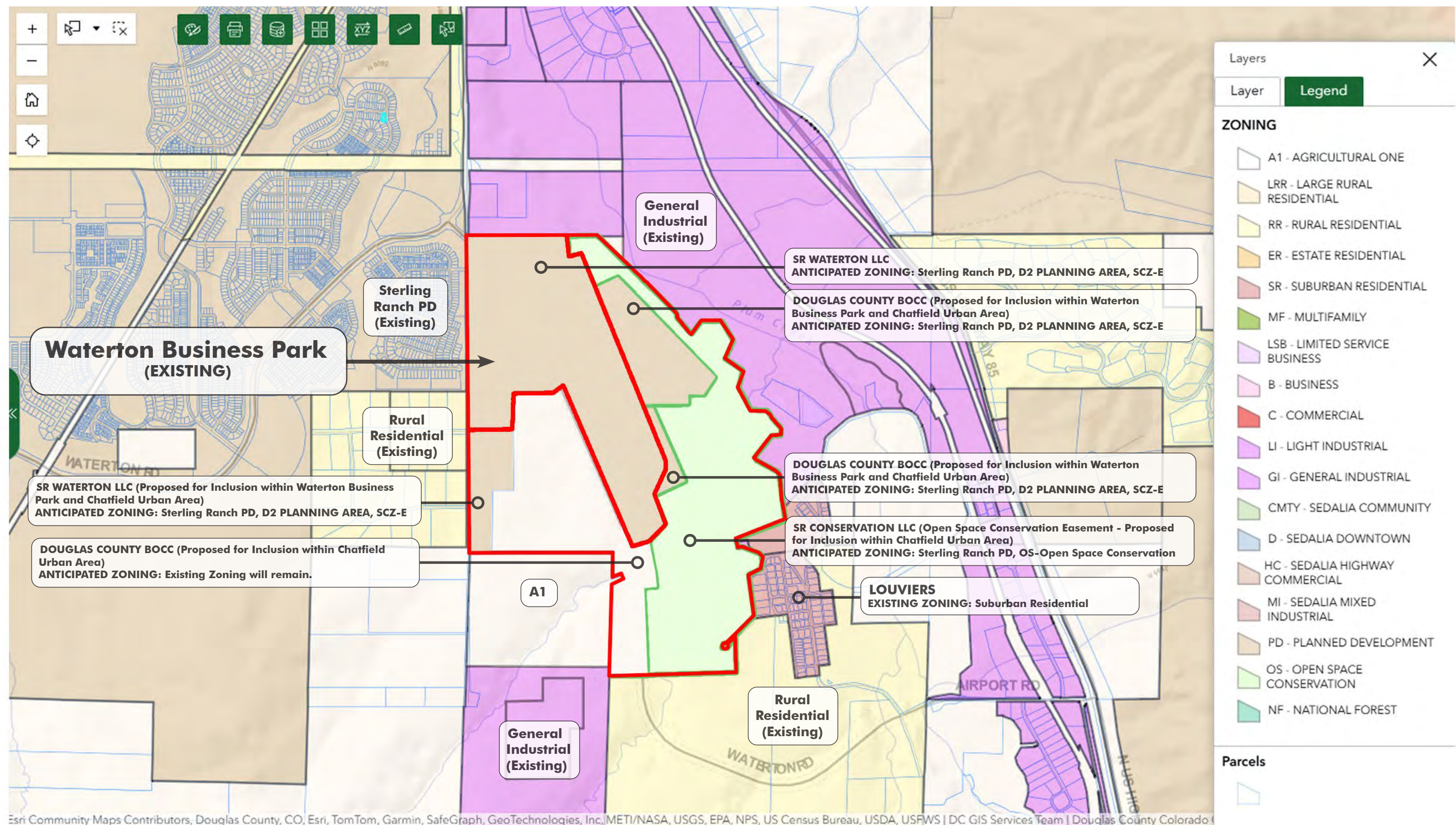
Exhibit E





**EXISTING ZONING ON THE WATERTON BUSINESS PARK SITE & ADJACENT PARCELS**





# ANTICIPATED ZONING ON THE WATERTON BUSINESS PARK SITE



# Map 4.1 Rural Communities Comprehensive Master Plan 2040

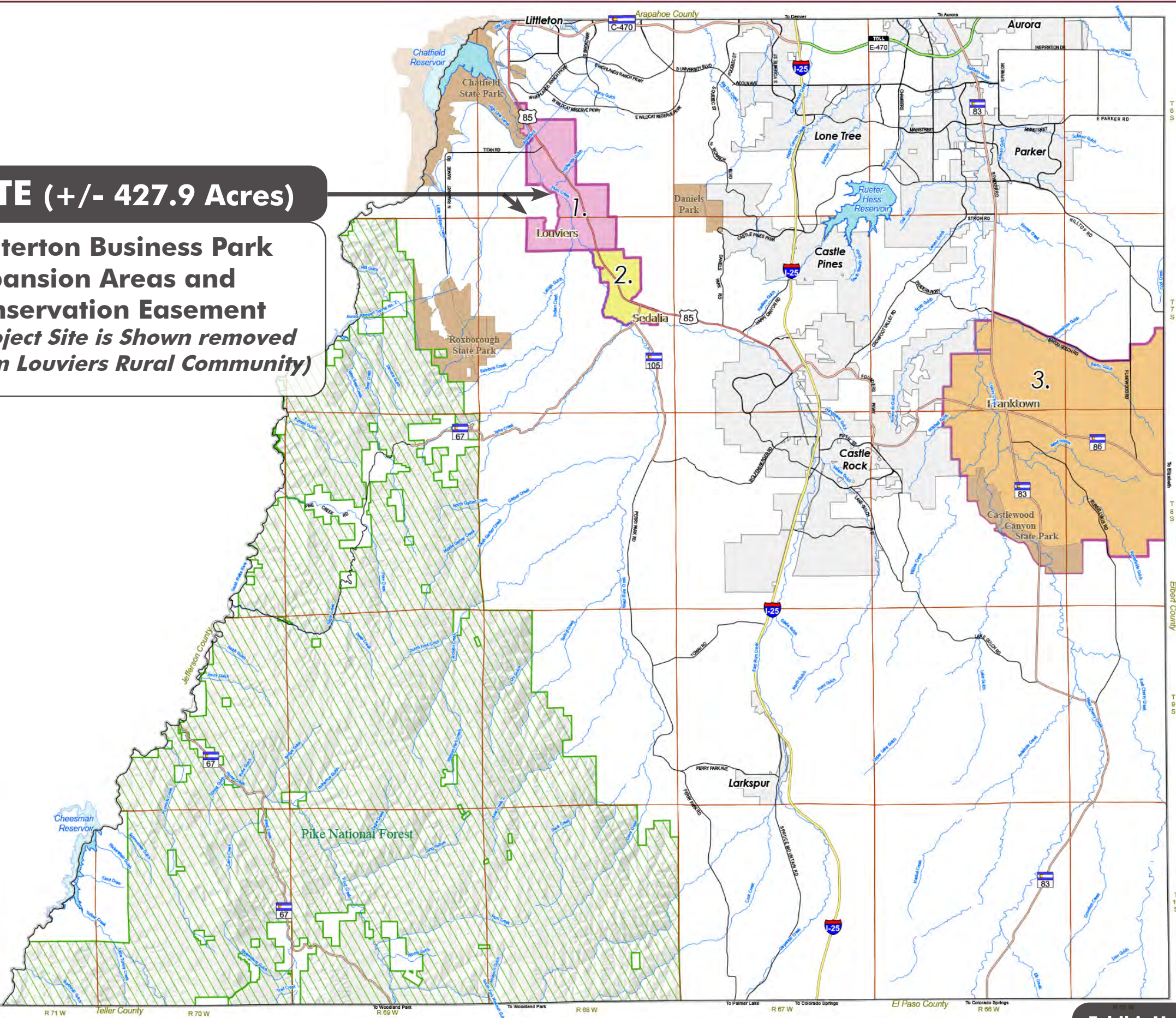
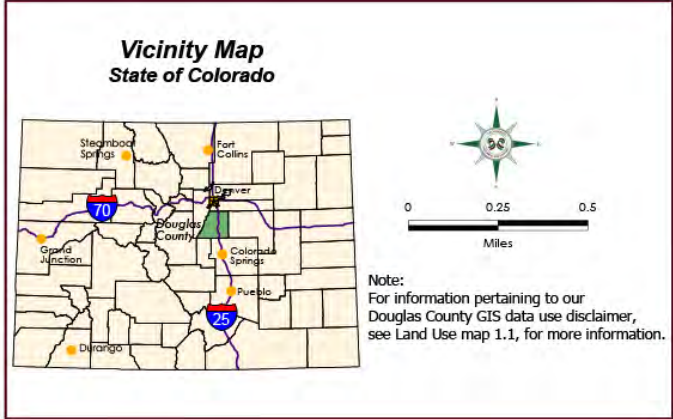
## Rural Communities

- 1. Louviers
- 2. Sedalia
- 3. Franktown

- Municipalities
- Parks
- Pike National Forest
- Townships
- Douglas County Boundary
- Lakes
- Streams
- Interstate
- US Highway
- State Highway
- Toll Highway
- Major Road

**SITE (+/- 427.9 Acres)**

**Waterton Business Park  
Expansion Areas and  
Conservation Easement**  
*(Project Site is Shown removed  
from Louviers Rural Community)*






# Map 7.1 Water Supply Zones

## Comprehensive Master Plan 2040

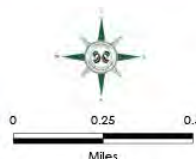
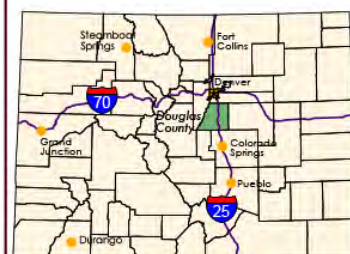
**SITE**

• **+/- 427.9 Acres**

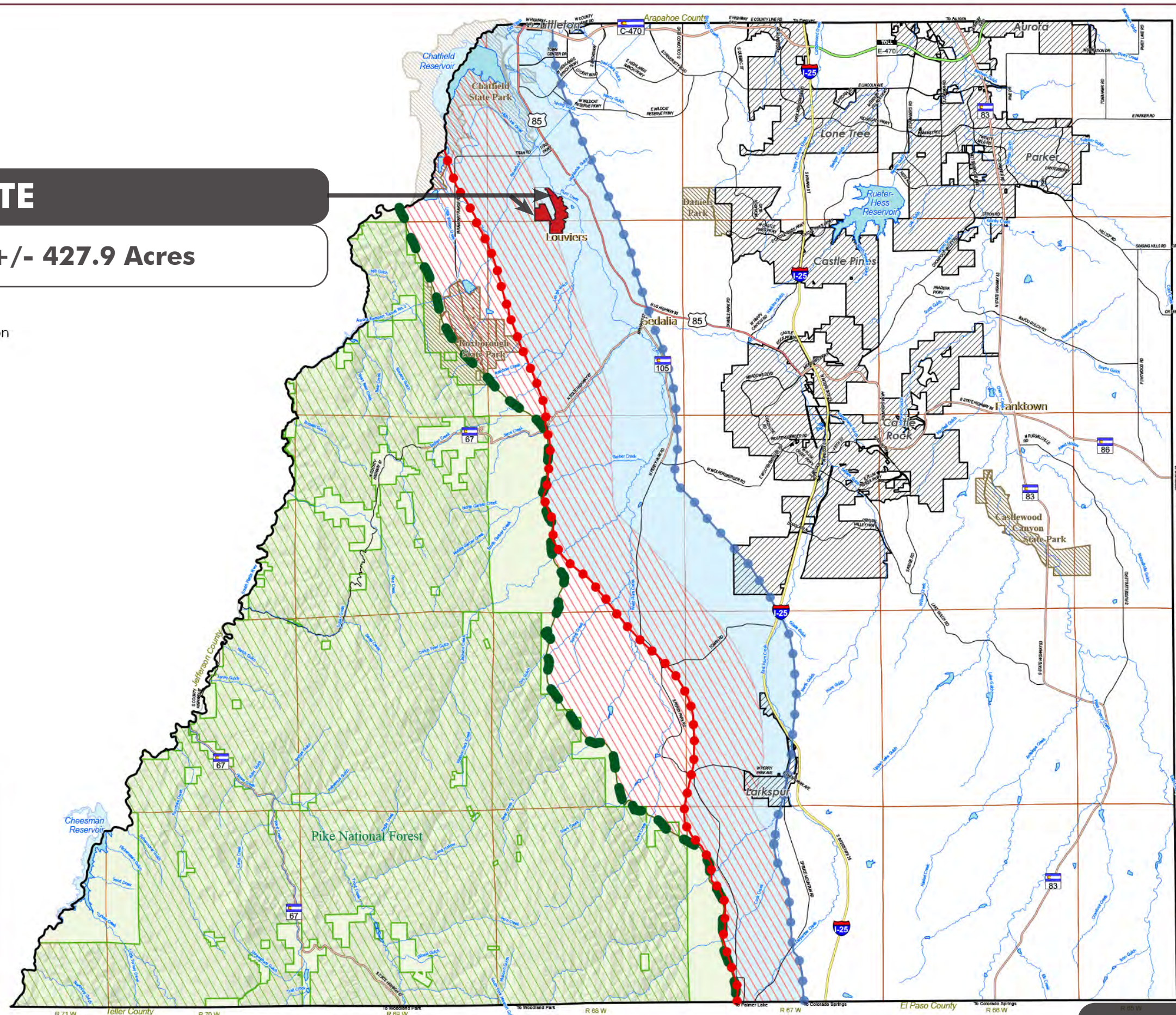
-  Margin **A** - Denver Formation
-  Margin **A** - Dakota Sandstone Formation
-  Margin **B** - Denver Formation
-  Central Basin - Denver Formation
-  Pike/Rampart - Private Holdings - Granitic Formation
-  Western Edge of Central Basin
-  Western Edge of Denver Basin
-  Eastern Edge of Granitic Formation
-  Municipalities
-  Townships
-  Douglas County Boundary
-  Parks
-  Pike National Forest
-  Lakes
-  Streams
-  Interstate
-  US Highway
-  State Highway
-  Toll Highway
-  Major Road

### Vicinity Map

#### State of Colorado



Note:  
For information pertaining to our  
Douglas County GIS data use disclaimer,  
see Land Use map 1.1, for more information.



**Exhibit I**



# Map 8.1 Class 3 Hazards and Environmental Constraints Comprehensive Master Plan 2040

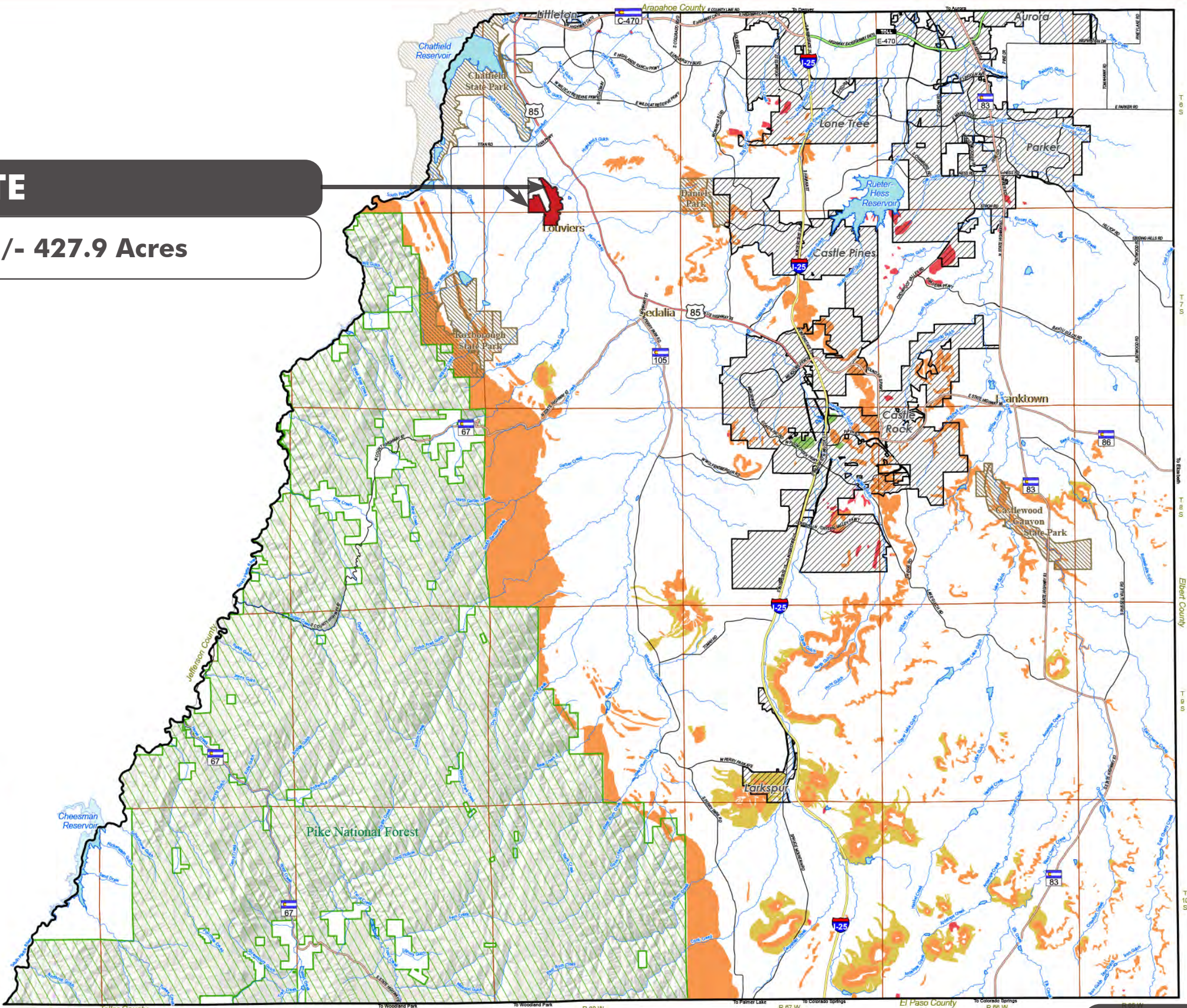
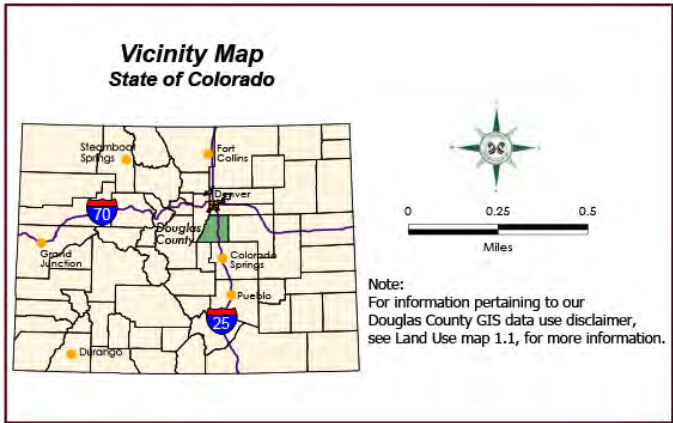
**SITE**

• +/- 427.9 Acres

## Class 3 Hazard Areas

- Debris-Flow Area
- Rockfall-Rockslide / Debris Avalanche Area
- Slope-Failure Area
- Soil Subsidence Area

- Municipalities
- Townships
- Douglas County Boundary
- Parks
- Pike National Forest
- Lakes
- Streams
- Interstate
- US Highway
- State Highway
- Toll Highway
- Major Road





# Map 8.2 Steeply Dipping Bedrock Comprehensive Master Plan 2040

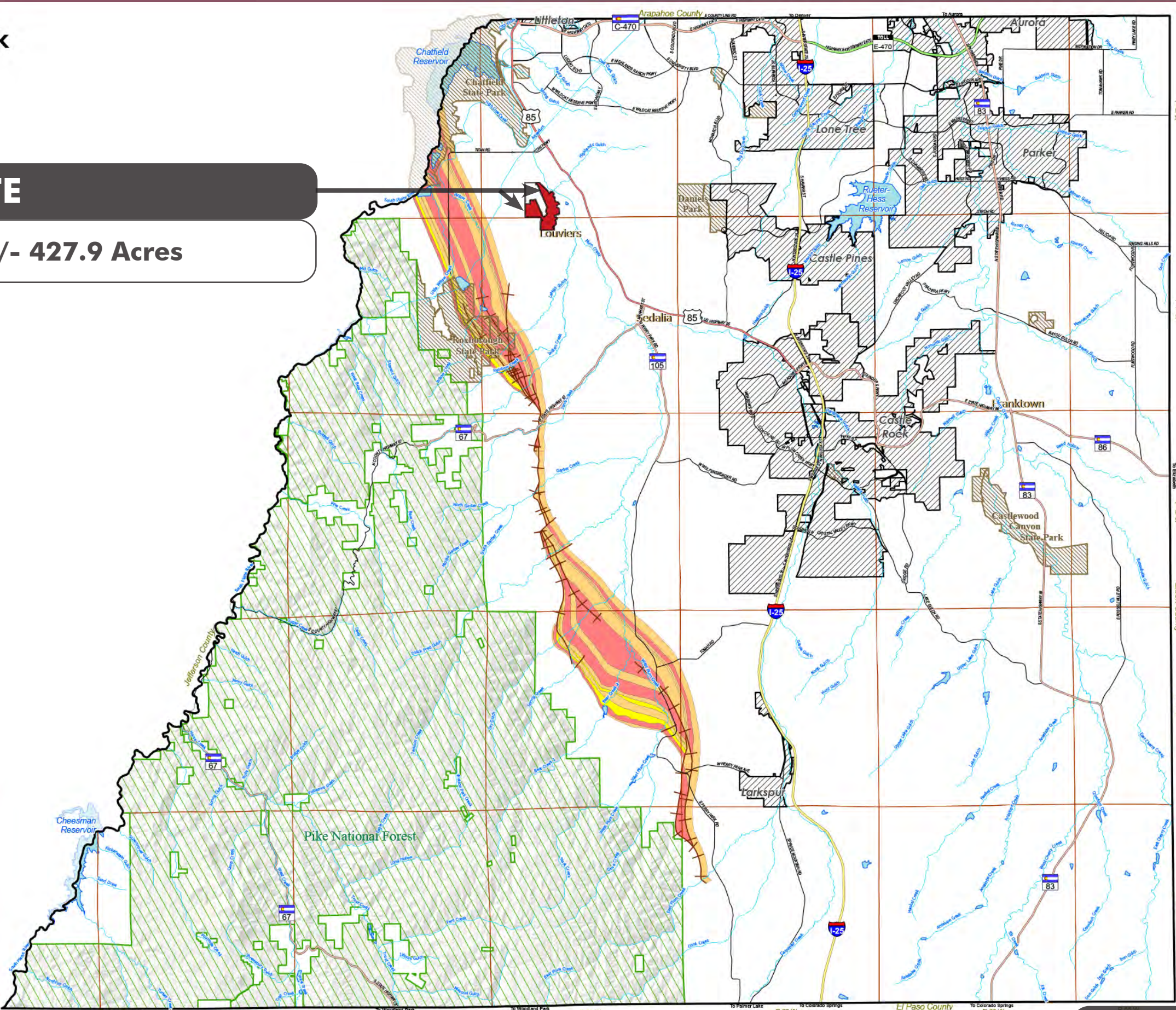
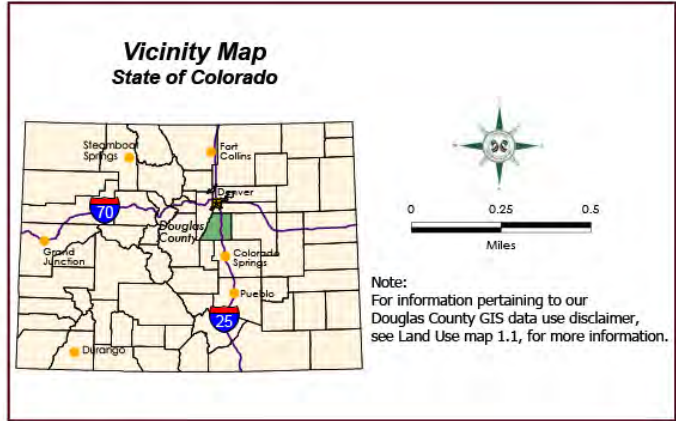
Potential for Heaving Bedrock:

- Low
- Moderate
- High
- Fault Lines

- Municipalities
- Parks
- Pike National Forest
- Townships
- Douglas County Boundary
- Lakes
- Streams
- Interstate
- US Highway
- State Highway
- Toll Highway
- Major Road

SITE

+/- 427.9 Acres



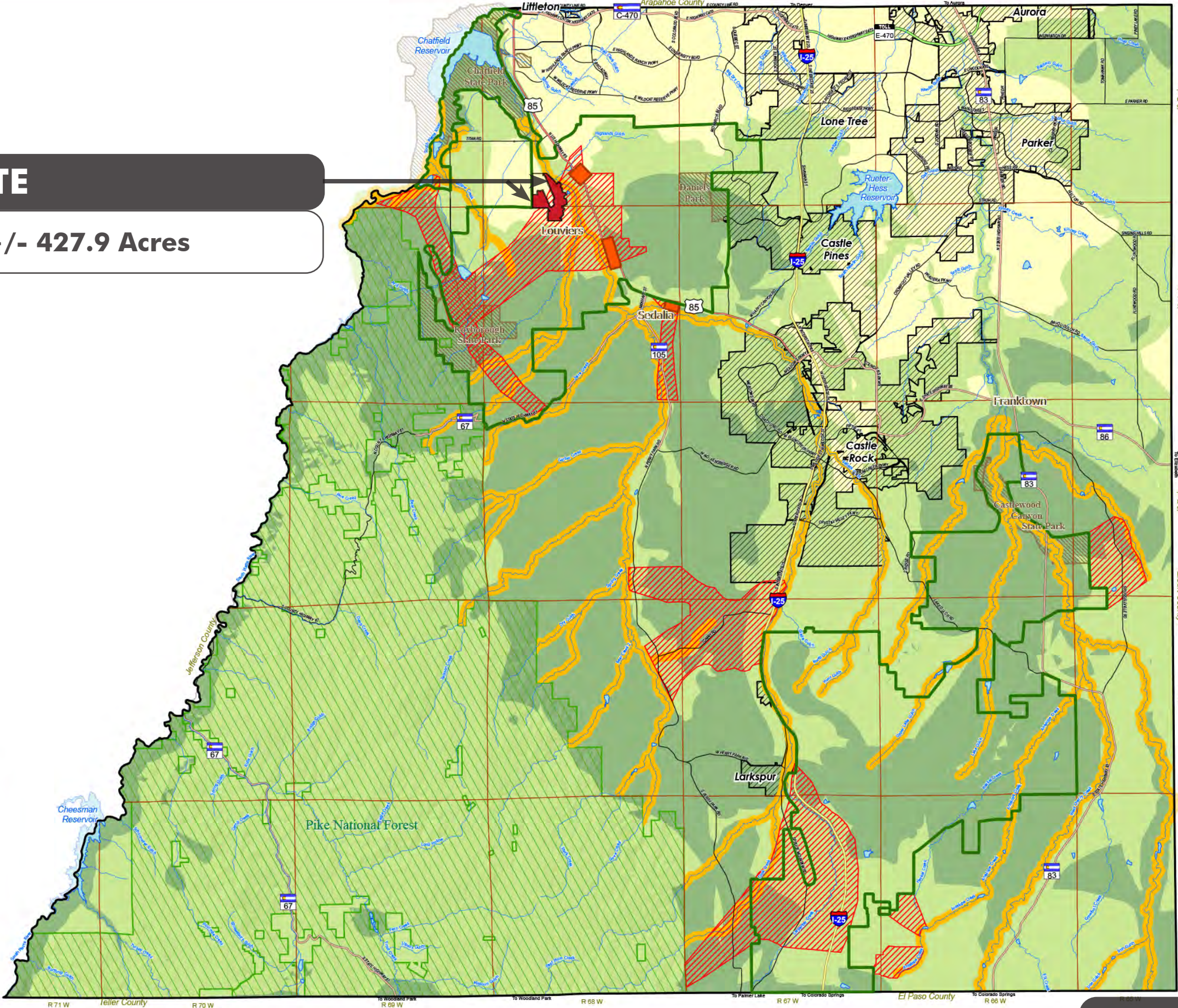
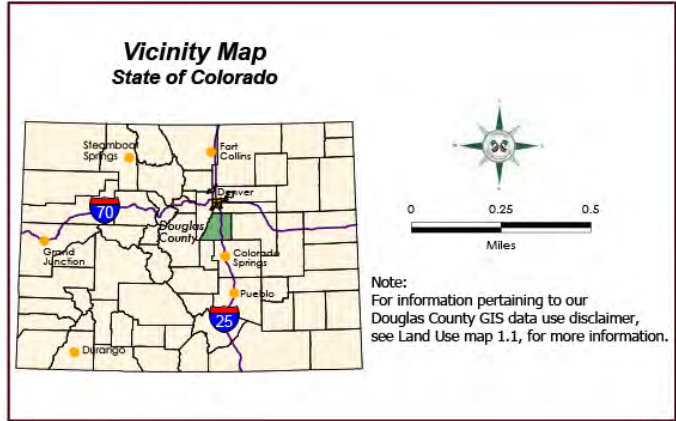


# Map 9.1 Wildlife Resources Comprehensive Master Plan 2040

- Wildlife Habitat Conservation Area
- Overland Connection
- Wildlife Movement Corridor
- Low Habitat Value
- Moderate Habitat Value
- High habitat Value
- Wildlife Crossing Area
- Parks
- Pike National Forest
- Municipalities
- Townships
- Douglas County Boundary
- Streams
- Interstate
- US Highway
- State Highway
- Toll Highway
- Major Road

SITE

• +/- 427.9 Acres





Protected Lands  
Douglas County, Colorado

**Legend**

- Douglas County Fee Title
- Douglas County Regional Parks
- Douglas County Conservation Easement
- Douglas Land Conservancy Conservation Easement
- Colorado Open Lands Conservation Easement
- Christensen Ranch
- Highlands Ranch Community Association
- Pike National Forest
- Colorado State Parks
- Colorado Division of Wildlife
- City and County of Denver
- Town/Metro District Open Space
- Incorporated Areas
- State Land Board
- Douglas County Open Space Funds Used
- Hydrography
- Major Roads

**\* Note:**  
Properties shown do not indicate public access. See Douglas County Guide to Recreation map for access opportunities.

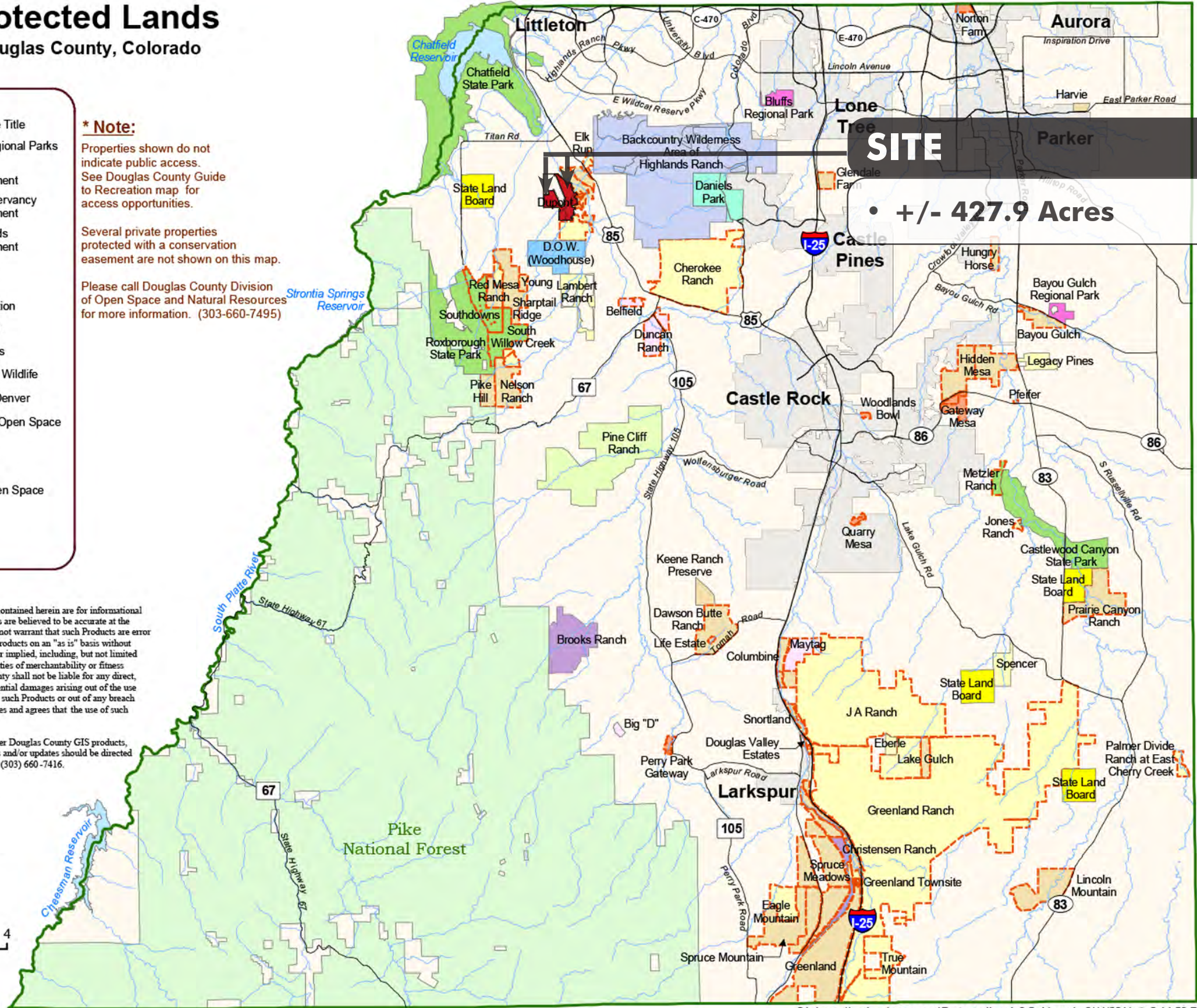
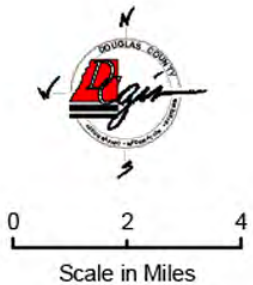
Several private properties protected with a conservation easement are not shown on this map.

Please call Douglas County Division of Open Space and Natural Resources for more information. (303-660-7495)

**DISCLAIMER:**

All data and information ("Products") contained herein are for informational purposes only. Although such Products are believed to be accurate at the time of printing, Douglas County does not warrant that such Products are error free. Douglas County provides these Products on an "as is" basis without warranties of any kind, either express or implied, including, but not limited to, warranties of title or implied warranties of merchantability or fitness for a particular purpose. Douglas County shall not be liable for any direct, indirect, incidental, special or consequential damages arising out of the use of such Products, or the inability to use such Products or out of any breach of any warranty. The user acknowledges and agrees that the use of such Products is at the sole risk of the user.

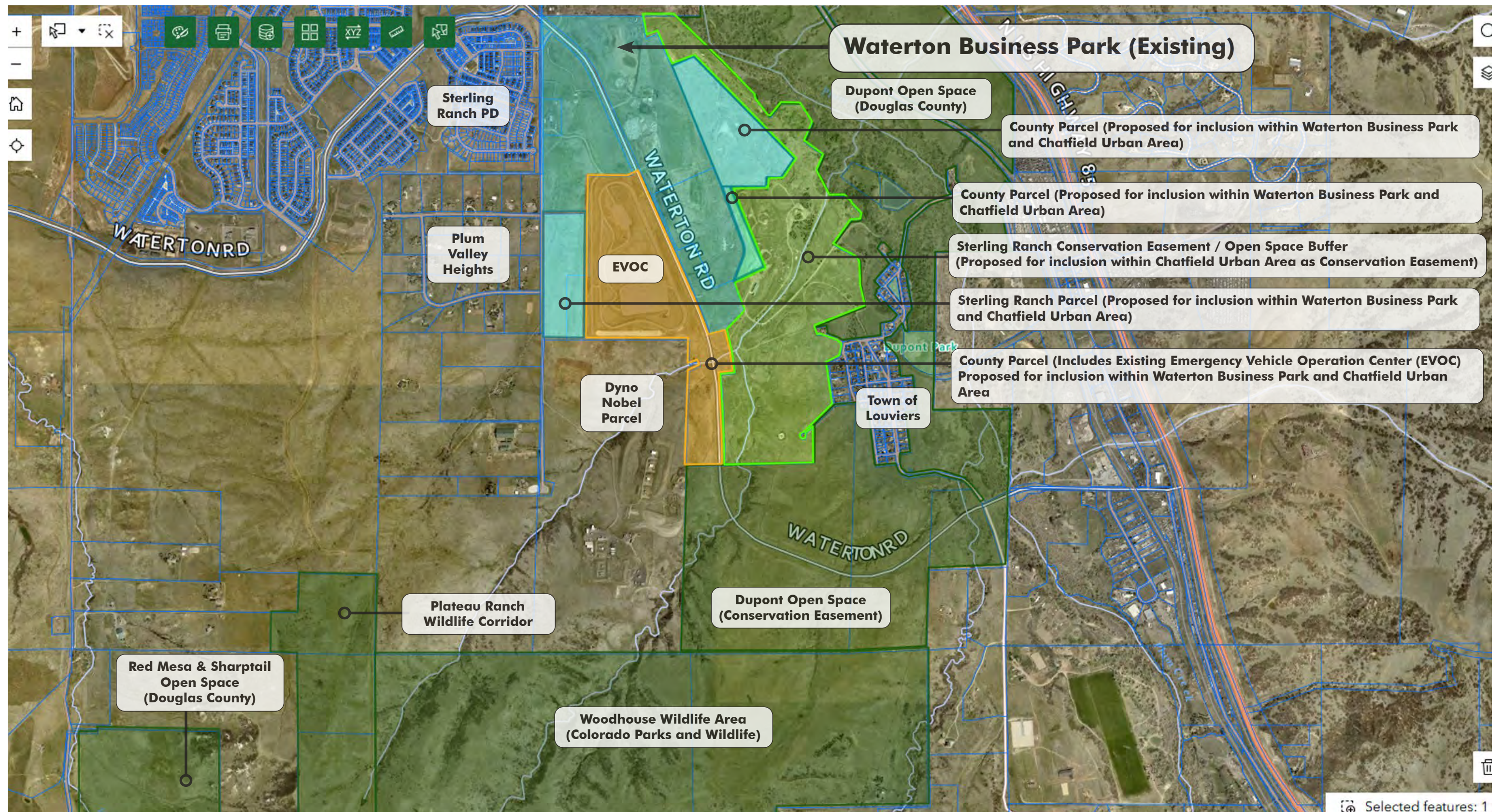
General questions about this or any other Douglas County GIS products, including errors, omissions, corrections and/or updates should be directed to the Douglas County GIS Division at (303) 660-7416.



S:\gis\map\landuse\openspce\ProtectedLands8.5x11.mxd - 2/11/2011 @ 2:44:59 PM

Exhibit M

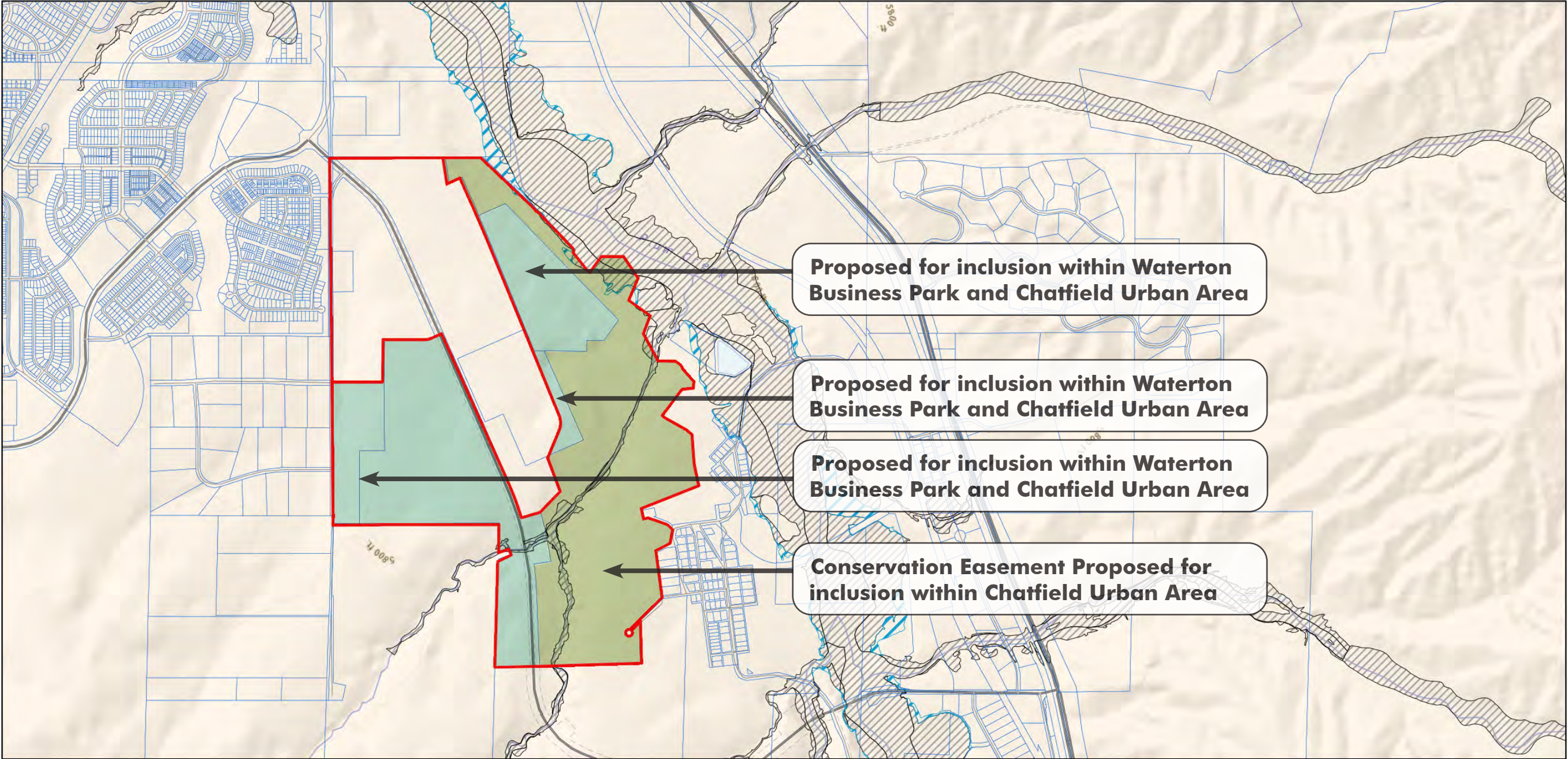




# WATERTON BUSINESS PARK - WILDLIFE HABITAT CONTEXT

Exhibit N





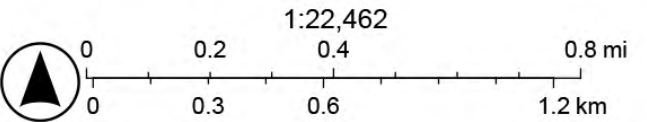
12/16/2025, 4:07:18 PM

Parcels

100 Year Flood Plain Hillshade\_10m

Floodplain

500 Year Flood Plain



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, DC GIS Services Team

# WATERTON BUSINESS PARK - MAPPED FLOODPLAIN



## WILDFIRE HAZARD OVERLAY DISTRICT Douglas County, Colorado

### SITE

- +/- 427.9 Acres

#### Legend

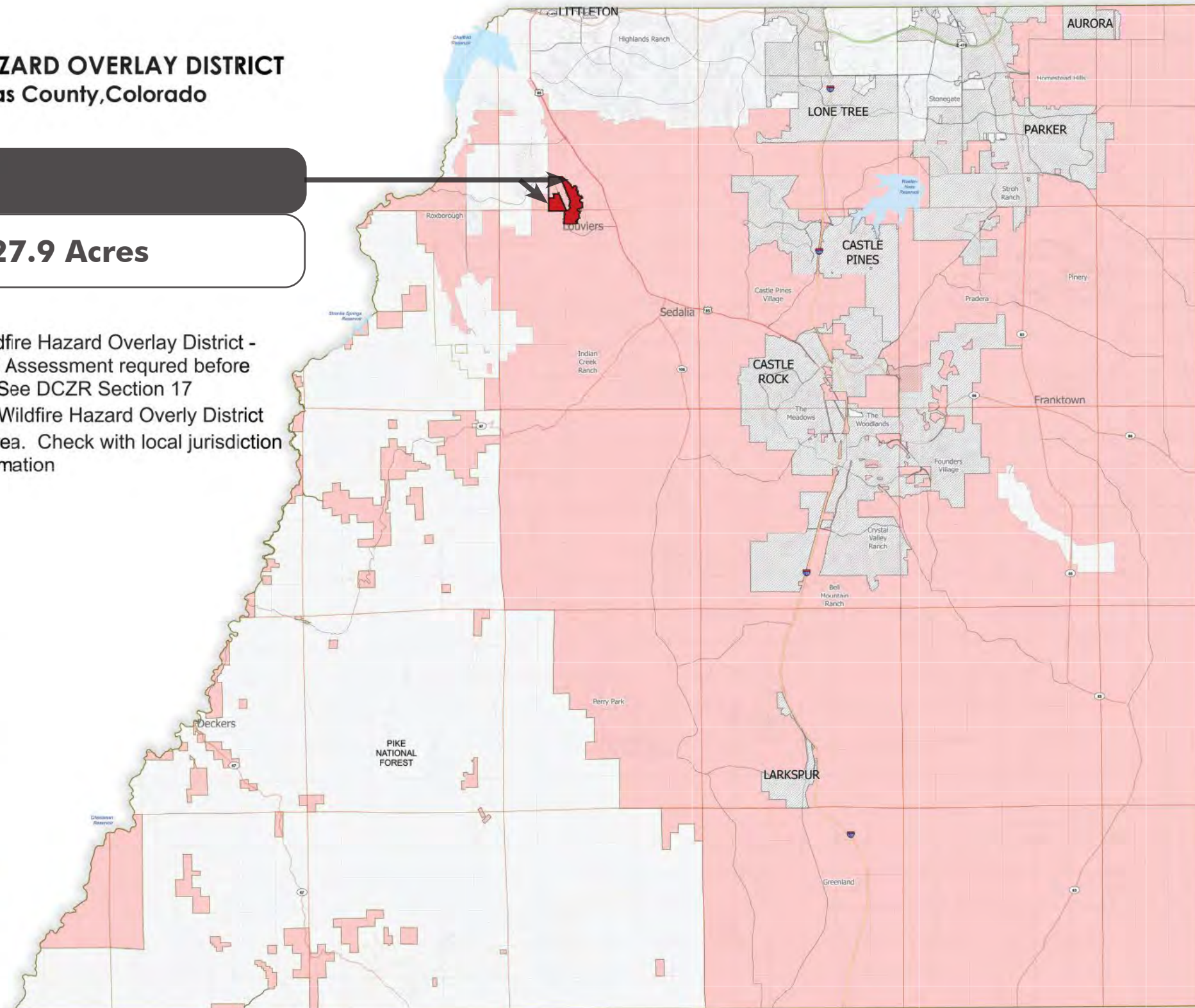
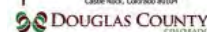
- Included in Wildfire Hazard Overlay District -
- Wildfire Hazard Assessment required before development - See DCZR Section 17
- Excluded from Wildfire Hazard Overlay District
- Incorporated area. Check with local jurisdiction for zoning information



DISCLAIMER:  
All data and information ("Products") contained herein are for informational purposes only. Although such Products are believed to be accurate at the time of printing, Douglas County does not warrant that such Products are error free. Douglas County provides these Products on an "as is" basis without warranties of any kind, either expressed or implied, including, but not limited to, warranties of title or implied warranties of merchantability or fitness for a particular purpose. Douglas County shall not be liable for any direct, indirect, incidental, special or consequential damages arising out of the use of such Products, or the inability to use such Products or out of any breach of any warranty. The user acknowledges and agrees that the use of such Products is at the sole risk of the user.

General questions about this or any other Douglas County GIS products, including errors, omissions, corrections and/or updates should be directed to the Douglas County GIS Services at (303) 689-7916.

Douglas County GIS Services  
Philip S. Miller, 100 Third St.  
Castle Rock, Colorado 80104

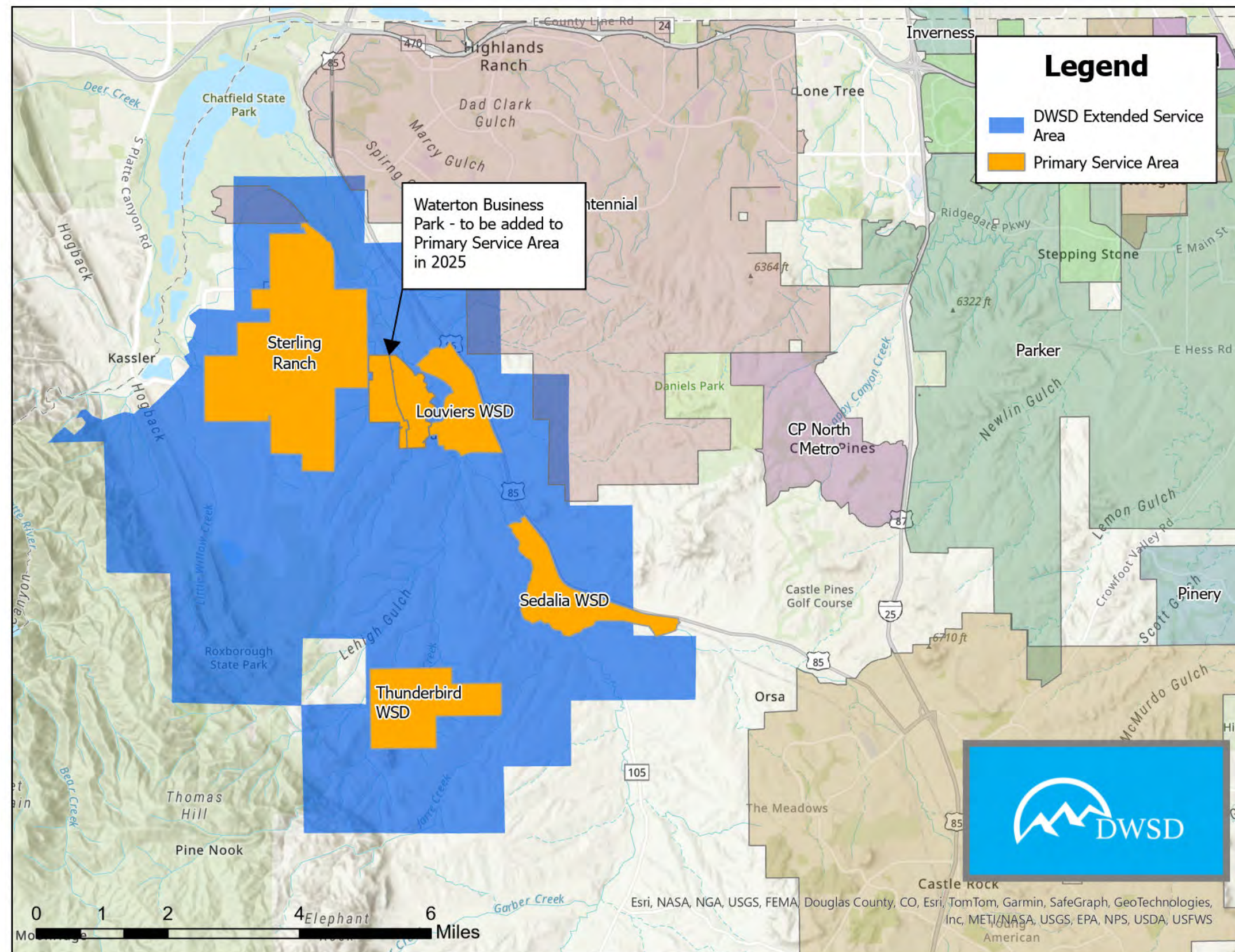


Document Path: S:\userwork\1\zones\WildfireOverlay\WildfireOverlay.aprx Print Date: 10/11/2023 9:53 AM

# WATERTON BUSINESS PARK - WILDFIRE HAZARD OVERLAY

Exhibit P



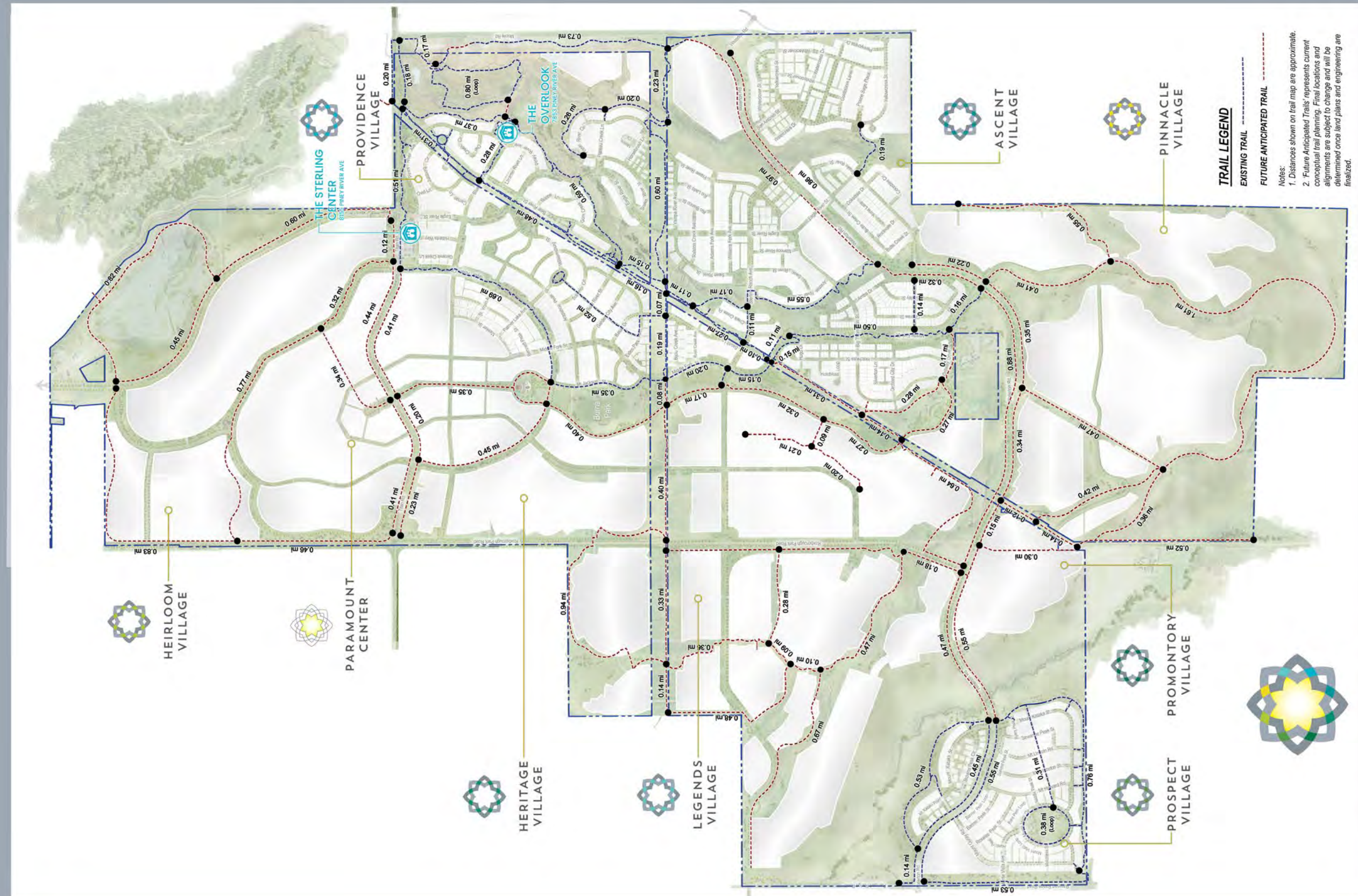


# WATERTON BUSINESS PARK - DOMINION WATER AND SANITATION DISTRICT SERVICE AREAS

Exhibit Q



# STERLING RANCH - EXISTING & PLANNED TRAILS MAP





**EXHIBIT A**  
**LEGAL DESCRIPTION**

THAT CERTAIN PORTION OF THE EAST HALF OF SECTION 32, THE WEST HALF OF SECTION 33, THE SOUTHEAST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 68 WEST, SIXTH PRINCIPAL MERIDIAN, THE NORTHWEST QUARTER OF SECTION 4 AND THE NORTHEAST QUARTER OF SECTION 5, TOWNSHIP 7 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, IN THE COUNTY OF DOUGLAS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

**COMMENCING** AT THE NORTH QUARTER CORNER OF SAID SECTION 32;

THENCE ALONG THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 32, NORTH 89°51'17" EAST, A DISTANCE OF 30.00 FEET TO THE EAST RIGHT-OF-WAY OF MOORE ROAD, AND THE **POINT OF BEGINNING**;

THENCE CONTINUING ALONG SAID NORTH LINE, NORTH 89°51'17" EAST, A DISTANCE OF 2,225.82 FEET;

THENCE DEPARTING SAID NORTH LINE, SOUTH 46°26'51" EAST, A DISTANCE OF 1,030.86 FEET;

THENCE SOUTH 41°48'51" EAST, A DISTANCE OF 99.68 FEET;

THENCE SOUTH 58°18'05" EAST, A DISTANCE OF 40.88 FEET;

THENCE SOUTH 43°59'11" EAST, A DISTANCE OF 730.63 FEET;

THENCE SOUTH 19°17'03" EAST, A DISTANCE OF 43.91 FEET;

THENCE SOUTH 10°24'22" WEST, A DISTANCE OF 30.03 FEET;

THENCE SOUTH 38°27'02" EAST, A DISTANCE OF 333.07 FEET;

THENCE SOUTH 54°13'44" EAST, A DISTANCE OF 44.31 FEET;

THENCE NORTH 35°46'15" EAST, A DISTANCE OF 287.80 FEET;

THENCE NORTH 89°59'27" EAST, A DISTANCE OF 326.80 FEET;

THENCE SOUTH 33°53'23" EAST, A DISTANCE OF 385.17 FEET;

THENCE SOUTH 22°57'33" WEST, A DISTANCE OF 353.81 FEET;

THENCE SOUTH 54°13'44" EAST, A DISTANCE OF 389.74 FEET;

THENCE SOUTH 20°30'58" WEST, A DISTANCE OF 283.69 FEET;

THENCE SOUTH 28°09'17" EAST, A DISTANCE OF 453.74 FEET;

THENCE SOUTH 88°33'42" EAST, A DISTANCE OF 257.56 FEET;

THENCE SOUTH 56°28'21" EAST, A DISTANCE OF 63.92 FEET;

THENCE SOUTH 48°30'01" EAST, A DISTANCE OF 30.19 FEET;

THENCE SOUTH 37°06'55" EAST, A DISTANCE OF 30.14 FEET;

11/3/2025

Q:\116017-02 - Sterling Ranch LLC Misc\Legals\Zebulon Sports Park\Zebulon Overall.docx

1 OF 5 PAGES

THENCE SOUTH 23°22'13" EAST, A DISTANCE OF 37.34 FEET;  
 THENCE SOUTH 41°10'12" EAST, A DISTANCE OF 249.14 FEET;  
 THENCE SOUTH 04°56'19" WEST, A DISTANCE OF 95.55 FEET;  
 THENCE SOUTH 83°45'39" WEST, A DISTANCE OF 167.61 FEET;  
 THENCE SOUTH 37°28'17" WEST, A DISTANCE OF 479.01 FEET;  
 THENCE SOUTH 47°45'30" EAST, A DISTANCE OF 52.60 FEET;  
 THENCE SOUTH 60°42'09" EAST, A DISTANCE OF 368.23 FEET;  
 THENCE SOUTH 48°15'44" EAST, A DISTANCE OF 105.26 FEET;  
 THENCE SOUTH 04°03'22" EAST, A DISTANCE OF 423.54 FEET;  
 THENCE SOUTH 11°41'19" EAST, A DISTANCE OF 337.04 FEET;  
 THENCE SOUTH 68°21'14" WEST, A DISTANCE OF 910.58 FEET;  
 THENCE SOUTH 12°22'53" EAST, A DISTANCE OF 31.81 FEET;  
 THENCE SOUTH 12°14'08" EAST, A DISTANCE OF 125.00 FEET;  
 THENCE NORTH 77°45'52" EAST, A DISTANCE OF 70.13 FEET;  
 THENCE SOUTH 70°45'08" EAST, A DISTANCE OF 282.72 FEET TO THE BEGINNING OF A  
 TANGENT CURVE CONCAVE SOUTHWESTERLY HAVING A RADIUS OF 98.70 FEET;  
 THENCE SOUTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 27°16'00", AN  
 ARC LENGTH OF 46.97 FEET;  
 THENCE TANGENT TO SAID CURVE, SOUTH 43°29'08" EAST, A DISTANCE OF 77.00 FEET;  
 THENCE SOUTH 10°06'52" WEST, A DISTANCE OF 202.03 FEET;  
 THENCE SOUTH 62°09'40" WEST, A DISTANCE OF 238.07 FEET;  
 THENCE SOUTH 07°36'07" EAST, A DISTANCE OF 696.71 FEET;  
 THENCE SOUTH 45°24'53" WEST, A DISTANCE OF 669.96 FEET TO THE BEGINNING OF A NON-  
 TANGENT CURVE CONCAVE NORTHEASTERLY HAVING A RADIUS OF 50.00 FEET, THE RADIUS  
 POINT OF SAID CURVE BEARS SOUTH 12°02'19" WEST;  
 THENCE SOUTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 323°45'40",  
 AN ARC LENGTH OF 282.53 FEET;  
 THENCE NON-TANGENT TO SAID CURVE, NORTH 45°24'53" EAST, A DISTANCE OF 182.39 FEET;  
 THENCE SOUTH 01°44'42" EAST, A DISTANCE OF 608.07 FEET;  
 THENCE SOUTH 88°16'19" WEST, A DISTANCE OF 1,530.96 FEET;

11/3/2025

Q:\116017-02 - Sterling Ranch LLC Misc\Legals\Zebulon Sports Park\Zebulon Overall.docx

2 OF 5 PAGES

THENCE NORTH 02°29'36" WEST, A DISTANCE OF 1,059.23 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE WESTERLY HAVING A RADIUS OF 4,562.42 FEET;

THENCE NORTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 21°41'32", AN ARC LENGTH OF 1,727.35 FEET;

THENCE TANGENT TO SAID CURVE, NORTH 24°11'09" WEST, A DISTANCE OF 2,380.30 FEET;

THENCE SOUTH 65°48'51" WEST, A DISTANCE OF 125.00 FEET;

THENCE SOUTH 66°19'02" WEST, A DISTANCE OF 38.20 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE NORTHERLY HAVING A RADIUS OF 281.54 FEET, THE RADIUS POINT OF SAID CURVE BEARS NORTH 22°50'56" WEST;

THENCE WESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 22°48'43", AN ARC LENGTH OF 112.09 FEET;

THENCE NON-TANGENT TO SAID CURVE, NORTH 89°59'09" WEST, A DISTANCE OF 604.99 FEET;

THENCE SOUTH 00°28'52" WEST, A DISTANCE OF 627.09 FEET;

THENCE SOUTH 00°35'14" EAST, A DISTANCE OF 2,099.09 FEET;

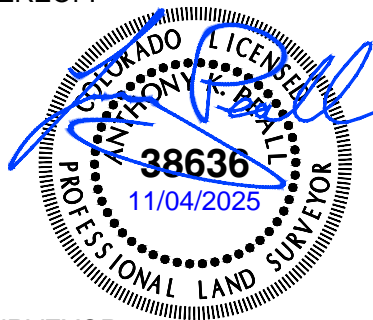
THENCE SOUTH 89°31'06" WEST, A DISTANCE OF 753.56 FEET TO THE EAST RIGHT-OF-WAY OF SAID MOORE ROAD;

THENCE ALONG SAID EAST RIGHT-OF-WAY THE FOLLOWING 3 COURSES:

- 1) NORTH 01°31'47" EAST, A DISTANCE OF 113.89 FEET;
- 2) NORTH 00°32'40" WEST, A DISTANCE OF 2,648.91 FEET;
- 3) NORTH 00°33'39" WEST, A DISTANCE OF 2,647.86 FEET TO THE **POINT OF BEGINNING**.

CONTAINING AN AREA OF 531.951 ACRES, (23,171,769 SQUARE FEET), MORE OR LESS.

ILLUSTRATION ATTACHED AND MADE A PART HEREOF.



ANTHONY K. PEALL, PLS 38636  
COLORADO LICENSED PROFESSIONAL LAND SURVEYOR  
FOR AND ON BEHALF OF AZTEC CONSULTANTS, INC.  
300 E. MINERAL AVENUE, SUITE 1  
LITTLETON, CO 80122

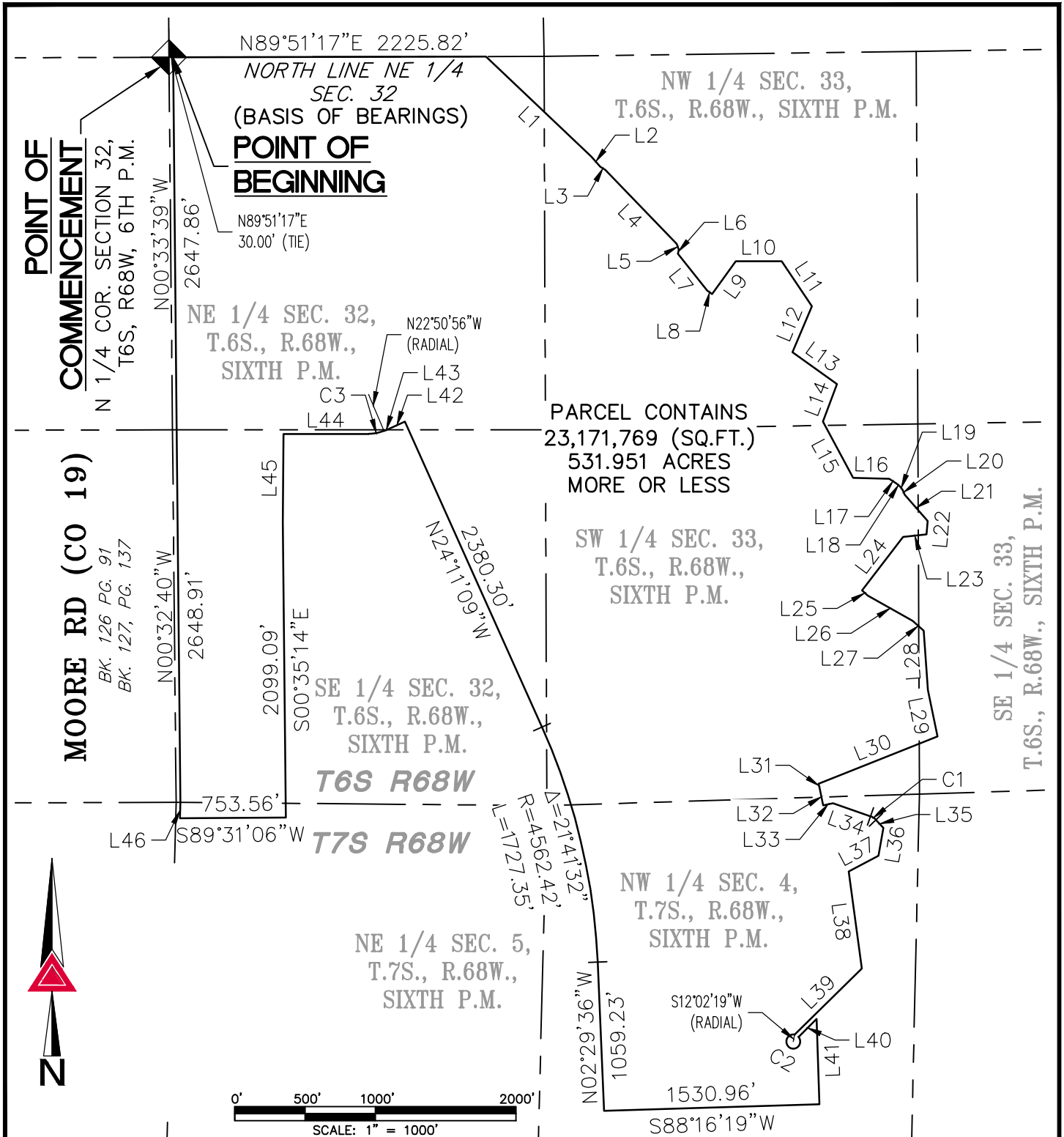
11/3/2025

Q:\116017-02 - Sterling Ranch LLC Misc\Legals\Zebulon Sports Park\Zebulon Overall.docx

3 OF 5 PAGES



# ILLUSTRATION TO EXHIBIT A



NOTE: THIS ILLUSTRATION DOES NOT REPRESENT A MONUMENTED LAND SURVEY AND IS ONLY INTENDED TO DEPICT THE ATTACHED LEGAL DESCRIPTION.



**ZEBULON OVERALL**  
E 1/2 SEC. 32, W 1/2 SEC. 33, SE 1/4 SEC. 33, T.6S., R.68W., 6TH P.M. NW 1/4 SEC. 4, NE 1/4 SEC. 5, T.7S., R.68W., 6TH P.M.  
DOUGLAS COUNTY, COLORADO

PATH: Q:\116017-02 - STERLING RANCH LLC MISC\DWG\EXHIBITS\ZEBULON SPORTS PARK\ZEBULON OVERALL.DWG  
JOB NUMBER: 116017-02 DATE: 11/3/2025 DWG: BOL CHK: AKP 4 OF 5 SHEETS

## ILLUSTRATION TO EXHIBIT A

LINE TABLE			LINE TABLE			LINE TABLE		
LINE	BEARING	LENGTH	LINE	BEARING	LENGTH	LINE	BEARING	LENGTH
L1	S46°26'51"E	1030.86'	L17	S56°28'21"E	63.92'	L33	N77°45'52"E	70.13'
L2	S41°48'51"E	99.68'	L18	S48°30'01"E	30.19'	L34	S70°45'08"E	282.72'
L3	S58°18'05"E	40.88'	L19	S37°06'55"E	30.14'	L35	S43°29'08"E	77.00'
L4	S43°59'11"E	730.63'	L20	S23°22'13"E	37.34'	L36	S10°06'52"W	202.03'
L5	S19°17'03"E	43.91'	L21	S41°10'12"E	249.14'	L37	S62°09'40"W	238.07'
L6	S10°24'22"W	30.03'	L22	S04°56'19"W	95.55'	L38	S07°36'07"E	696.71'
L7	S38°27'02"E	333.07'	L23	S83°45'39"W	167.61'	L39	S45°24'53"W	669.96'
L8	S54°13'44"E	44.31'	L24	S37°28'17"W	479.01'	L40	N45°24'53"E	182.39'
L9	N35°46'15"E	287.80'	L25	S47°45'30"E	52.60'	L41	S01°44'42"E	608.07'
L10	N89°59'27"E	326.80'	L26	S60°42'09"E	368.23'	L42	S65°48'51"W	125.00'
L11	S33°53'23"E	385.17'	L27	S48°15'44"E	105.26'	L43	S66°19'02"W	38.20'
L12	S22°57'33"W	353.81'	L28	S04°03'22"E	423.54'	L44	N89°59'09"W	604.99'
L13	S54°13'44"E	389.74'	L29	S11°41'19"E	337.04'	L45	S00°28'52"W	627.09'
L14	S20°30'58"W	283.69'	L30	S68°21'14"W	910.58'	L46	N01°31'47"E	113.89'
L15	S28°09'17"E	453.74'	L31	S12°22'53"E	31.81'			
L16	S88°33'42"E	257.56'	L32	S12°14'08"E	125.00'			

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	27°16'00"	98.70'	46.97'
C2	323°45'40"	50.00'	282.53'

NOTE: THIS ILLUSTRATION DOES NOT REPRESENT A MONUMENTED LAND SURVEY AND IS ONLY INTENDED TO DEPICT THE ATTACHED LEGAL DESCRIPTION.



**ZEBULON OVERALL**  
 E 1/2, SEC. 32, W 1/2 SEC. 33, SE 1/4 SEC. 33, T.6S., R.68W., 6TH P.M. NW 1/4 SEC. 4, NE 1/4 SEC. 5, T.7S., R.68W., 6TH P.M.  
 DOUGLAS COUNTY, COLORADO

PATH: Q:\116017-02 - STERLING RANCH LLC MISC\DWG\EXHIBITS\ZEBULON SPORTS PARK\ZEBULON OVERALL.DWG  
 JOB NUMBER: 116017-02 DATE: 11/3/2025 DWG: BOL CHK: AKP 5 OF 5 SHEETS

# Chemours Property Land Exchange



September 26, 2023  
BCC Business Meeting

Dan Dertz, Open Space Director  
Janet Herman, Director, PW Engineering  
Dan Roberts, Asst. Director, PW Operations  
Sean Owens, Engineering Special Projects Manager  
Chris Pratt, Managing County Attorney  
Dan Avery, Special Projects Manager, Admin.



# Key Provisions

Douglas County will receive a combined 275 acres of land and conservation easement in exchange for 120 acres of land currently owned by the County.





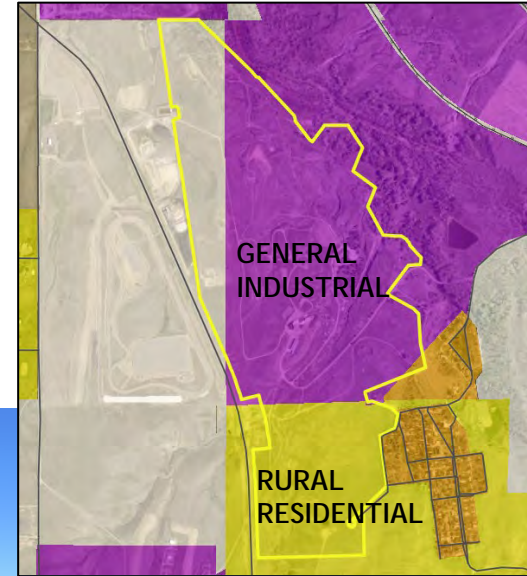
# Key Provisions

The conservation easement preserves a prominent elk migration corridor.



# Key Provisions

The conservation easement effectively downzones and preserves a community separation buffer around Louviers.



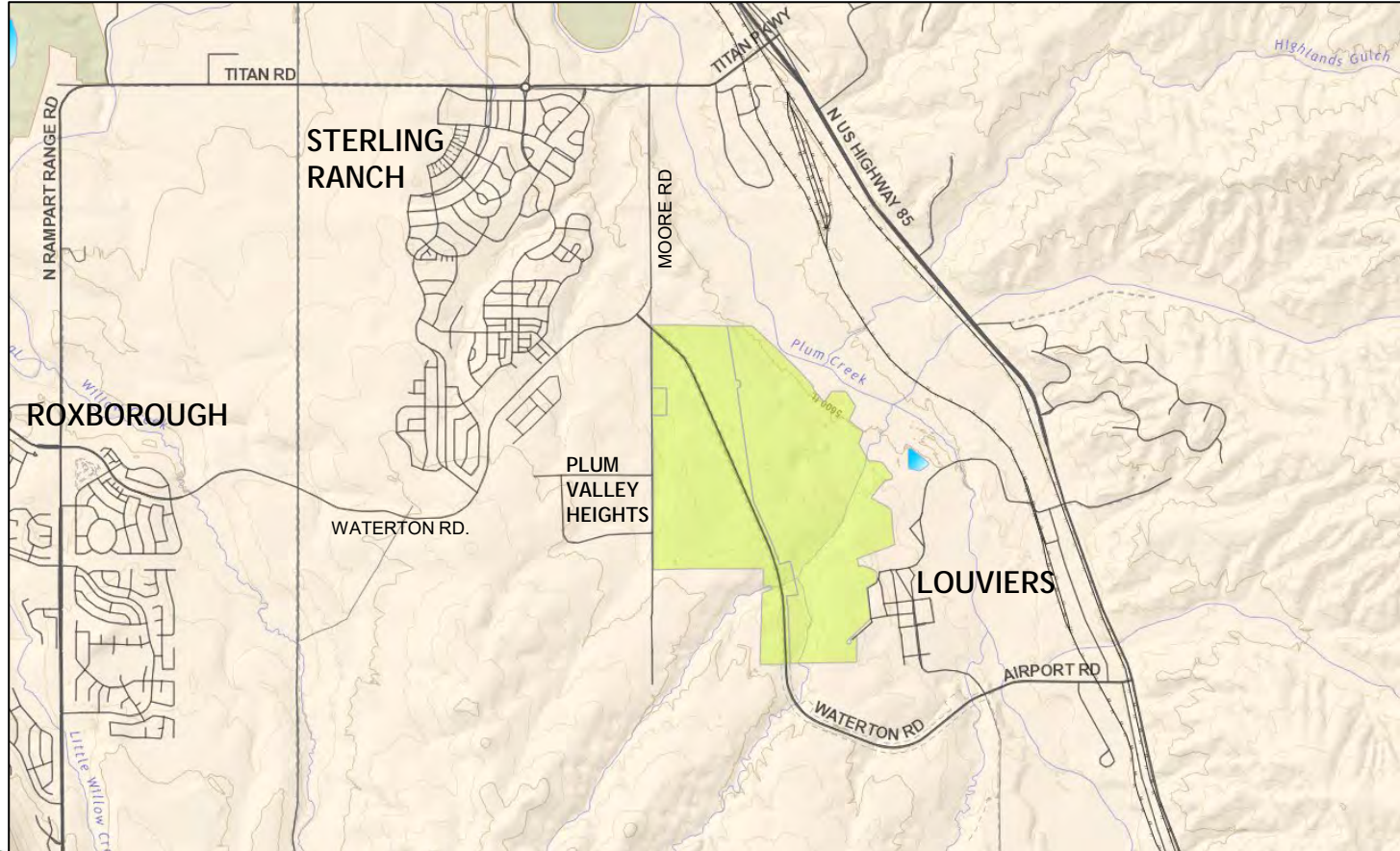


# Key Provisions

The exchange provides land for County operational needs in northwest Douglas County.



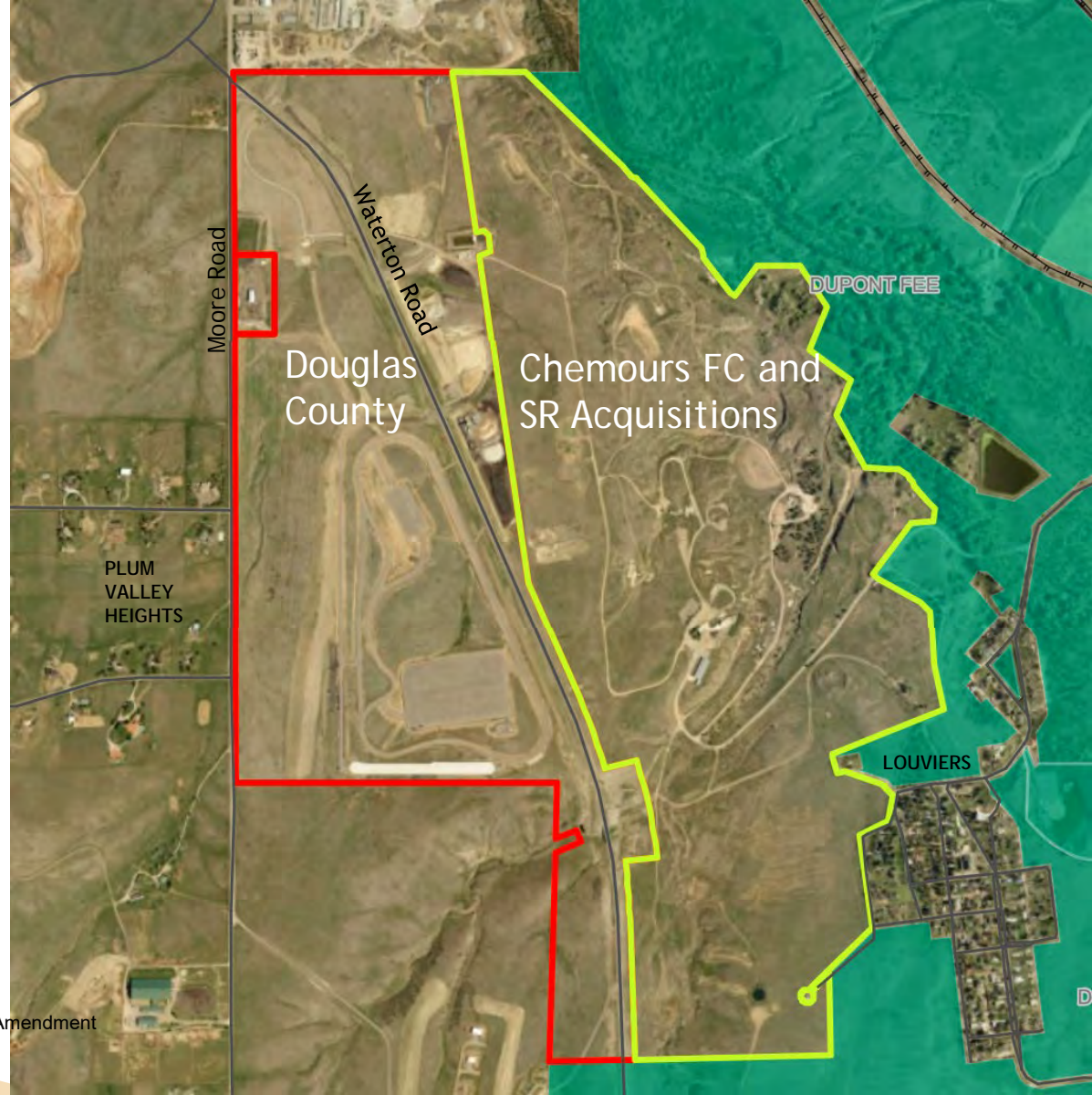
# Vicinity Map





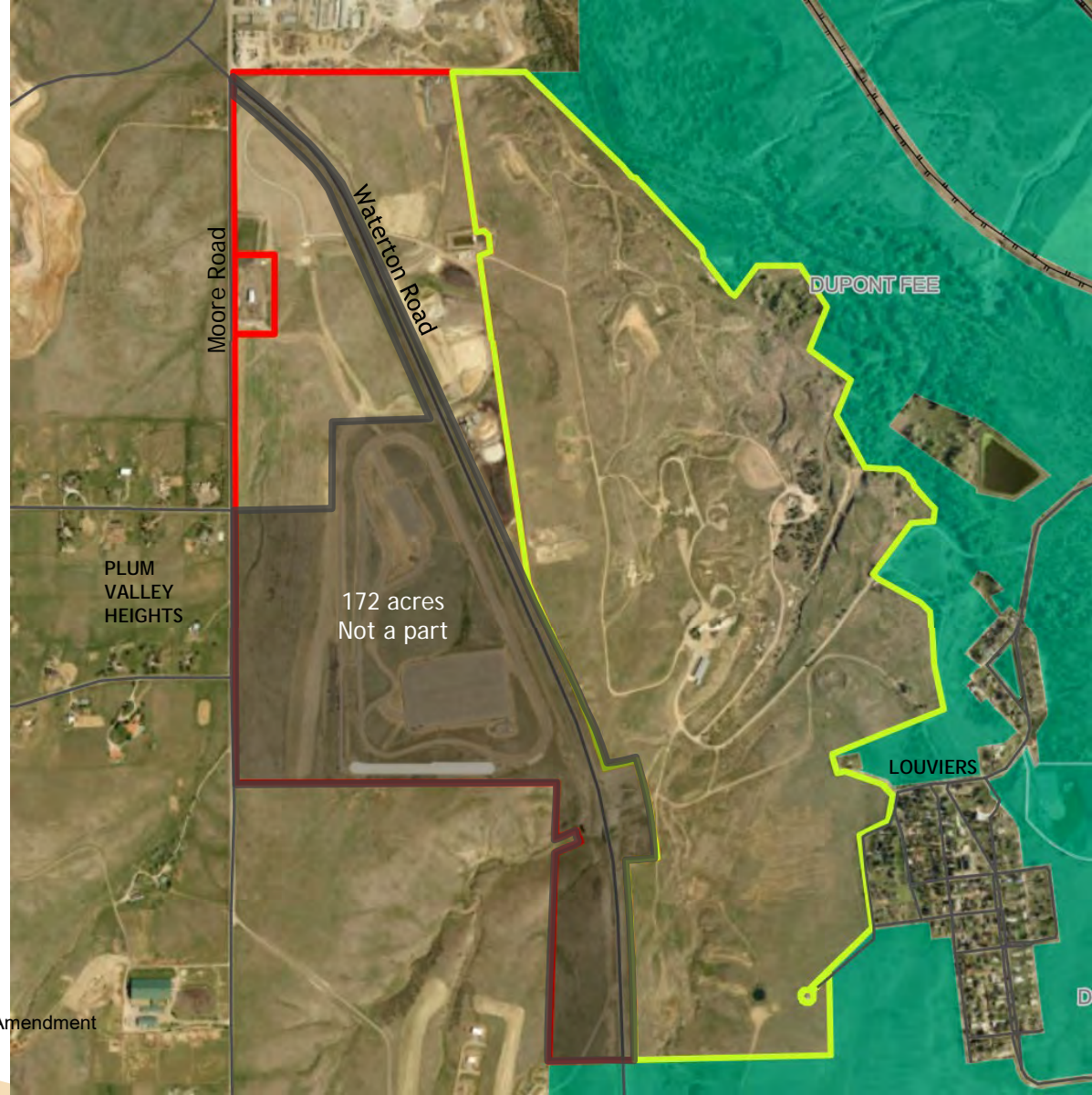
# Parcels Involved

- 356 acres owned by Chemours FC LLC, under contract to SR Acquisitions, LLC.
- 290 acres owned by Douglas County.
- 4 acres owned by Douglas County.



# Excluded Land

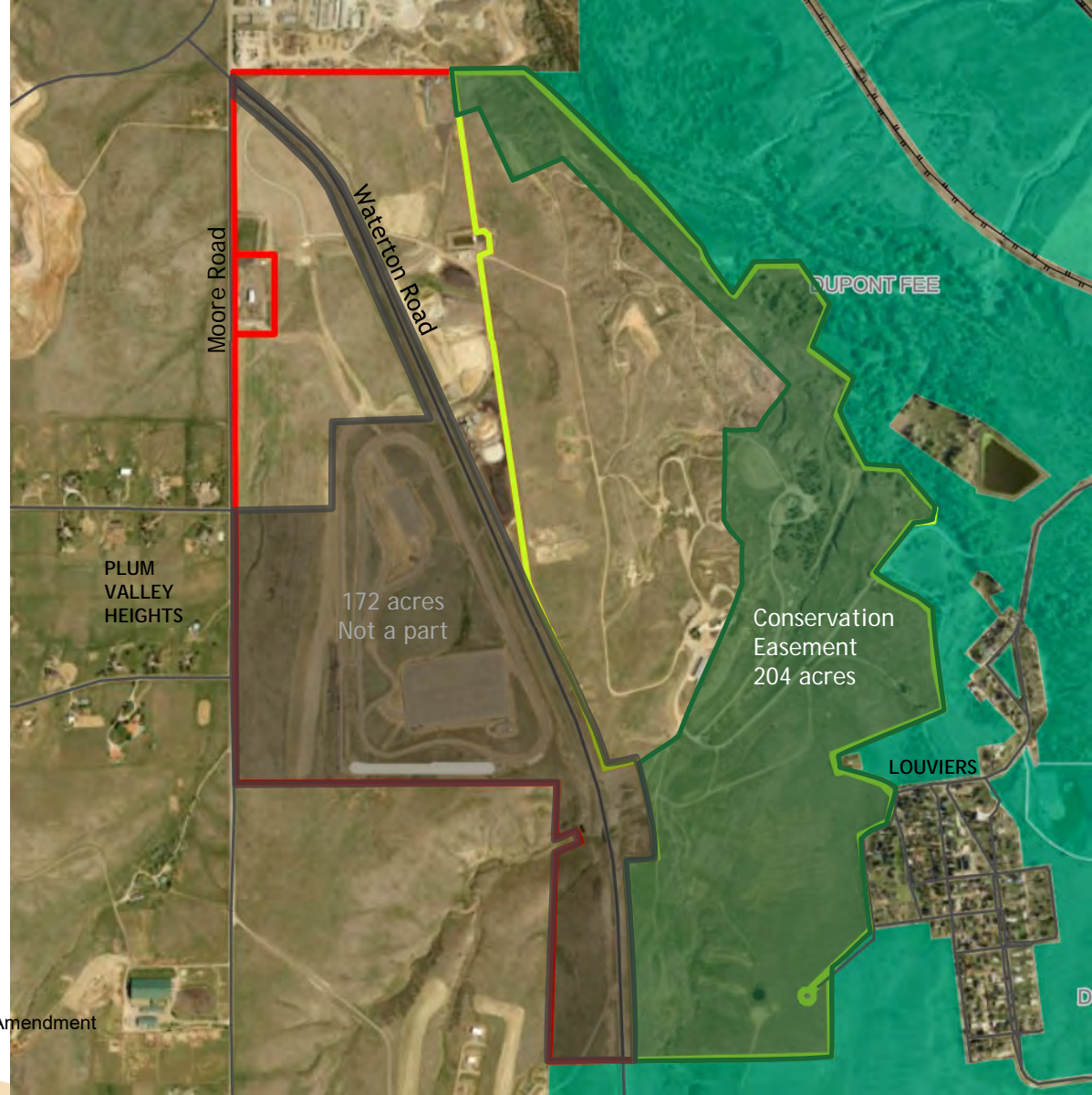
- Waterton Road right-of-way
- Emergency Vehicle Operations Center (EVOC)
- 35 acres west of EVOC along Moore Road





# Conservation Easement

- Elk migration corridor
- Louviers community open space buffer
- Environmentally constrained land
- SR Acquisitions will retain title (ownership, maintenance, liability)
- Douglas County will acquire the conservation easement (monitoring and compliance)



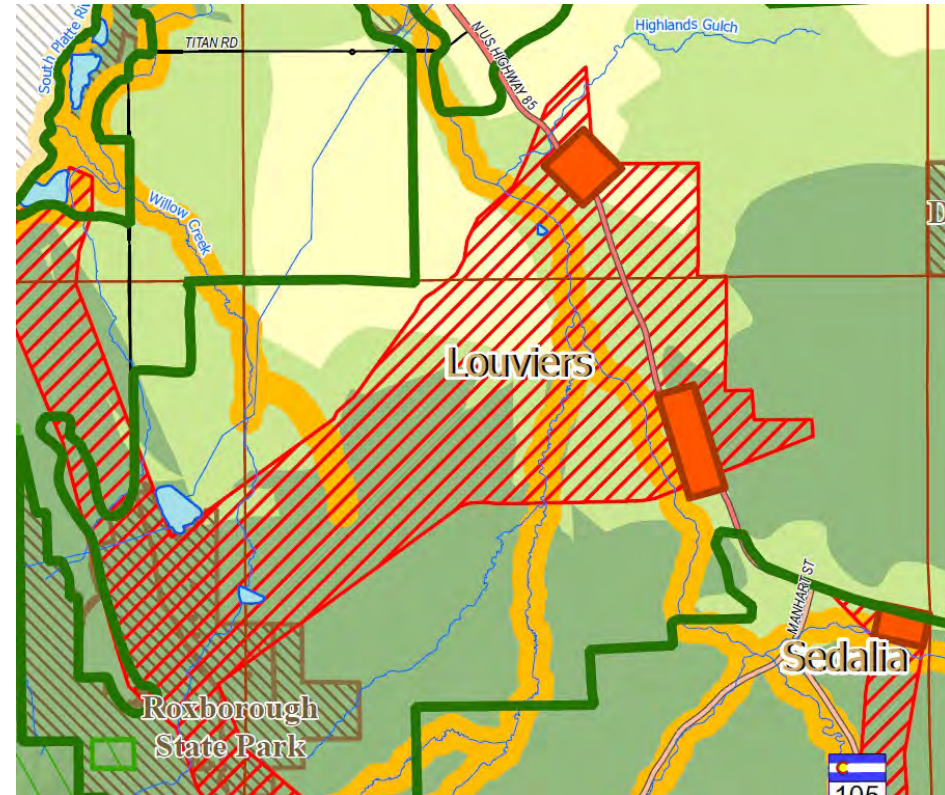
# Comprehensive Master Plan - Wildlife Resources

"Maintain healthy ecosystems within the County by establishing, maintaining, buffering, and improving a set of core habitat areas, such as habitat conservation areas (HCAs), connected by movement corridors and overland connections as shown in the Wildlife Resources Map."

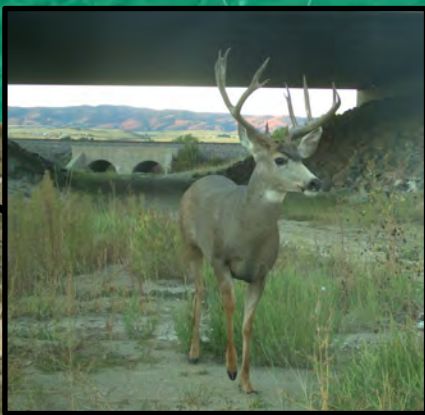
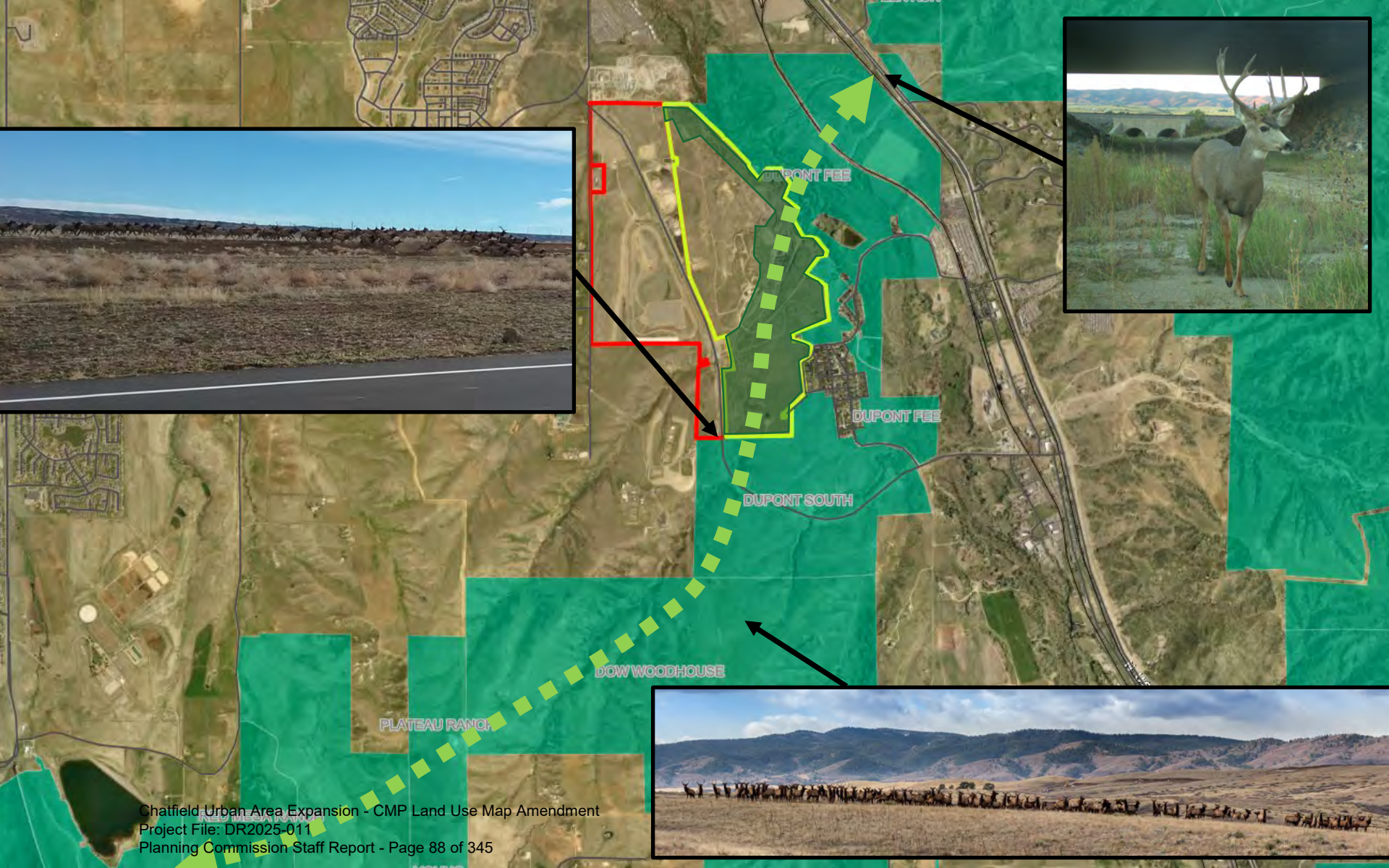
"Link wildlife habitat and movement corridors, wherever possible."

"Develop partnerships to conserve additional habitat and manage and improve existing habitat."

"Protect important wildlife habitat, habitat conservation areas (HCAs), movement corridors and overland connections."







# Public Works Operations Facility

## Structure Requirements

- Enclosed Heated Snowplow Parking
- Fleet Maintenance Garage
- Car and Truck Wash Bays
- Heated Dry Storage Warehouse
- Fuel Pad with Covered Fuel Pumps
- Magnesium Chloride Tanks
- Covered Dry Deicer Material Storage

## Bulk Material Storage

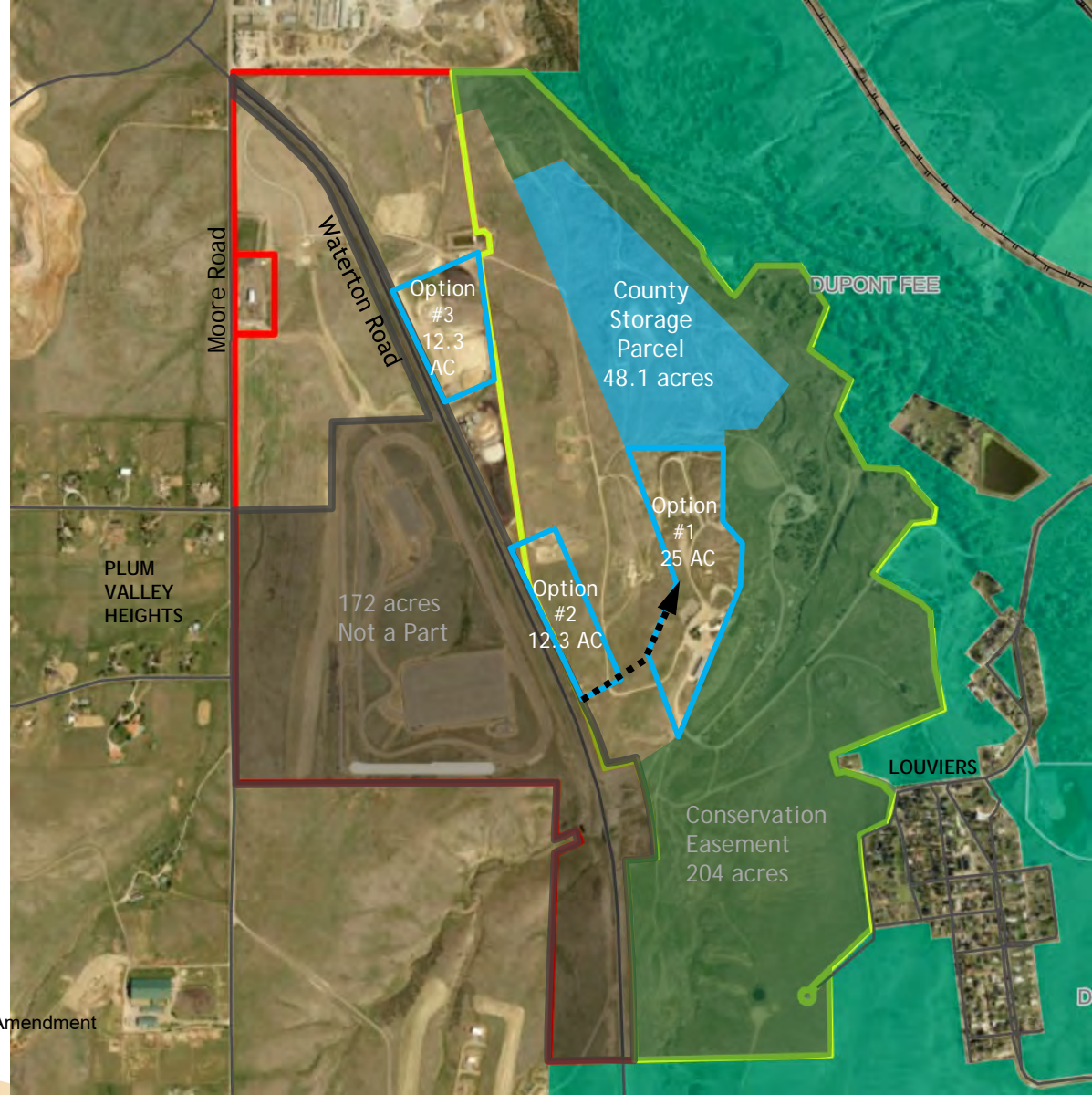
- Recycled asphalt
- Recycled concrete
- Stockpiled topsoil
- Stockpiled fill dirt
- Emergency branch drop-off site or compost site





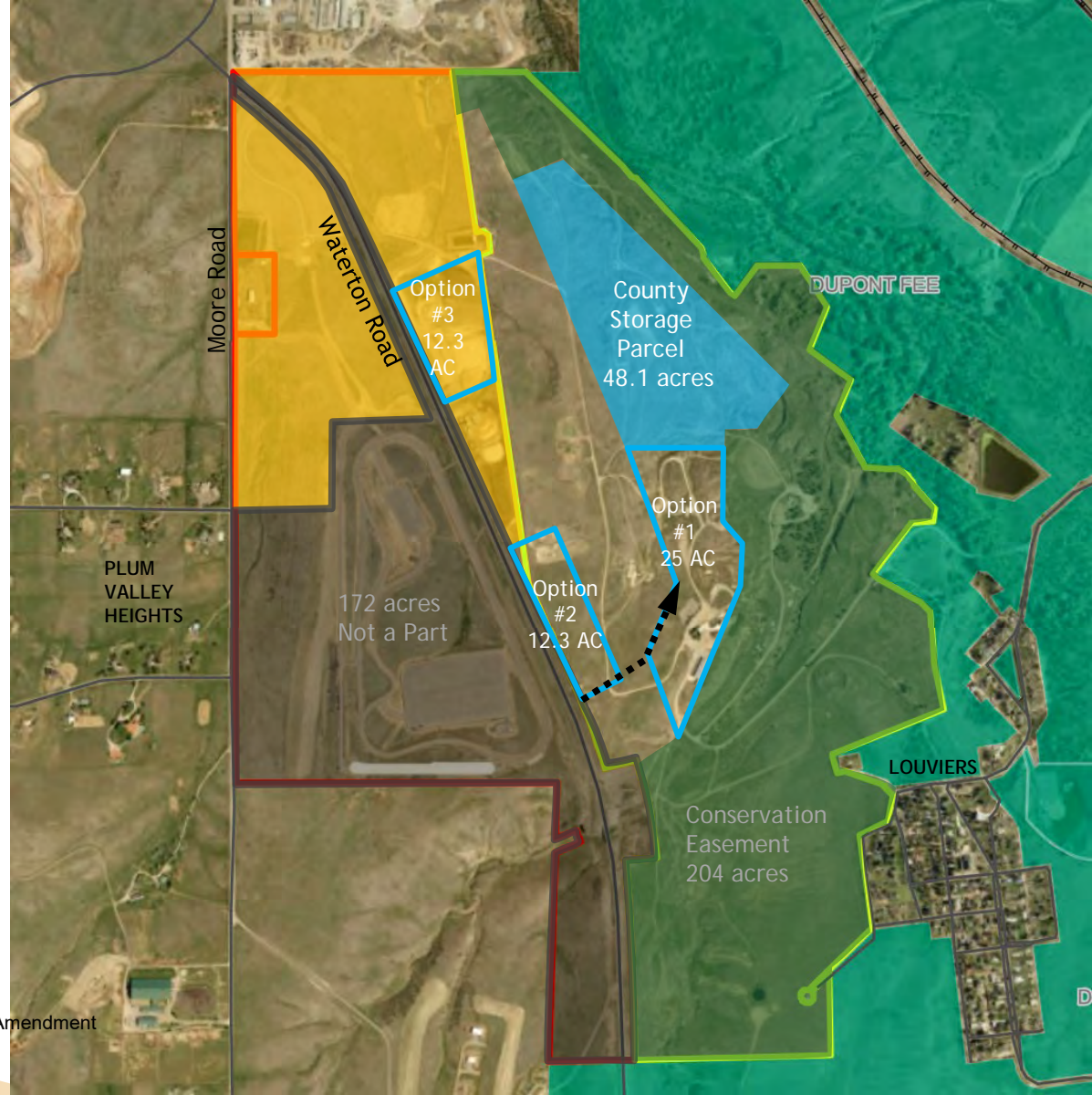
# Operations Facility Site:

- 48.1-acre storage parcel
- Options 1, 2, or 3



# Exchange:

- County receives:
  - 48.1 ac storage parcel
  - Options 1, 2, or 3
  - Conservation Easement
- SRA receives:
  - Up to 120 acres of land from the County





# Fiscal Impact

- Douglas County receives land valued at approx. \$1M and a conservation easement valued at \$1 to \$1.5M.
- SR receives land valued at approximately \$2.5M.
- Future property and sales tax revenue.

# Questions?





November 18, 2025

Mr. Kevin Johnk  
Sterling Ranch, LLC  
8155 Piney River Ave, Suite 200  
Littleton, CO 80125

Subject: Wildlife Habitat Assessment  
Waterton Business Park  
Douglas County, Colorado

Sterling Ranch, LLC retained Kimley-Horn and Associates, Inc. (Kimley-Horn) to complete an assessment of potential habitat for state and federally listed species, migratory birds, and big game and to prepare this memorandum for the Waterton Business Park project located off Waterton Road in Douglas County, Colorado (**Figure 1 – Project Location Map, Figure 2 – USGS Map**). The project consists of a mixed-use commercial and industrial development. A site plan for the proposed project is included in **Appendix A**.

## Project Location

The project site is situated west and east of Waterton Road and east of North Moore Road. The project site is in Sections 32 and 33, Township 6 South, Range 68 West, and Sections 4 and 5, Township 7 South, Range 68 West in Douglas County, Colorado (**Figure 1**). The center latitude/longitude of the project site is 39.4877889N, -105.0209708W. The average elevation of the project site is approximately 5,700 feet above sea level (ASL).

## Site Description

The 327.3-acre project site is made up of three (3) parcels (Parcel ID 2229-321-00-001, 2229-321-00-003, and 2229-321-00-004) and portions of three (3) parcels (Parcel ID 2229-332-00-002, 2229-333-00-005, and 2229-324-00-002) and consists of primarily disturbed shrubland. A large portion of the site, approximately 150 acres, consists of vacant land containing a former powder plant. Approximately 50 acres of the site is utilized as the storage yard for Douglas County including a soil stockpile, materials and machinery, materials for winter roadway treatment, and demolished concrete and asphalt rubble. The remainder of the site consists of vacant grassland and shrubland, a detention pond, a small area managed for EVOC Training purposes, and unimproved roads. One (1) ephemeral stream runs along the southwestern boundary and two (2) ephemeral streams run perpendicular to the eastern boundary (**Figure 3 – Habitat Characterization Map**).

Dominant upland species in the grassland and shrubland areas consisted of kochia (*Bassia scoparia*), blue grama (*Bouteloua gracilis*), rubber rabbitbrush (*Ericameria nauseosa*), and basin wild rye (*Leymus cinereus*). The ephemeral drainages were dominated by hairy false golden aster (*Heterotheca villosa*), slimflower scurfpea (*Psoralea tenuiflora*), and western snowberry (*Symphoricarpos occidentalis*). Various noxious and nuisance weed species were observed including kochia, curly dock (*Rumex crispus*), hoary alyssum (*Berteroa incana*), quackgrass (*Elymus repens*), common mullein (*Verbascum thapsus*), cheatgrass (*Bromus tectorum*), diffuse knapweed (*Centaurea diffusa*), and field bindweed (*Convolvulus arvensis*).

The project site is bound to the north by a commercial business, to the east by county-owned vacant land (Sterling Ranch Conservation Easement), to the south by county-owned land, and to the west by county-owned land and residential lots. From the earliest aerial of 1944, the powder plant can be observed within the eastern portion of the project site. The remaining portions of the project site were primarily vacant grassland from the earliest aerial to 1971 when unimproved roads and buildings were constructed. Between 1971 and 1978, two impounded ponds were constructed in the eastern extent. Little to no change occurred within the limits from 1978 to 2015. From 2017 to present day, the Douglas County storage yard has expanded throughout the eastern portion of the site.

Within the project site, hydrology drains from higher elevations in the southwest to eventually empty into Plum Creek to the east of the site. Plum Creek is a perennial stream/wetland complex that runs north into the South Platte River within Chatfield Reservoir. Plum Creek is a National Hydrography Dataset (NHD) mapped perennial stream and a National Wetland Inventory (NWI) mapped permanently flooded, lower perennial riverine feature. The unnamed drainage along the southwestern project boundary runs northeast and is mapped as a seasonally flooded, intermittent stream. The two (2) unnamed drainages within the eastern portion of the project site are not mapped features by NHD or NWI. Representative photos of the project site can be found in **Appendix B**.

### Site History

On September 26, 2023, the Douglas County Board of County Commissioners (BOCC) unanimously approved a Chemours Land Exchange between Sterling Ranch Acquisitions, LLC (separate from Sterling Ranch Development Company) and Douglas County BOCC. In this land exchange agreement, Douglas County received land to develop a fleet maintenance facility and a conservation easement, and Sterling Ranch received land to develop as part of the Sterling Ranch Development. The proposed conservation easement will permanently protect 204 acres of land as open space and as an elk migration corridor, which was at risk for general industrial development per its previously designated zoning classification. The preservation of this land also provides a connection to the Dupont Conservation Easement, established in 2002. During the land exchange, which was executed by a separate agreement, the wildlife corridor will be conserved and maintained in perpetuity as a wildlife corridor and open space buffer for the community of Louviers.

### Methodology

Kimley-Horn accessed the U.S. Fish and Wildlife Service (USFWS) Information, Planning, and Conservation (IPAC) online system (<http://ecos.fws.gov/ipac/>), the Colorado Parks and Wildlife (CPW) Species Activity Mapping (SAM) Data, the Colorado Natural Heritage Program (CNHP) Colorado's Conservation Data Explorer (CODEX; <https://codex.cnhp.colostate.edu/content/map>), and Douglas County, Colorado's Open Data (DougCo Hub; <https://dcdata-dougco.opendata.arcgis.com/pages/data>) to determine if any federal or state listed species and big game species and their associated corridors could potentially occur in the vicinity of the project site (**Appendix C**). A site visit was conducted by Kimley-Horn on August 28, 2024, and November 7, 2025, to perform an assessment of potential habitat for the aforementioned species.



## Results

Wildlife, or signs of wildlife, observed within the project site during field reconnaissance are included below in **Table 1**. Signs of wildlife include burrows, tracks, scat, etc.

Table 1 – Wildlife Species Observed within the Project Site		
Common Name	Scientific Name	Status
<b>Avian</b>		
Red-tailed hawk	<i>Buteo jamaicensis</i>	MBTA
<b>Mammalian</b>		
Mule deer	<i>Odocoileus hemionus</i>	NL*
Elk	<i>Cervus canadensis</i>	NL*
Legend: MBTA – Avian species protected under the Migratory Bird Treaty Act (MBTA); NL - Not Listed; *Managed by CPW		

Based on field reconnaissance and database reviews, a listing of the state and federally listed and managed species potentially occurring within the vicinity of the project site has been compiled. **Table 2** lists species that may occur and their likelihood of occurrence. Likelihood of occurrence is based on actual observation of the species, signs (burrows, tracks, scat, etc.), observance of suitable habitat, or documented occurrences of the species. None indicates no suitable habitat is present within the project site. A Low ranking indicates that suitable habitat for that species was documented and/or observed within the project site, but the species has not been documented within one (1) mile of the project site. A Moderate ranking indicates that suitable habitat exists, and the species has been documented within one (1) mile of the project site. A High ranking indicates that suitable habitat exists, and the species was observed during field reconnaissance.

Table 2 – State and Federally Listed and Managed Species with the Potential to Occur within the Project Site in Douglas County, Colorado						
Common Name	Scientific Name	Status	Documented (<1 Mile)	Habitat Present	Likelihood of Occurrence	Action Required
<b>Mammals</b>						
Preble's meadow jumping mouse	<i>Zapus hudsonius preblei</i>	FT, ST	Yes	No	Low	No
<b>Big Game</b>	<b>Multiple</b>	<b>NL*</b>	<b>Yes</b>	<b>Yes</b>	<b>High</b>	<b>Yes</b>
<b>Birds</b>						
Piping plover	<i>Charadrius melodis</i>	FT, ST, MBTA	No	No	None	No**
Whooping crane	<i>Grus americana</i>	FE, SE, MBTA	No	No	None	No
<b>Raptors</b>	-	<b>MBTA</b>	<b>Yes</b>	<b>Yes</b>	<b>High</b>	<b>Yes</b>
Passerine Songbirds	-	MBTA	Yes	Yes	High	Yes
<b>Fishes</b>						
Pallid sturgeon	<i>Scaphirhynchus albus</i>	FE	No	No	Low	No**
<b>Flowering Plants</b>						
Ute ladies'-tresses	<i>Spiranthes diluvialis</i>	FT	No	No	Low	No
Western prairie fringed orchid	<i>Platanthera praeclara</i>	FT	No	No	Low	No**
<b>Insects</b>						
Monarch butterfly	<i>Danaus plexippus</i>	Proposed FT	No	Yes	Low	No

Table 2 – State and Federally Listed and Managed Species with the Potential to Occur within the Project Site in Douglas County, Colorado						
Common Name	Scientific Name	Status	Documented (<1 Mile)	Habitat Present	Likelihood of Occurrence	Action Required
Suckley's Cuckoo Bumble Bee	<i>Bombus suckleyi</i>	Proposed FE	No	Yes	Low	No
Western regal fritillary	<i>Argynnis idalia occidentalis</i>	Proposed FT	No	Yes	Low	No
<p><b>Legend:</b>  FE – Federally Endangered; FT – Federally Threatened; FT(S/A) – Threatened due to Similarity of Appearance; C – Candidate for Listing  SE – State Endangered; ST – State Threatened; SC – Species of Concern  MBTA - Avian species protected under the Migratory Bird Treaty Act (MBTA)  NL – Not Listed, but have other regulatory protections  Species in <b>bold</b> were observed on-site during field reconnaissance  *Managed by Colorado Parks and Wildlife  **Unless the project plans for water depletions</p>						

The listed species described below have been determined to have suitable habitat within the site and require additional action.

### Big Game

Species in this category are not listed under the Endangered Species Act; however, they are part of the respective CPW Herd Management Plans. The project site is within the species ranges of elk (*Cervus canadensis*), mule deer (*Odocoileus hemionus*), and white-tailed deer (*Odocoileus virginianus*; **Figure 4 – Species Occurrence Map**). Suitable habitat for these species is present within the project site and signs of these species (skat, tracks) were observed during field reconnaissance. No mule deer migration corridors are mapped within the project site or within a mile radius by CPW SAM Data or CNHP CODEX. No elk migration corridors are mapped within the project site by CPW SAM Data or CNHP CODEX. The nearest CPW-mapped elk migration corridor is located 0.44 miles south of the project site.

Douglas County's Wildlife Mapping shows a wildlife migration corridor intersecting the northeast corner of the project site within Plum Creek's upland buffer. The nearest Douglas County-mapped wildlife movement corridor is located within the southern terminus of the project site; however, it is almost entirely contained within the conservation easement south and southeast of the project site. An overland connection is mapped within the southern 1/4 of the project site by Douglas County. However, this data is not representative due to the impassable fences that sever movement between Plum Creek and the west. The project site is predominantly within the Douglas County Moderate Habitat Value Area. 10 acres of the project site within the northeast is within the Douglas County High Habitat Value Area. The project site is 0.29 miles south of the Low Habitat Value Area. The nearest Douglas County wildlife crossing is located 0.56 miles east of the project site. The northern portion of the project site provides suboptimal conditions for migration due to fencing and moderate levels of traffic on Waterton Rd and Moore Rd. The central portion provides suboptimal conditions for migration due to the approximately 50-acres of Douglas County storage of materials and machinery, the perimeter fencing surrounding the former powder plant, as well as fencing on both sides of Waterton Rd. The southern portion of the project site presents limited suitable conditions due to impassable fencing that begins east of the project site and continues south along Waterton Rd. Based on field reconnaissance, big game activity within the project site exhibits sporadic movement with habitat fragmentation likely forcing wildlife to use Waterton Rd. In consultation with the project proponent, it was determined that the Waterton Business Park project proposes to facilitate big game



movement to the proposed 203.9-acre conservation easement south of the project site by removing impassable fencing to allow for more suitable travel paths to and along Plum Creek. It is assumed the high presence of impassable fences within and surrounding the project site is the primary driving force of unnatural migration patterns in lands surrounding the site. Further coordination with CPW is recommended to verify migration information within and around the site.

### ***Passerine Songbirds and Raptors***

Avian species in this category are not listed under the Endangered Species Act; however, they have additional protections under the Migratory Bird Treaty Act (MBTA) of 1918. Additionally, all raptors in Colorado are protected by the MBTA. CPW has published the “Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors (2020)”. This document was created to provide developers with recommended buffers to avoid impacts to raptors in Colorado. CPW buffer recommendations are included as **Appendix D**. The CPW Raptor Nest Database did not document any active raptor nests as occurring within the restricted radii for raptors. The nearest documented raptor nest is a red-tailed hawk (*Buteo jamaicensis*) nest located 1.37 miles north of the project site with an active status as of August 2024 (**Figure 4**). If construction is to occur within the nesting season of songbird or raptor species, preconstruction avian nesting surveys are recommended.

### **Project Design Considerations**

During project design, we recommend considering options that will prioritize wildlife habitat, movement, and conservation and minimize impacts to the Moderate Habitat Value Area. Protection of the adjacent drainageway, Plum Creek, will help to further maintain the Moderate Habitat Value Area.

The following recommendations should be considered to promote wildlife conservation during zoning:

- Sensible planning of transportation infrastructure to accommodate wildlife.
- Creation of development guidelines which minimize exclusionary fencing and promote wildlife friendly fencing.
- Implement appropriate erosion control practices during land disturbance activities, including practicing avoidance of unnecessary land disturbances.
- Provide habitat restoration through stabilization of land disturbances with beneficial vegetation through wildlife friendly native seed species, provide noxious weed and pest management practices and on-going pasture management to promote residual groundcover.

### **Summary and Recommendations**

Sterling Ranch, LLC retained Kimley-Horn and Associates, Inc. (Kimley-Horn) to complete an assessment of potential habitat for state and federally listed species, migratory birds, and big game and to prepare this memorandum for the Waterton Business Park project located off Waterton Road in Douglas County, Colorado. The 327.3-acre project site consists of primarily disturbed grassland and shrubland. A large portion of the site, approximately 150 acres, consists of vacant land containing a former powder plant. Approximately 50 acres of the site is utilized as the storage yard for Douglas County including a soil stockpile, materials and machinery, materials for winter roadway treatment, and demolished concrete and asphalt rubble. The remaining of the site consists of vacant grassland, a detention pond, and unimproved

roads. One (1) ephemeral stream runs along the southwestern boundary and two (2) ephemeral streams run perpendicular of the eastern boundary.

Kimley-Horn accessed the U.S. Fish and Wildlife Service (USFWS) Information, Planning, and Conservation (IPAC) online system (<http://ecos.fws.gov/ipac/>), the Colorado Parks and Wildlife (CPW) Species Activity Mapping (SAM) Data, the Colorado Natural Heritage Program (CNHP) Colorado's Conservation Data Explorer (CODEX), and Douglas County, Colorado's Open Data (DougCo Hub) to determine if any federal or state listed species and big game species and their associated corridors could potentially occur in the vicinity of the project site (Appendix C). A site visit was conducted by Kimley-Horn on August 28, 2024, and November 7, 2025, to perform an assessment of potential habitat for the aforementioned species. Three groups of species (big game, passerine songbirds, and raptors) were determined to have suitable habitat and require additional action.

The following items are recommended regarding wildlife habitat:

- Further coordination with CPW is recommended to verify elk migration information within and around the site.
- Further coordination with CPW and Douglas County is recommended to modify the impassable fences obstructing natural migration patterns adjacent to the site.
- If disturbance activities are planned during the avian nesting season, a preconstruction avian nesting survey is recommended.

Should you have any questions regarding this assessment, please contact me at (719) 299-5093 or [Alexis.Marchando@kimley-horn.com](mailto:Alexis.Marchando@kimley-horn.com).

Sincerely,



Alexis Marchando  
Environmental Scientist  
Kimley-Horn and Associates, Inc.



## References

Audubon. 2023. Guide to North American Birds. Available at: <https://www.audubon.org/bird-guide>

Fertig. 2005. Rangewide Status Review of Ute Ladies'-Tresses (*Spiranthes diluvialis*). Available at: <https://efotg.sc.egov.usda.gov/references/public/WY/UtesRangewideStatusReview2005byFertig.pdf>

U.S. Fish and Wildlife Service (USFWS). 2018. Preble's Meadow Jumping Mouse Recovery Plan, Colorado. Region 6, Lakewood, Colorado. 148 pages. Available at: [https://ecos.fws.gov/docs/recovery\\_plan/Final\\_Draftpreblesrecoveryplan\\_10032018\\_signed.pdf](https://ecos.fws.gov/docs/recovery_plan/Final_Draftpreblesrecoveryplan_10032018_signed.pdf)

USFWS. 2022. Review of Species That Are Candidates for Listing as Endangered or Threatened. Available at: <https://www.govinfo.gov/link/fr/87/26152>

*Attachments:*

Figure 1 – Location Map

Figure 2 – USGS Map

Figure 3 – Habitat Characterization Map

Figure 4 – Species Occurrence Map

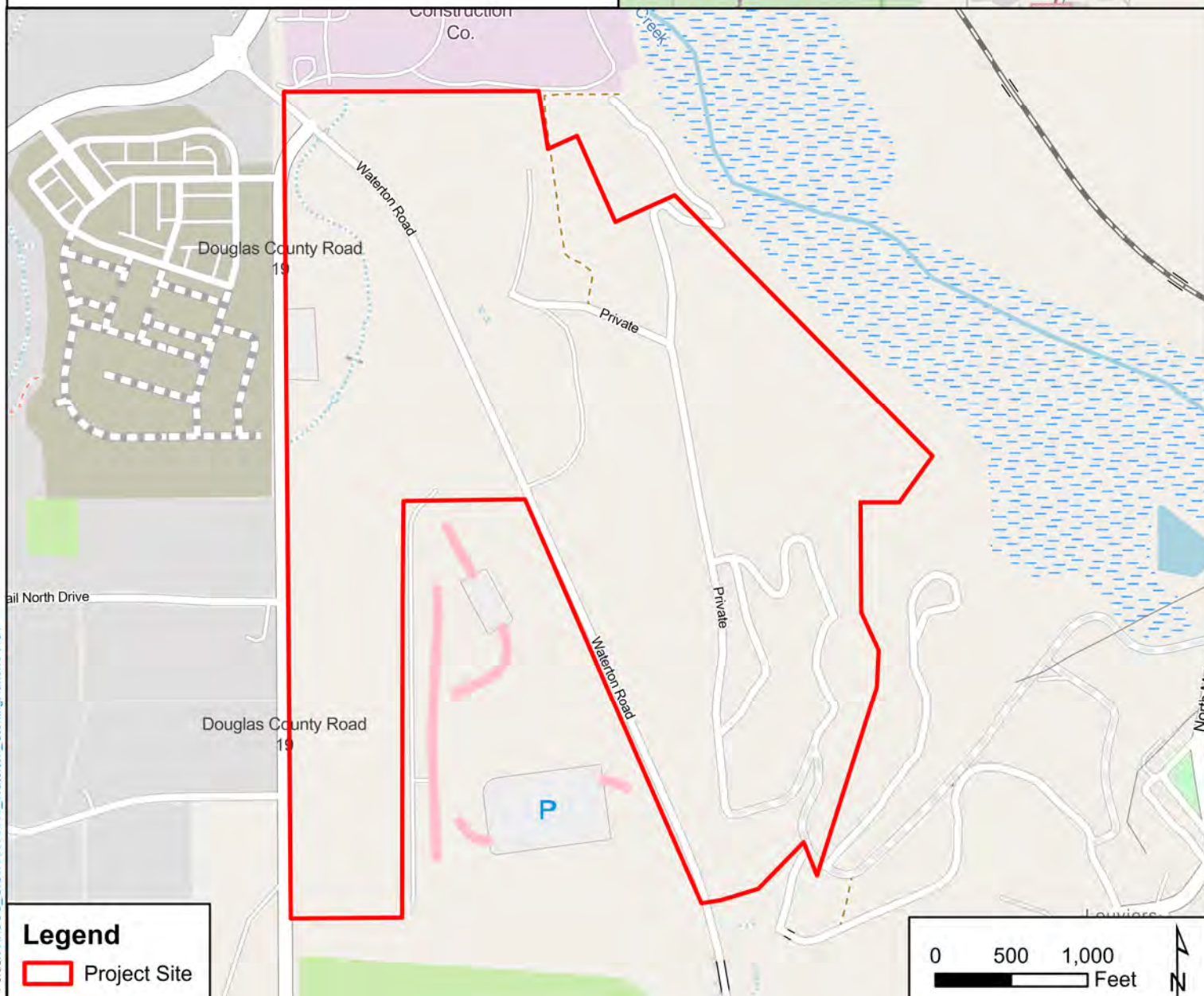
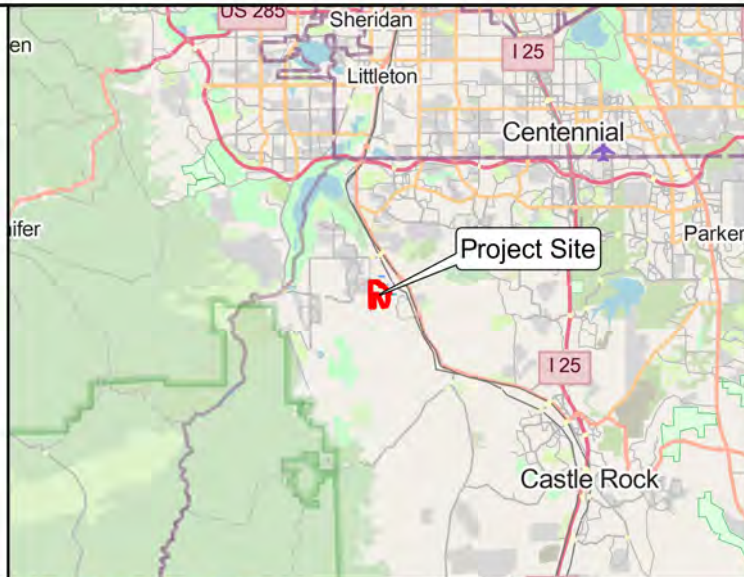
Appendix A – Proposed Site Plan

Appendix B – Representative Site Photos

Appendix C – IPAC Report

Appendix D – Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors





Folder: K:\COS\_GIS\196393006\_Waterton\_SterlingRanch\PROJ

**Kimley»Horn**

© 2025 Kimley-Horn and Associates, Inc.  
2 N Nevada Ave, Ste 900, Colorado Springs, CO

Phone (719) 453-0180

www.kimley-horn.com

Project File: DR2025-011

### Property Location Map

### Waterton Business Park Douglas County, Colorado

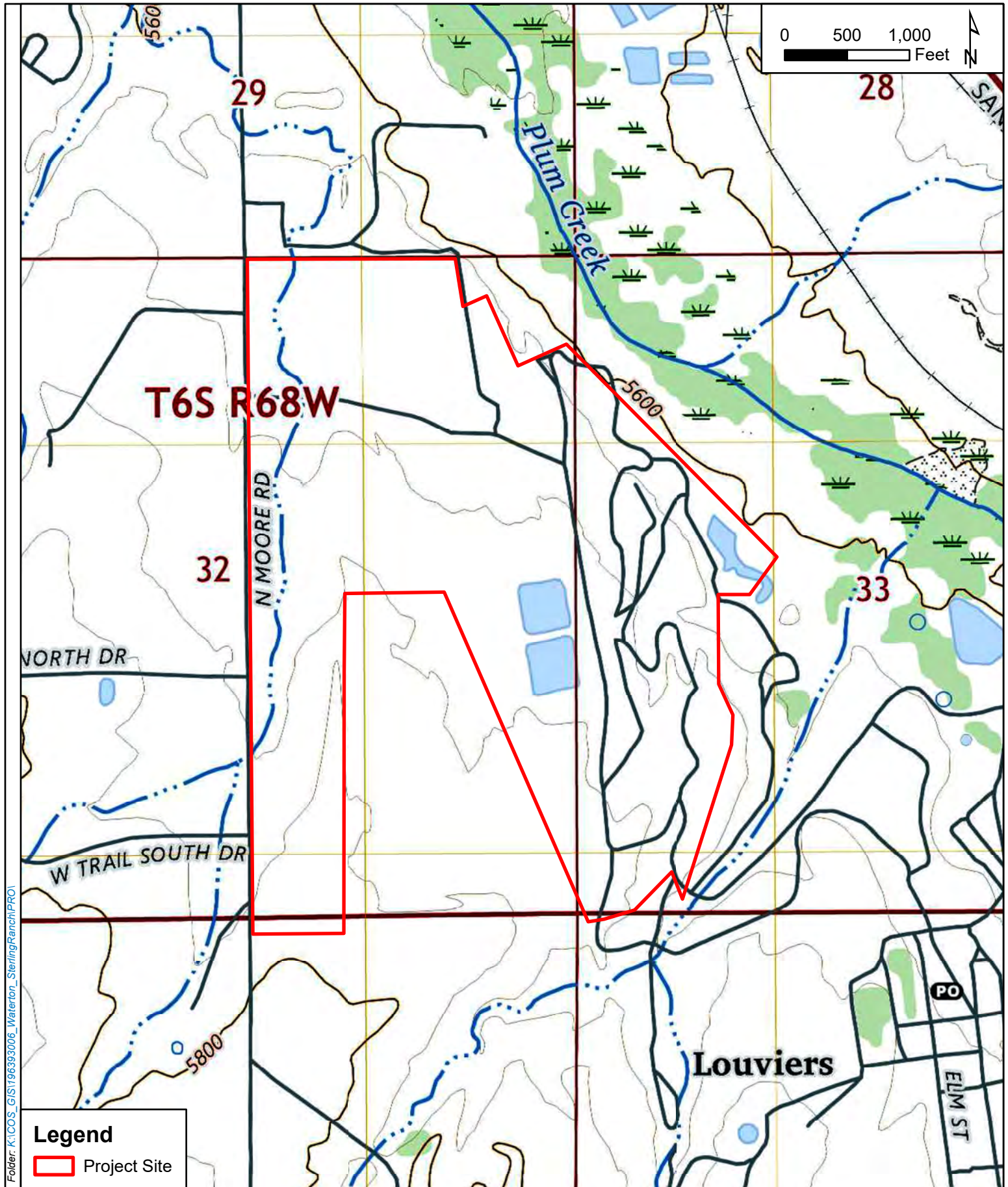
Chatfield Urban Area Expansion - CMP, Land Use Map Amendment

IN 1,000' PROJECT NUMBER: 196686010

NOVEMBER 2025

FIGURE 1





**Legend**

Project Site

**Kimley»Horn**

© 2025 Kimley-Horn and Associates, Inc.  
2 N Nevada Ave, Ste 900, Colorado Springs, CO

Phone (719) 453-0180  
www.kimley-horn.com  
Project File: DR2025-011

**USGS Map**

**Waterton Business Park  
Douglas County, Colorado**

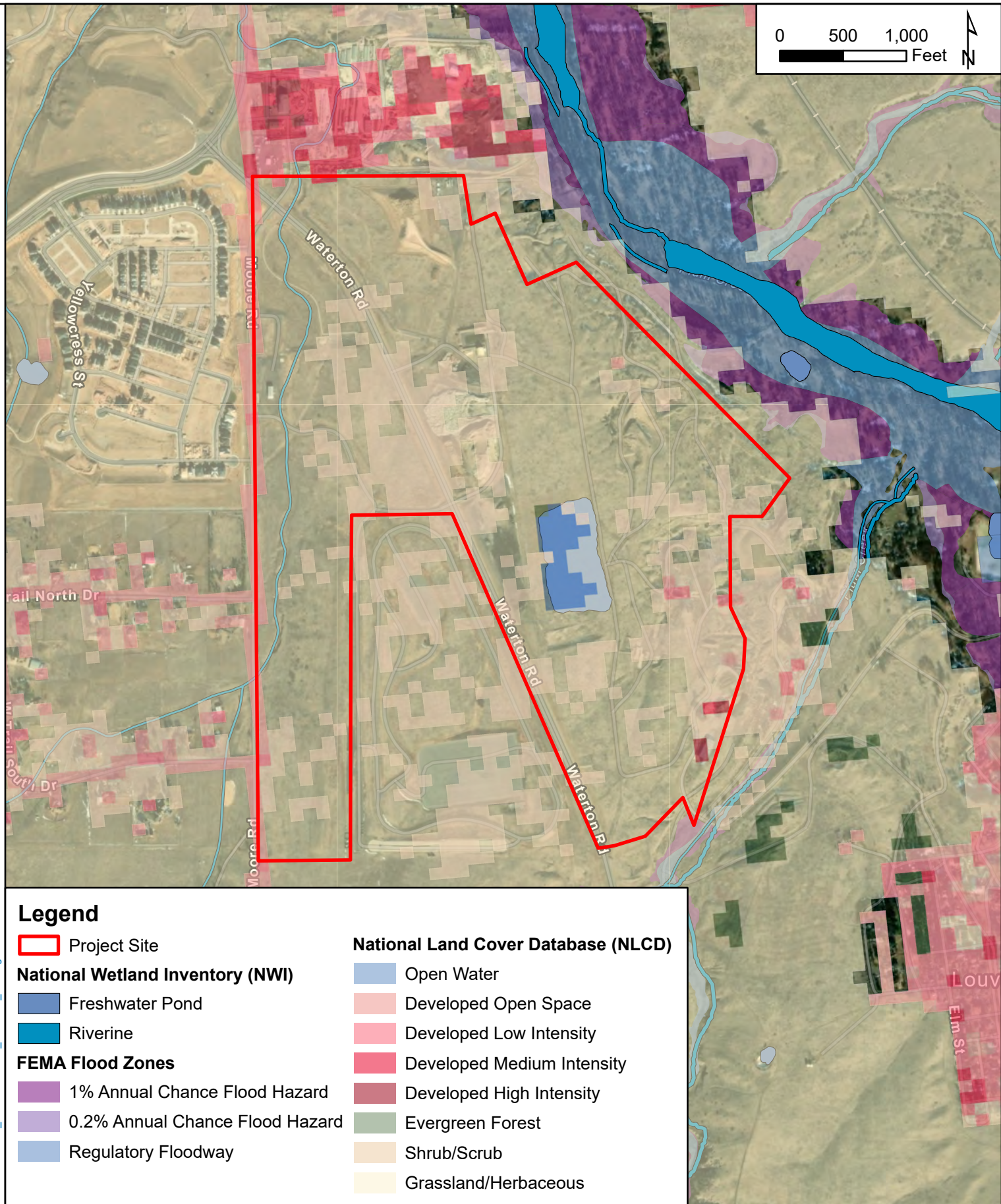
Charfield Urban Area Expansion - CMP, Land Use Map Amendment  
Scale: 1 inch = 1,000 feet  
PROJECT NUMBER: 196686010

NOVEMBER 2025

FIGURE 2



Folder: K:\COS\_GIS\196393006\_Waterton\_SterlingRanch\PROJ



## Legend

Project Site

### National Wetland Inventory (NWI)

Freshwater Pond

Riverine

### FEMA Flood Zones

1% Annual Chance Flood Hazard

0.2% Annual Chance Flood Hazard

Regulatory Floodway

### National Land Cover Database (NLCD)

Open Water

Developed Open Space

Developed Low Intensity

Developed Medium Intensity

Developed High Intensity

Evergreen Forest

Shrub/Scrub

Grassland/Herbaceous

**Kimley»Horn**

© 2025 Kimley-Horn and Associates, Inc.  
2 N Nevada Ave, Ste 900, Colorado Springs, CO

Phone (719) 453-0180

www.kimley-horn.com

Project File: DR2025-011

## Habitat Characterization Map

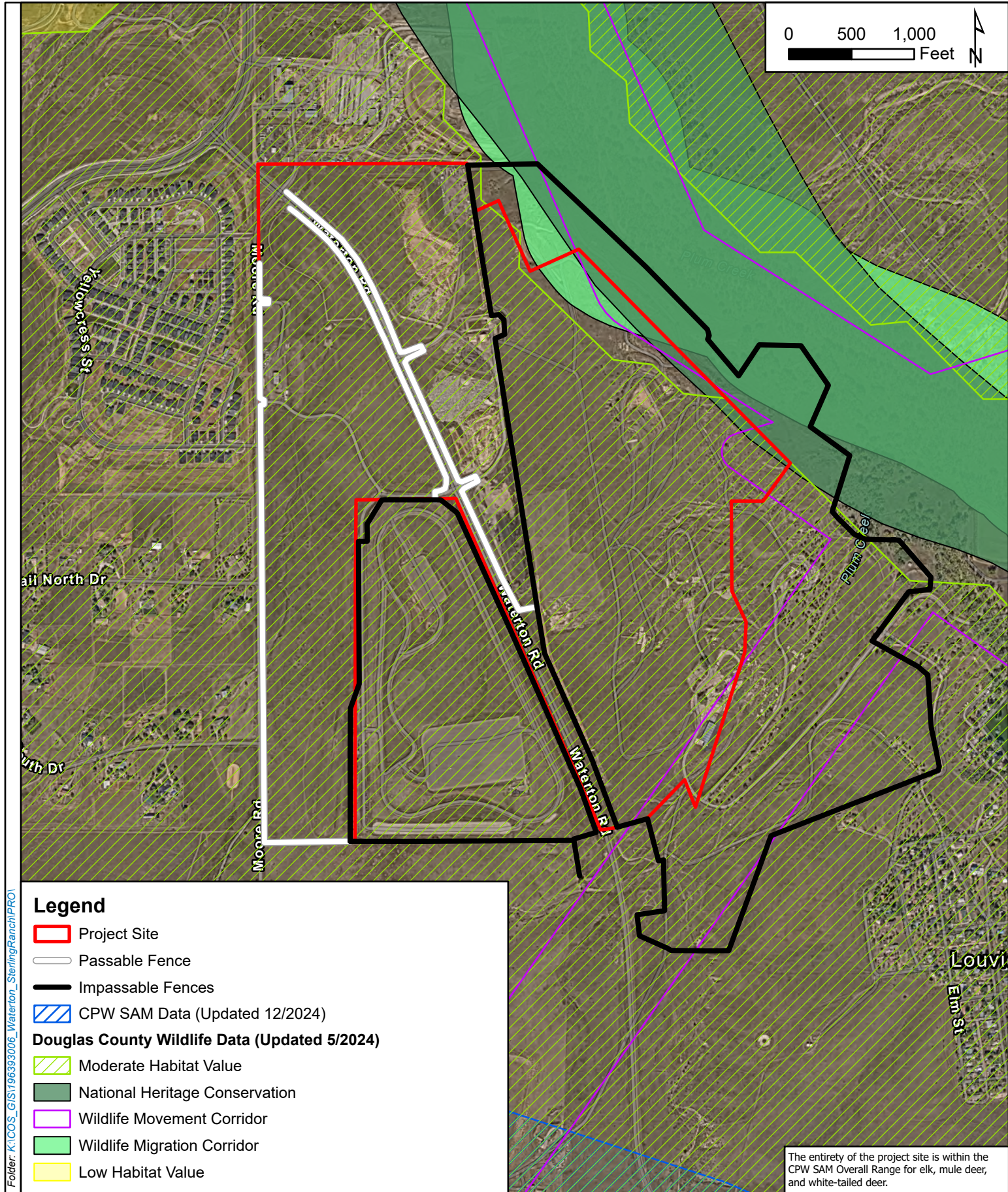
**Waterton Business Park  
Douglas County, Colorado**

Map Scale: 1 inch = 1,000 feet  
PROJECT NUMBER: 196686010

NOVEMBER 2025

FIGURE 3





**Legend**

- Project Site
- Passable Fence
- Impassable Fences
- CPW SAM Data (Updated 12/2024)
- Douglas County Wildlife Data (Updated 5/2024)**
- Moderate Habitat Value
- National Heritage Conservation
- Wildlife Movement Corridor
- Wildlife Migration Corridor
- Low Habitat Value



© 2025 Kimley-Horn and Associates, Inc.  
2 N Nevada Ave, Ste 900, Colorado Springs, CO

Phone (719) 453-0180

www.kimley-horn.com

Project File: DR2025-011

**Species Occurrence Map**

**Waterton Business Park  
Douglas County, Colorado**

Waterton Business Park Expansion - CMP, Land Use Map Amendment  
Scale: 1 inch = 1,000 feet  
PROJECT NUMBER: 196686010

NOVEMBER 2025

FIGURE 4

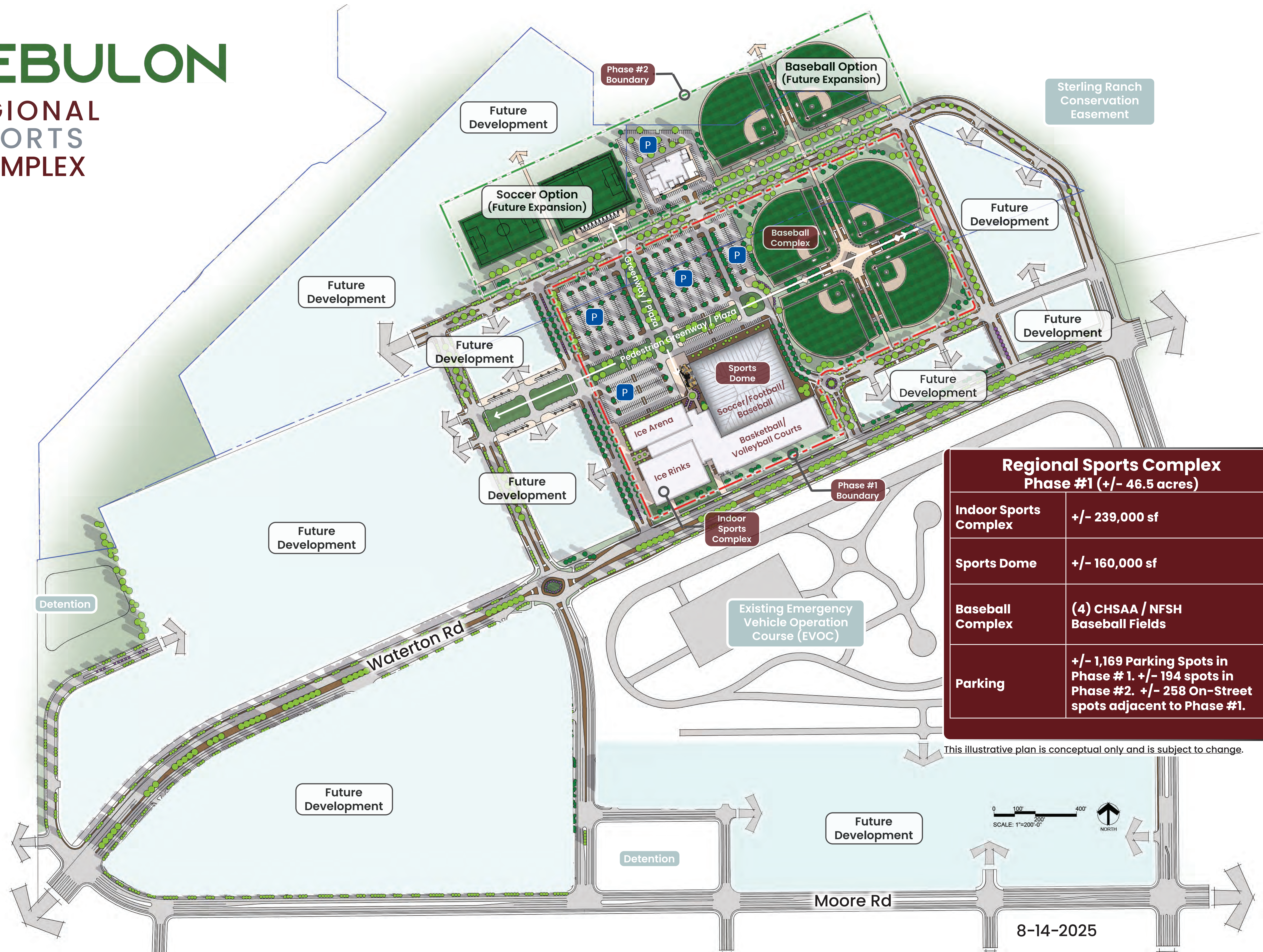


## Appendix A Site Plan



# ZEBULON

## REGIONAL SPORTS COMPLEX





## **Appendix B**

### **Representative Site Photos**

## Site Conditions



**Photo 1 – Northwest Project Extent, Facing North**



**Photo 2 – Northeast Project Extent, Facing South**

### Representative Site Photos – November 7<sup>th</sup>, 2025

#### **Waterton Business Park**

**Douglas County, Colorado**

Chatfield Urban Area Expansion  
Project File: DR2025-011



Site Conditions



Photo 3 – Central Project Extent, Facing West



Photo 4 – East Project Extent, Facing East



## Site Conditions



**Photo 5 – Southwest Project Extent, Facing East**



**Photo 6 – Southeast Project Extent, Facing North**

### Representative Site Photos – November 7<sup>th</sup>, 2025

#### Waterton Business Park

Douglas County, Colorado

Chatfield Urban Area Expansion  
Project File: DR2025-011



## **Appendix C IPAC Report**

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Douglas County, Colorado



Colorado Ecological Services Field Office

☎ (303) 236-4773

 (303) 236-4005

## MAILING ADDRESS

Denver Federal Center  
P.O. Box 25486  
Denver, CO 80225-0486

## PHYSICAL ADDRESS

1 Denver Federal Center  
Bldg 53 Room Fw100}  
Denver, CO 80225-0001



# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

- 1. Draw the project location and click CONTINUE.
- 2. Click DEFINE PROJECT.
- 3. Log in (if directed to do so).
- 4. Provide a name and description for your project.
- 5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

- 1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
- 2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Mammals

NAME	STATUS
Preble's Meadow Jumping Mouse <i>Zapus hudsonius preblei</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/4090">https://ecos.fws.gov/ecp/species/4090</a>	Threatened

## Birds

NAME	STATUS
Piping Plover <i>Charadrius melodus</i> This species only needs to be considered if the following condition applies: <ul style="list-style-type: none"><li>• Project includes water-related activities and/or use in the N. Platte, S. Platte, and Laramie River Basins which may affect listed species in Nebraska.</li></ul> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/6039">https://ecos.fws.gov/ecp/species/6039</a>	Threatened
Whooping Crane <i>Grus americana</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/758">https://ecos.fws.gov/ecp/species/758</a>	Endangered

## Fishes

NAME	STATUS
<p>Pallid Sturgeon <i>Scaphirhynchus albus</i></p> <p>Wherever found</p> <p>This species only needs to be considered if the following condition applies:</p> <ul style="list-style-type: none"><li>• Water use or contamination may adversely affect the species. Within the Platte River basin, depletions may adversely affect the species. These affects must be considered even outside occupied range. See local FWS office for more information.</li></ul> <p>No critical habitat has been designated for this species.</p> <p><a href="https://ecos.fws.gov/ecp/species/7162">https://ecos.fws.gov/ecp/species/7162</a></p>	<p>Endangered</p>

## Insects

NAME	STATUS
<div>Monarch Butterfly <i>Danaus plexippus</i></div> <div>Wherever found</div> <div>There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat.</div> <div><a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a></div>	Proposed Threatened
<div>Suckley's Cuckoo Bumble Bee <i>Bombus suckleyi</i></div> <div>No critical habitat has been designated for this species.</div> <div><a href="https://ecos.fws.gov/ecp/species/10885">https://ecos.fws.gov/ecp/species/10885</a></div>	Proposed Endangered
<div>Western Regal Fritillary <i>Argynnis idalia occidentalis</i></div> <div>Wherever found</div> <div>No critical habitat has been designated for this species.</div>	Proposed Threatened

## Flowering Plants

NAME	STATUS
<div>Ute Ladies'-tresses <i>Spiranthes diluvialis</i></div> <div>Wherever found</div> <div>No critical habitat has been designated for this species.</div> <div><a href="https://ecos.fws.gov/ecp/species/2159">https://ecos.fws.gov/ecp/species/2159</a></div>	Threatened
<div>Western Prairie Fringed Orchid <i>Platanthera praeclara</i></div> <div>Wherever found</div> <div>No critical habitat has been designated for this species.</div> <div><a href="https://ecos.fws.gov/ecp/species/1669">https://ecos.fws.gov/ecp/species/1669</a></div>	Threatened

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

## Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act <sup>2</sup> and the Migratory Bird Treaty Act (MBTA) <sup>1</sup>. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>



- Nationwide avoidance and minimization measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

There are Bald Eagles and/or Golden Eagles in your [project](#) area.

**Measures for Proactively Minimizing Eagle Impacts**

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the [National Bald Eagle Management Guidelines](#). You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

If disturbance or take of eagles cannot be avoided, an [incidental take permit](#) may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the [Do I Need A Permit Tool](#). For assistance making this determination for golden eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

**Ensure Your Eagle List is Accurate and Complete**

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

**Review the FAQs**

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
<div>Bald Eagle <i>Haliaeetus leucocephalus</i></div> <div>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.</div> <div><a href="https://ecos.fws.gov/ecp/species/1626">https://ecos.fws.gov/ecp/species/1626</a></div>	Breeds Oct 15 to Jul 31
<div>Golden Eagle <i>Aquila chrysaetos</i></div> <div>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.</div> <div><a href="https://ecos.fws.gov/ecp/species/1680">https://ecos.fws.gov/ecp/species/1680</a></div>	Breeds Dec 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

**Probability of Presence** (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

**Breeding Season (■)**

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

**Survey Effort (|)**

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

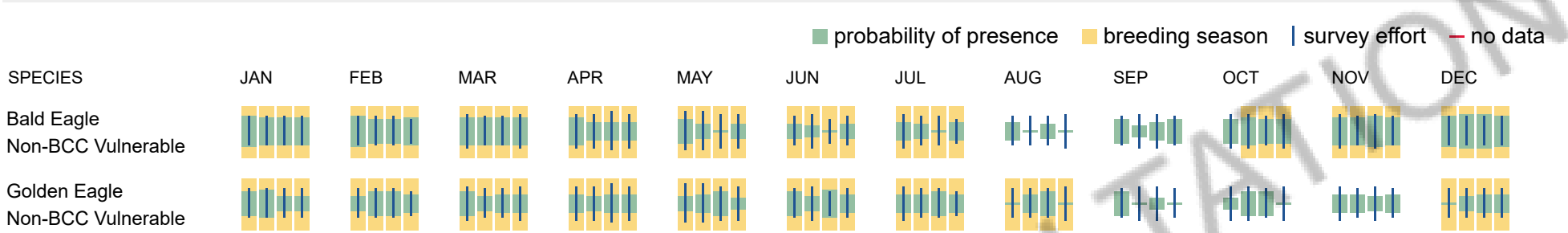
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

**No Data (—)**

A week is marked as having no data if there were no survey events for that week.

**Survey Timeframe**

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Bald & Golden Eagles FAQs

**What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?**

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle ([Bald and Golden Eagle Protection Act](#) requirements may apply).

**Proper interpretation and use of your eagle report**

On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

**How do I know if eagles are breeding, wintering, or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the [RAIL Tool](#) and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

**Interpreting the Probability of Presence Graphs**

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

**How is the probability of presence score calculated? The calculation is done in three steps:**

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

**Breeding Season (■)**

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.



**Survey Effort ( )**

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

**No Data ( )**

A week is marked as having no data if there were no survey events for that week.

**Survey Timeframe**

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

# Migratory birds

The Migratory Bird Treaty Act (MBTA) <sup>1</sup> prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

**Measures for Proactively Minimizing Migratory Bird Impacts**

Your IPaC Migratory Bird list showcases [birds of concern](#), including [Birds of Conservation Concern \(BCC\)](#), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the [Nationwide avoidance and minimization measures for birds](#) document, and any other project-specific avoidance and minimization measures suggested at the link [Measures for avoiding and minimizing impacts to birds](#) for the birds of concern on your list below.

**Ensure Your Migratory Bird List is Accurate and Complete**

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles document](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

**Review the FAQs**

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
<div>Bald Eagle <i>Haliaeetus leucocephalus</i></div> <div>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.</div> <div><a href="https://ecos.fws.gov/ecp/species/1626">https://ecos.fws.gov/ecp/species/1626</a></div>	Breeds Oct 15 to Jul 31
<div>Broad-tailed Hummingbird <i>Selasphorus platycercus</i></div> <div>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</div>	Breeds May 25 to Aug 21
<div>Chestnut-collared Longspur <i>Calcarius ornatus</i></div> <div>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</div>	Breeds May 1 to Aug 10
<div>Chimney Swift <i>Chaetura pelagica</i></div> <div>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</div>	Breeds Mar 15 to Aug 25

<p>Clark's Grebe <i>Aechmophorus clarkii</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Jun 1 to Aug 31
<p>Ferruginous Hawk <i>Buteo regalis</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p> <p><a href="https://ecos.fws.gov/ecp/species/6038">https://ecos.fws.gov/ecp/species/6038</a></p>	Breeds Mar 15 to Aug 15
<p>Golden Eagle <i>Aquila chrysaetos</i></p> <p>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.</p> <p><a href="https://ecos.fws.gov/ecp/species/1680">https://ecos.fws.gov/ecp/species/1680</a></p>	Breeds Dec 1 to Aug 31
<p>Grasshopper Sparrow <i>Ammodramus savannarum perpallidus</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p> <p><a href="https://ecos.fws.gov/ecp/species/8329">https://ecos.fws.gov/ecp/species/8329</a></p>	Breeds Jun 1 to Aug 20
<p>Lesser Yellowlegs <i>Tringa flavipes</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/9679">https://ecos.fws.gov/ecp/species/9679</a></p>	Breeds elsewhere
<p>Lewis's Woodpecker <i>Melanerpes lewis</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/9408">https://ecos.fws.gov/ecp/species/9408</a></p>	Breeds Apr 20 to Sep 30
<p>Long-billed Curlew <i>Numenius americanus</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p> <p><a href="https://ecos.fws.gov/ecp/species/5511">https://ecos.fws.gov/ecp/species/5511</a></p>	Breeds Apr 1 to Jul 31
<p>Long-eared Owl <i>asio otus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/3631">https://ecos.fws.gov/ecp/species/3631</a></p>	Breeds Mar 1 to Jul 15
<p>Northern Harrier <i>Circus hudsonius</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p> <p><a href="https://ecos.fws.gov/ecp/species/8350">https://ecos.fws.gov/ecp/species/8350</a></p>	Breeds Apr 1 to Sep 15
<p>Pectoral Sandpiper <i>Calidris melanotos</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds elsewhere
<p>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 10 to Sep 10
<p>Sprague's Pipit <i>Anthus spragueii</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/8964">https://ecos.fws.gov/ecp/species/8964</a></p>	Breeds elsewhere
<p>Thick-billed Longspur <i>Rhynchophanes mccownii</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 1 to Aug 15
<p>Whimbrel <i>Numenius phaeopus hudsonicus</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds elsewhere



# Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

## Probability of Presence

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

## Breeding Season

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

## Survey Effort

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

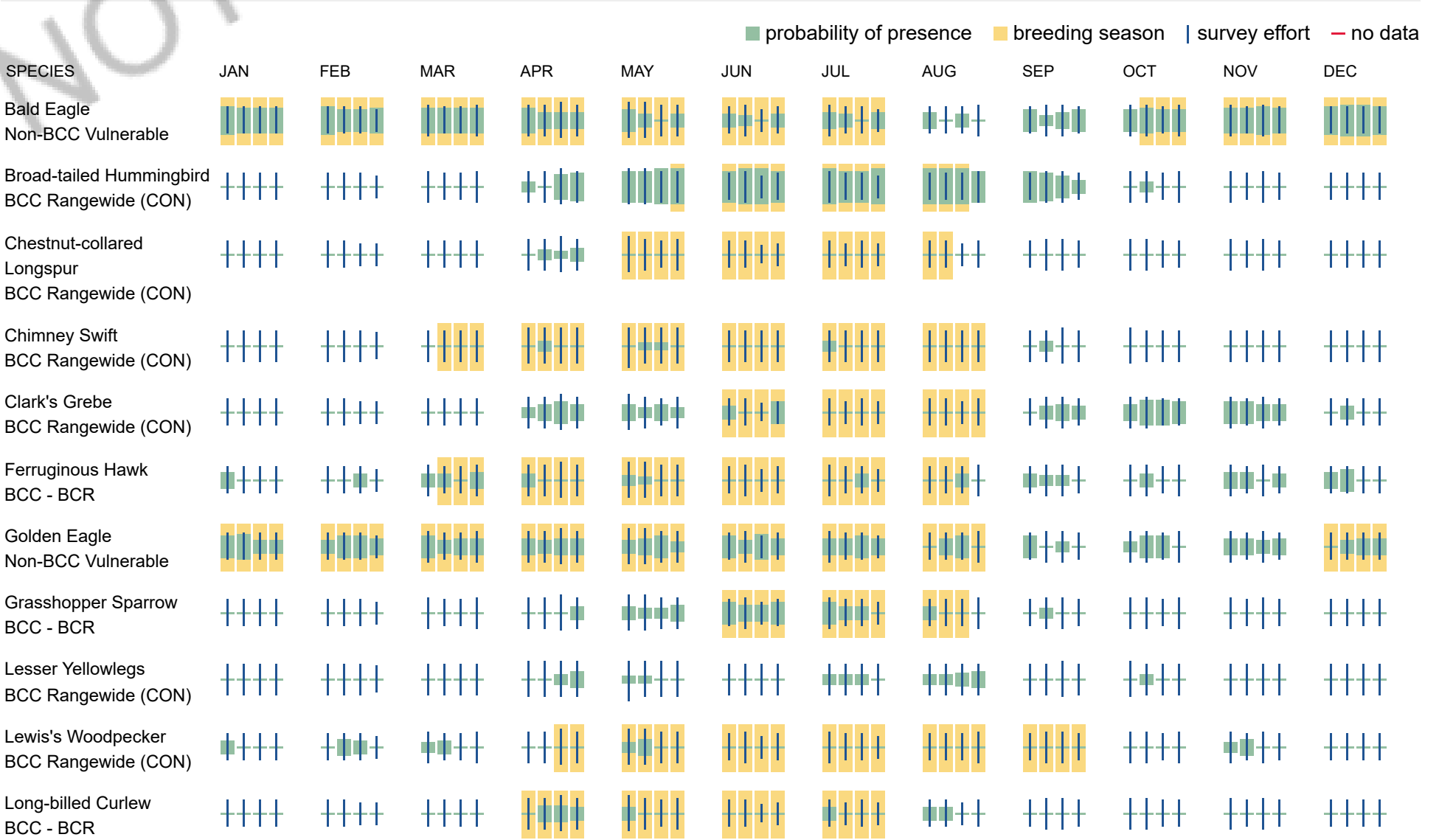
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

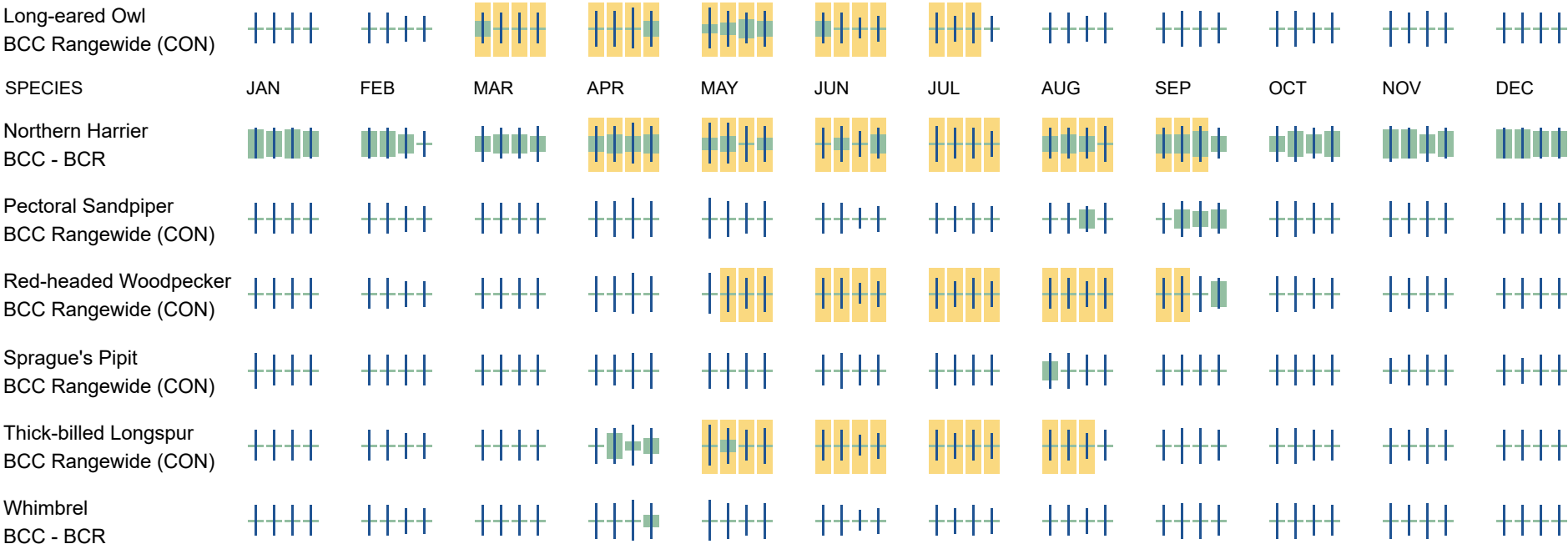
## No Data

A week is marked as having no data if there were no survey events for that week.

## Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Migratory Bird FAQs

Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Avoidance & Minimization Measures for Birds](#) describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the [Bald and Golden Eagle Protection Act](#) and those species marked as "Vulnerable". See the FAQ "What are the levels of concern for migratory birds?" for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle ([Bald and Golden Eagle Protection Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the [RAIL Tool](#) and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

- 1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- 2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
- 3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Bald and Golden Eagle Protection Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).



Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ "Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

#### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

#### Proper interpretation and use of your migratory bird report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

#### Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

#### *How is the probability of presence score calculated? The calculation is done in three steps:*

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

#### Breeding Season ( )

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

#### Survey Effort ( )

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

#### No Data ( )

A week is marked as having no data if there were no survey events for that week.

#### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

### Fish hatcheries

There are no fish hatcheries at this location.

# Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER POND  
[PUBF](#)

RIVERINE  
[R4SBC](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

**NOTE:** This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

**Data limitations**

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

**Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

**Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.



## **Appendix D**

### **CPW Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors**



## **RECOMMENDED BUFFER ZONES AND SEASONAL RESTRICTIONS FOR COLORADO RAPTORS (2020)**

### **OVERVIEW**

Colorado Parks and Wildlife (CPW) is routinely asked for recommendations on ways to avoid and minimize disturbance to nesting, wintering, and resident raptors in Colorado. These guidelines were originally developed by Colorado Division of Wildlife in 2002 and updated in 2008. We recently (2020) undertook a periodic review of our guidelines to ensure that they are the most up to date based on the best available science and professional judgement. Further revisions of this document may become necessary as additional information is published or becomes available.

### **Background on Disturbance**

The term "disturbance" is ambiguous and experts disagree on what actually constitutes a disturbance. Reactions may be as subtle as elevated pulse rate or as obvious as vigorous defense or abandonment of a nest site. Impacts of disturbance may not be immediately evident. A pair of raptors may respond to human intrusion by defending the nest, but well after the disturbance has passed, the male may remain in the vicinity for protection rather than forage to feed the nestlings. Golden eagles rarely defend their nests, but merely fly a half mile or more away and perch and watch. Chilling and overheating of eggs or chicks and starvation of nestlings can result from human activities that appeared not to have caused an immediate response.

Tolerance limits to disturbance vary among as well as within raptor species. As a general rule, Ferruginous Hawks and Golden Eagles respond to human activities at greater distances than do Ospreys and American Kestrels. Some individuals within a species also habituate and tolerate human activity at a proximity that would cause the majority of the group to abandon their nests. Other individuals can become sensitized to repeated encroachment and react at greater distances. The tolerance of a particular pair may change when a mate is replaced with a less tolerant individual and this may cause the pair to react to activities that were previously ignored. Responses will also vary depending upon the reproductive stage. Although the level of stress is the same, the pair may be more secretive during egg laying and incubation and more demonstrative when the chicks hatch. Recognizing that there is individual variability, the buffer areas and seasonal restrictions suggested here reflect an informed opinion that if implemented, should assure that the majority of individuals within a species will continue to occupy the area. Also, in order to allow for individual variability and renesting pairs, CPW recommends seasonal restrictions continue to be implemented until the chicks have fledged. Other factors such as intervening terrain, vegetation screens, and the existing cumulative impacts of activities should also be considered.

A 'holistic' approach is recommended when protecting raptor habitats. While it is important for land managers to focus on protecting nest sites, attention should also focus on defining important foraging areas that support the pair's nesting effort. Hunting habitats of many raptor species are extensive and may necessitate interagency cooperation to assure continued nest occupancy. Unfortunately, basic knowledge of habitat use for individual nesting pairs is often lacking.



## RECOMMENDED BUFFER ZONES AND SEASONAL RESTRICTIONS

CPW recommends consultation with local CPW staff early in the planning phase of project proposals in order to assess and develop site-specific recommendations based on pre-existing conditions (e.g. existing development, topography, vegetation, and line-of-sight to nest). CPW maintains a leadership role with respect to raptor management in Colorado; however it is important to keep in mind that the primary authority for the regulation of take and the ultimate jurisdiction for most of these species rests with the U. S. Fish and Wildlife Service (USFWS) under the Migratory Bird Treaty Act (16 U.S.C. 703-712) and the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c). Therefore, CPW also recommends early consultation with the U.S. Fish and Wildlife Service to comply with the Bald and Golden Eagle Protection Act, the Migratory Bird Treaty Act, and the 2016 U.S. Fish and Wildlife Service Eagle Permits Rules as applicable (USFWS 2016).

### **BALD EAGLE**

**Nest Site:** No Surface Occupancy (NSO) beyond that which historically occurred, within ¼ mile (1320 feet, 400 meters) radius of active nests. No permitted, authorized, or human encroachment activities within ½ mile (2640 feet, 800 meters) radius of active nest sites from December 1 through July 31. The majority of bald eagle chicks in Colorado have fledged by July 31; however, for late-nesting or potential re-nesting bald eagles, CPW recommends seasonal restrictions beyond July 31 if chicks are still present in the nest. CPW's recommended buffer is more extensive than the National Bald Eagle Management Guidelines (USFWS 2007) due to the generally open habitat used by Colorado's nesting bald eagles.

If surface occupancy cannot be avoided within ¼ mile of the nest AND the nest is located within a Highly Developed Area, then the recommended NSO extends ⅓ mile (660 feet, 200 meters) from the nest site. No permitted, authorized, or human encroachment activities within ¼ mile radius of active nests from December 1 through July 31. This buffer recommendation matches the USFWS 2007 Guidelines in the instances where eagles have demonstrated the ability to tolerate previous levels of human encroachment and surface occupancy.

**Winter Night Roost and/or Communal Roost:** No permitted, authorized, or human encroachment activities within ¼ mile (1320 feet, 400 meters) radius of an active night and/or communal roost from November 15 through March 15 if there is no direct line of sight between the roost and the activity. No permitted, authorized, or human encroachment activities within ½ mile (2640 feet, 800 meters) radius of an active night or communal roost from November 15 through March 15 if there is a direct line of sight between the roost and the activity.

If an active winter night roost is located within a Highly Developed Area, then no permitted, authorized, or human encroachment activities within ⅓ mile (660 feet, 200 meters) radius from November 15 through March 15 if there is no direct line of sight between the roost and the activity. No permitted, authorized, or human encroachment activities within ¼ mile (1320 feet, 400 meters) radius from November 15 through March 15 if there is a direct line of sight between the roost and the activity. Note: Communal roosts are relatively rare in Colorado and have disproportionately high biological value. Therefore a reduced buffer within a Highly Developed Area does not apply to communal roosts.

If periodic visits (such as oil well maintenance work) to preexisting facilities are required within the buffer zones described above, activity should be restricted to the period between 1000 and 1400 hours from November 15 to March 15.

### **GOLDEN EAGLE**

**Nest Site:** No surface occupancy (beyond that which historically occurred in the area) within ¼ mile (1320 feet, 400 meters) radius of active nests. No permitted, authorized, or human encroachment activities within ½ mile (2640 feet, 800 meters) radius of active nests from December 15 through July 15.

### **FERRUGINOUS HAWK**

**Nest Site:** No surface occupancy (beyond that which historically occurred in the area) within ½ mile (2640 feet, 800 meters) radius of active nests. No permitted, authorized, or human encroachment activities within ½ mile (2640 feet, 800 meters) radius of active nests from February 1 through July 15. This species is especially prone to nest abandonment during incubation if disturbed.

### **RED-TAILED HAWK**

**Nest Site:** No surface occupancy (beyond that which historically occurred in the area) within ⅓ mile radius of active nests. No permitted, authorized, or human encroachment activities within ⅓ mile radius of active nests from February 15 through July 15. Some individuals of this species have adapted to urbanization and may exhibit a high tolerance to human habitation and activities within 100 yards of their nest. Development that encroaches on rural nest sites is more likely to cause abandonment.

### **SWAINSON'S HAWK**

**Nest Site:** No surface occupancy (beyond that which historically occurred in the area) within ¼ mile (1320 feet, 400 meters) radius of active nests. No permitted, authorized, or human encroachment activities within ¼ mile (1320 feet, 400 meters) radius of active nests from April 1 through July 31. Some members of this species have adapted to urbanization and may tolerate human habitation to within 100 yards of their nest.

### **PEREGRINE FALCON**

**Nest Site:** No surface occupancy (beyond that which historically occurred in the area) within ½ mile (2640 feet, 800 meters) radius of active nests. No permitted, authorized, or human encroachment activities within ½ mile (2640 feet, 800 meters) mile of the nest cliff(s) from March 15 to July 31. Due to propensity to relocate nest sites, sometimes up to ½ mile (2640 feet, 800 meters) along cliff faces, it is more appropriate to designate 'Nesting Areas' that encompass the cliff system and a ½ mile (2640 feet, 800 meters) buffer around the cliff complex.

### **PRAIRIE FALCON**

**Nest Site:** No surface occupancy (beyond that which historically occurred in the area) within ½ mile (2640 feet, 800 meters) radius of active nests. No permitted, authorized, or human encroachment activities within ½ mile (2640 feet, 800 meters) radius of active nests from March 15 through July 15.

### **NORTHERN GOSHAWK**

**Nest Site:** No surface occupancy (beyond that which historically occurred in the area) within ½ mile (2640 feet, 800 meters) radius of active nests. No permitted, authorized, or human encroachment activities within ½ mile (2640 feet, 800 meters) radius of active nests from March 1 through September 15.

### **OSPREY**

**Nest Site:** No surface occupancy (beyond that which historically occurred in the area) within ¼ mile (1320 feet, 400 meters) radius of active nests. No permitted, authorized, or human encroachment activities within ¼ mile



(1320 feet, 400 meters) radius of active nests from March 15 through August 15. Some osprey populations have habituated and are tolerant to human activity in the immediate vicinity of their nests.

### **MEXICAN SPOTTED OWL**

No surface occupancy (beyond that which historically occurred in the area) within USFWS designated Critical Habitat and within Protected Activity Center (PAC). No permitted, authorized, or human encroachment activities within ½ mile (2640 feet, 800m) buffer of Protected Activity Center from March 1 through August 31.

### **BURROWING OWL**

**Nest Site:** No permitted, authorized, or human encroachment activities within ⅛ mile (660 feet, 200 meters) of the nest site during the nesting season March 15 through August 31. For large industrial disturbances (drilling rig, residential construction, etc.), no permitted, authorized, or human encroachment activities within ¼ mile (1320 feet, 400 meters) of the nest site during the nesting season March 15 through August 31. Although Burrowing Owls may not be actively nesting during this entire period, they may be present at burrows up to a month before egg laying and several months after young have fledged. Therefore, it is recommended that efforts to eradicate prairie dogs or destroy abandoned towns not occur between March 15 and October 31 when owls may be present. Because nesting Burrowing Owls may not be easily visible, it is recommended that targeted surveys be implemented to determine if burrows are occupied. More detailed recommendations are available in a document entitled “Recommended Survey Protocol and Actions to Protect Nesting Burrowing Owls,” which is available from the CPW.

## **DEFINITIONS**

**Active nest** – Any nest that is frequented or occupied by a raptor during the breeding season, or which has been occupied in any of the five previous breeding seasons. Many raptors use alternate nests in various years. Thus, a nest site may be active even if a particular structure is not occupied in a given year.

**Winter night roost and/or communal roost** – Areas where bald eagles and sometimes golden eagles perch overnight or gather to perch or forage. Individuals, pairs, and groups of eagles demonstrate site fidelity to winter night roosts and communal roosts throughout the winter season and year after year. Communal roost sites have more than 15 eagles for the majority of the roosting season and are usually in large trees (live or dead) that are relatively sheltered from wind and are generally in close proximity to foraging areas. Winter night roost and communal roosts may also serve a social purpose for pair bond formation and communication among eagles.

**Permitted, authorized, or human encroachment activities-** Any activity that brings humans in the area. Examples include construction activities, oil and gas development and production, driving, facilities maintenance, boating, trail access (e.g., hiking, biking), etc.

**Surface Occupancy** – Any physical object that is intended to remain on the landscape permanently or for a significant amount of time. Examples include houses, oil and gas wells, tanks, wind turbines, solar developments, roads, tracks, trails, etc.

**Highly Developed Area** – An area where existing density from the cumulative development of oil and gas facilities, home sites, subdivisions, commercial buildings, malls, apartment complexes, gravel pit operations, etc. exceed 10 or more daily occupied facilities within a ¼ mile (1320 feet, 400 meters) radius of the nest. Determination of whether or not a nest site is within a highly developed area will be done in consultation with CPW.

**Mexican Spotted Owl Critical Habitat** – Critical habitat is defined as areas of land and water with physical and biological features that are essential to the conservation of a threatened or endangered species, and that may require special management considerations or protection. Defined by U.S. FWS Final Rule 2004.

**Mexican Spotted Owl Protected Activity Center (PAC)** – An area established around an owl nest (or sometimes roost) site, for the purpose of protecting that area. Management of these areas is largely restricted to managing for forest-health objectives.

## CONTACT

For further information contact:

Liza Rossi  
Bird Conservation Coordinator  
Colorado Parks and Wildlife  
925 Weiss Drive  
Steamboat Springs, CO 80487  
Phone: 970-871-2861  
Email: [liza.rossi@state.co.us](mailto:liza.rossi@state.co.us)

## REFERENCES

- Bechard, M.J., and J.K. Schmutz. 1995. Ferruginous Hawk (*Buteo regalis*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/172>
- Buehler, D.A. 2000. Bald Eagle (*Haliaeetus leucocephalus*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/506>
- Call, M. 1979. Habitat management guides for birds of prey. Technical Note No.338, U.S. Bureau of Land Management, Denver Service Center, Denver, CO. 69pp. Energy Research and Development Administration (ERDA). 1977. EIA for CUI Venture application for geothermal loan guarantee (Beryl and Lund, Utah). EIA/GE/77-8. Washington, D.C. 109pp.
- England, A.S., M.J. Bechard, and C.S. Houston. 1997. Swainson's Hawk (*Buteo swainsoni*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/265>
- Greater Yellowstone Bald Eagle Working Group. 1996. Greater Yellowstone bald eagle management plan: 1995 update. Greater Yellowstone Bald Eagle Working Group, Wyoming Game & Fish Dept., Lander WY 82520. 47pp.
- Grier, J.W., F.J. Gramlich, J. Mattisson, J.E. Mathisen, J.V. Kussman, J.B. Elder, and N.F. Green. 1983. The bald eagle in the northern United States. Bird Cons. 144-66.



- Haug, E.A., B.A. Millsap, and M.S. Martell. 1993. Burrowing Owl (*Athene cunicularia*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/061>
- Holmes, Tamara L. 1993. Behavioral responses of grassland raptors to human disturbance. MS Thesis. Colorado State University, Fort Collins. 62pp.
- Holthuijzen, A.M.A., W.G. Eastland, A.R. Ansell, M.N. Kochert, R.D. Williams, and L.S. Young. 1990. Effects of blasting on behavior and productivity of nesting prairie falcons. Wildl. Soc. Bull. 18:270-281.
- Kochert, M. N., K. Steenhof, C. L. McIntyre, and E. H. Craig. 2002. Golden Eagle (*Aquila chrysaetos*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/684>
- Martin, D.J. 1973. Selected aspects of burrowing owl ecology and behavior. Condor 75:446-456.
- Northern States Bald Eagle Recovery Team. 1983. Northern States Bald Eagle Recovery Plan. U.S. Fish and Wildlife Service. 75pp.
- Olendorff, R. R., and W.D. Zeedyk. 1978. Land management for the conservation of endangered birds. Pages 419-428 in S.A. Temple, ed. *Endangered birds*. University of Wisconsin Press, Madison, Wisconsin.
- Poole, A.F., R.O. Bierregaard, and M.S. Martell. 2002. Osprey (*Pandion haliaetus*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/683>
- Preston, C.R., and R.D. Beane. 1993. Red-tailed Hawk (*Buteo jamaicensis*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/052>
- Reynolds, R., R.T. Graham, H.M. Reiser. 1992. Management recommendations for the northern goshawk in the southwestern United States. Gen. Tech. Rep. RM-217. Fort Collins, CO. U.S. Dept. of Agri., Forest Service, Rocky Mountain Forest and Range Experiment Station. 90pp.
- Richardson, C.T. and C.K. Miller. 1997. Recommendations for protecting raptors from human disturbance: a review. Wildl. Soc. Bull. 25(3):634-638.
- Rocky Mountain/Southwest Peregrine Falcon Recovery Team. 1984. American peregrine falcon Rocky /Southwest population recovery plan. U.S. Fish and Wildlife Serv. 105pp.
- Squires, J.R., S.H. Anderson, and R. Oakleaf. 1993. Home range size and habitat-use patterns of nesting prairie falcons near oil developments in northeastern Wyoming. J. Field Ornithol. 64:1-10.

- Steenhof, Karen. 1998. Prairie Falcon (*Falco mexicanus*), The Birds of North America Online Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/346>
- Squires, J.R., and R.T. Reynolds. 1997. Northern Goshawk (*Accipiter gentilis*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/298>
- Suter, G.W. and J.L. Joness. 1981. Criteria for Golden Eagle, Ferruginous Hawk, and Prairie Falcon nest site protection. J. Raptor Res. 15(1):12-18.
- Swenson, J.E. 1979. Factors affecting status and reproduction of ospreys in Yellowstone National Park. J. Wildl. Manage. 43:595-601.
- Thomsen, L. 1971. Behavior and ecology of burrowing owls on the Oakland Municipal Airport. Condor 73:177-192.
- U.S. Fish and Wildlife Service. 2004. Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for the Mexican Spotted Owl. 50 CFR Part 17. Federal Register Vol. 69, No. 168 August 31, 2004.
- U.S. Fish and Wildlife Service. 2007. National Bald Eagle Management Guidelines. <http://www.fws.gov/migratorybirds/issues/BaldEagle/NationalBaldEagleManagementGuidelines.pdf>
- U.S. Fish and Wildlife Service. 2012. Final Recovery Plan for the Mexican Spotted Owl (*Strix occidentalis lucida*), First Revision. U.S. Fish and Wildlife Service, Albuquerque, New Mexico, USA. 413 pp.
- U.S. Fish and Wildlife Service. 2016. Eagle Permits; Revisions to Regulations for Eagle Incidental Take and Take of Eagle Nests. 50 CFR Parts 13 and 22. Federal Register Vol. 81 No. 242, December 16, 2016.
- White, C.M., N.J. Clum, T.J. Cade, and W.G. Hunt. 2002. Peregrine Falcon (*Falco peregrinus*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/660>





**Recommended Buffer Zones and Seasonal Restrictions Around Raptor Use Sites**

Species and Use	Buffer	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Bald Eagle</b>													
ACTIVE NEST - No Surface Occupancy	¼ Mile												
ACTIVE NEST - No Human Encroachment	½ Mile												
ACTIVE NEST HIGHLY DEVELOPED AREA - No Surface Occupancy	⅛ Mile												
ACTIVE NEST HIGHLY DEVELOPED AREA - No Human Encroachment	¼ Mile												
ACTIVE WINTER NIGHT ROOST without a direct line of sight- No Human Encroachment	¼ Mile												
ACTIVE WINTER NIGHT ROOST with a direct line of sight - No Human Encroachment	½ Mile												

Species and Use	Buffer	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Golden Eagle</b>													
ACTIVE NEST - No Surface Occupancy	¼ Mile												
ACTIVE NEST - No Human Encroachment	½ Mile												
<b>Osprey</b>													
ACTIVE NEST - No Surface Occupancy	¼ Mile												
ACTIVE NEST - No Human Encroachment	¼ Mile												
<b>Ferruginous Hawk</b>													
ACTIVE NEST - No Surface Occupancy	½ Mile												
ACTIVE NEST - No Human Encroachment	½ Mile												
<b>Red-tailed Hawk</b>													
ACTIVE NEST - No Surface Occupancy	⅓ Mile												
ACTIVE NEST - No Human Encroachment	⅓ Mile												
<b>Swainson's Hawk</b>													
ACTIVE NEST - No Surface Occupancy	¼ Mile												
ACTIVE NEST - No Human Encroachment	¼ Mile												



Species and Use	Buffer	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Peregrine Falcon</b>													
ACTIVE NEST - No Surface Occupancy	½ Mile												
ACTIVE NEST - No Human Encroachment	½ Mile												
<b>Prairie Falcon</b>													
ACTIVE NEST - No Surface Occupancy	½ Mile												
ACTIVE NEST - No Human Encroachment	½ Mile												
<b>Northern Goshawk</b>													
ACTIVE NEST - No Surface Occupancy	½ Mile												
ACTIVE NEST - No Human Encroachment	½ Mile												
<b>Burrowing Owl</b>													
ACTIVE NEST - No Human Encroachment	⅛ Mile												
ACTIVE NEST INDUSTRIAL ACTIVITIES - No Human Encroachment	¼ Mile												
Recommend against prairie-dog eradication or conduct surveys													

Species and Use	Buffer	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Mexican Spotted Owl</b>													
Critical Habitat and Protected Activity Center (PAC) - No Surface Occupancy													
Critical Habitat and Protected Activity Center (PAC) - No Human Encroachment	½ Mile												
		= time period for which seasonal restrictions are in place.											



## MEMORANDUM

**To:** Douglas County Development Review  
**From:** Cassie Slade, PE, PTOE  
**Date:** November 25, 2024  
**Project:** Waterton Business Park (Chemours Property)  
**Subject:** Transportation Review

---

The Sterling Ranch Development Group is proposing to change the Douglas County Comprehensive Plan to include the Chemours Property within the Chatfield Urban Area. The project is currently being referred to as the Waterton Business Park. The subject property is located on both sides of Waterton Road (Southern Connector) east of Moore Road (South) and is included in the Louviers Rural Community boundary. It is understood that there are no current concept plans for the types of land uses that will be planned for the site. It is envisioned that the site will complement the Sterling Ranch development with additional residents and/or employment opportunities.

### Executive Summary

The Waterton Business Park includes approximately 225 acres of developable land. The Douglas County's *2040 TMP* identified the property to be within TAZ #2352 which included up to two (2) households and 585 employees by Year 2040. It is understood that historically the site was thought to become heavy industrial facilities or Douglas County light industrial uses. At this time, the land uses, sizes, and mix have not been determined for the Waterton Business Park. Four scenarios of development were evaluated for this analysis to understand the potential impact on the future transportation network.

Based on the forecasts in the current *Sterling Ranch Master Traffic Study (MTS)* (December 2019) and the roadway capacity thresholds set forth by Douglas County's *2040 Transportation Master*

November 25, 2024

---

Plan (TMP), it was estimated that there will be approximately 11,300 vehicles per day (vpd) of available roadway capacity on external roadways in Year 2040 (full buildout of Chatfield Basin per the MTS). This includes Titan Road, Waterton Road, Airport Road, and Wadsworth Boulevard.

The trip generation estimates indicated the potential development options for the Waterton Business Park would increase the daily volumes of the property between 1,300 vpd and 5,615 vpd, which is a maximum increase of approximately 4% of the daily volumes traveling externally to/from the Chatfield Basin. Based on MTS assumptions for trip distribution, it was determined that the development options will generate up to 4,740 vpd that are external to the Chatfield Basin. Comparing the estimated trips to the available roadway capacity, it was determined that there is sufficient roadway capacity throughout the Chatfield Basin to accommodate the Waterton Business Park.

This traffic analysis provides the calculations for future roadway capacity, trip generation, trip assignment, and discusses the transportation assumptions for the Waterton Business Park. Additional evaluation will be necessary in the next stages of the development process with a defined site plan and focus on intersection capacity throughout the area.

## **Roadway Network**

The current and planned future network in the Chatfield Basin will provide access to the Waterton Business Park. It is anticipated that primary access to the site will be provided on Moore Road (South) and Waterton Road (Southern Connector). Moore Road (South) is currently a two-lane rural collector that serves the Plum Valley Heights neighborhood, Zuma Horse Rescue, a small mining business, and the Douglas County Emergency Vehicle Operations Center (EVOC). Waterton Road (Southern Connector) is a two-lane collector roadway that connects the Chatfield Basin to Louviers and US 85 (Santa Fe Drive) at Airport Road.

The existing and future transportation network that is anticipated to support the Waterton Business Park includes the following roadways:

- **Waterton Road** is a two- to four-lane minor arterial roadway that provides access from the Chatfield Basin and Roxborough Park area to areas west, north, and south of Sterling Ranch. Waterton Road extends from Wadsworth Boulevard to Moore Road and then to US 85 (Santa Fe Drive) at Airport Road. There are portions of Waterton Road that provide one lane per direction and other sections that provide two lanes per direction. In the future, Waterton Road is planned to be a four-lane roadway from Wadsworth Boulevard to Moore Road.



November 25, 2024

- 
- **Titan Road** is a two- to four-lane minor arterial extending west from Titan Parkway to Rampart Range Road. From Santa Fe Drive (US 85) to Taylor River Circle, this roadway is four lanes wide (two lanes per direction) and then narrows to a two-lane roadway west of Taylor River Circle. Titan Road changes to Rampart Range Road as the roadway curves to become oriented north/south. Combined with Titan Parkway, this roadway provides east-west access through the Chatfield Basin with direct access to existing commercial, residential, agricultural, and public uses. In the long-term future, it is planned that Titan Road will be four-lanes from Rampart Range Road to Moore Road (North) and widened to six lanes from Moore Road (North) to US 85 (Santa Fe Drive).
  - **Moore Road** is a two-lane collector roadway that provides north-south access to existing commercial, industrial, and residential uses immediately north of the project site, extending from Titan Road to a terminus 2.5 miles to the south. The construction of Waterton Road and the Southern Connector have disconnected Moore Road near the Lawrence Construction property. Hence the references to the North and South portions of Moore Road. Moore Road (North) directly connects to Waterton Road for east-west travel. Moore Road (South) intersections with the Southern Connector portion of Waterton Road. In the near future, Moore Road (North) will be widened to four lanes between Waterton Road and Titan Road.
  - **Wadsworth Boulevard (State Highway 121)** is a four-lane arterial roadway that provides access to the north and west of the Chatfield Basin, connecting Waterton Road to C-470 and into Littleton.

As additional development occurs in the Chatfield Basin, improvements will be made in partnership by developers and Douglas County to accommodate future growth, ensure acceptable operational performance, and provide safe routes for all roadway users.

Figure 3 of the MTS (also attached to this memo) provides the planned roadway classification and number of lanes throughout the Chatfield Basin. Figure 12 of the MTS (also attached to this memo) provides the future lane configurations along the roadways and at key intersections to accommodate the full development of the Chatfield Basin.

## **Future Roadway Volume and Available Capacity**

The determination of lanes is based on the estimated trips associated with the buildout of Sterling Ranch and background growth, including the completion of Solstice and other known developments in the area, plus an annual growth rate of 0.3% to accommodate for unknown

November 25, 2024

developments or traffic changes in the area. The annual growth rate likely accounts for a portion of traffic associated with the Chemours Property but may not be inclusive of the entirety of this potential new development project that was not previously defined at the time of the MTS. Daily volumes per roadway segment are shown on Figure 9 of the MTS (also attached to this memo).

Utilizing the current *Sterling Ranch Master Traffic Study (MTS)* (December 2019), the forecasted daily volumes were compared to the thresholds set forth by Douglas County’s *2040 Transportation Master Plan (TMP)* (September 2019, Table 4, page 19). The roadway volume thresholds are guidelines on the anticipated level of traffic that would trigger the need to increase roadway and/or intersection capacity (i.e. turn lanes, through lanes, change in traffic control). The purpose of this traffic analysis is to determine if there is available roadway capacity for the inclusion of the potential development of the Chemours Property on the planned transportation network.

**Table 1** summarizes the volume thresholds listed in Douglas County’s *2040 TMP*.

*Table 1. Roadway Capacity Comparison*

Roadway Type and Lanes	Douglas County Transportation Master Plan
Major Collector “Avenue”	
2-lane	12,000
4-lane	20,000
Major Arterial “Boulevard”	
4-lane	40,000
6-lane	55,000

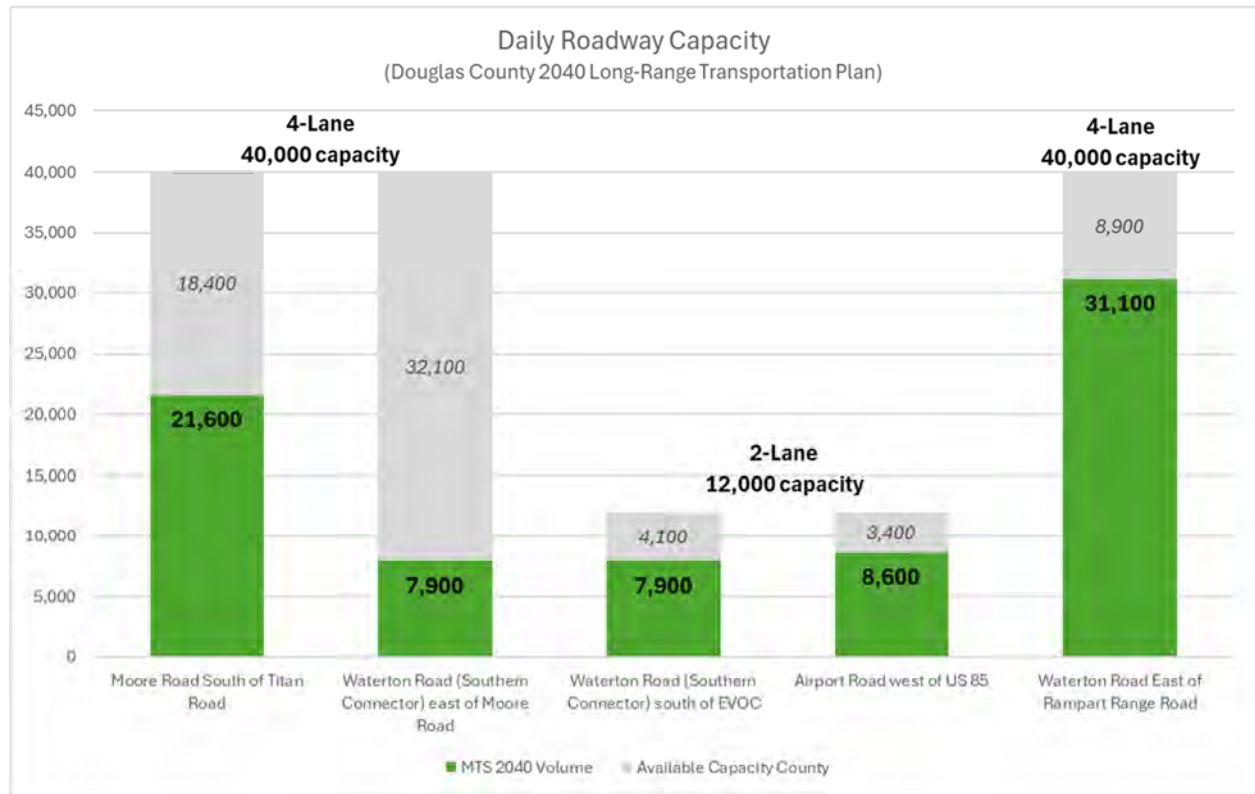
***Capacity Based on Douglas County’s Transportation Master Plan (TMP)***

**Graph 1** illustrates the Year 2040 volumes from the MTS, roadway capacity threshold, and available capacity per roadway. **Graph 1** shows there is available capacity on Moore Road, Waterton Road, and Airport Road.



**Sterling Ranch: Waterton Business Park  
Traffic Memorandum**

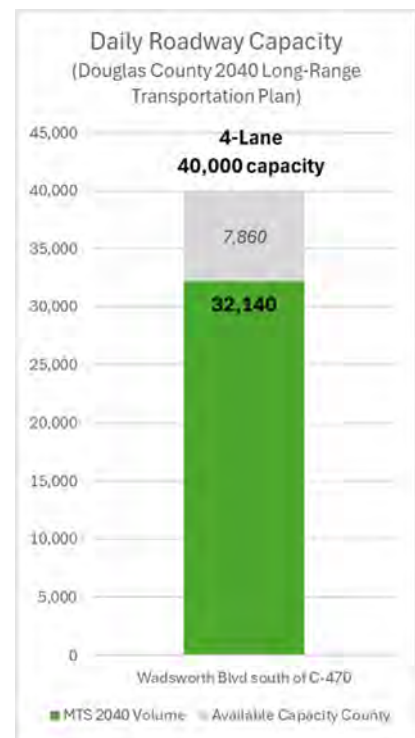
November 25, 2024



**Graph 1. Capacity Availability per Douglas County's TMP – Moore Road, Waterton Road, Airport Road**

An additional roadway for the Chatfield Basin's that provides capacity is Wadsworth Boulevard. This arterial is currently two lanes per direction and Jefferson County's Countywide Transportation Plan (1998 with 2002 and 2014 addendums) does not indicate widening in the future. Based on CDOT data, Wadsworth Boulevard south of C-470 services approximately 29,530 vehicles per day (Year 2023). CDOT data indicated that this arterial has an average 20-year factor of 1.11, which equates to an annual growth rate of 0.5%. Forecasting the existing daily volume to Year 2040, it was calculated that Wadsworth Boulevard will service approximately 32,140 vpd. There is available capacity in the future on Wadsworth Boulevard as shown on **Graph 2**.

Per the approved MTS, Titan Road east of Moore Road to US 85 (Santa Fe Drive) was projected to exceed the County's volume threshold for a six-lane road with the buildout of the Chatfield



**Graph 2. Roadway Capacity of Wadsworth Boulevard**

November 25, 2024

---

Basin by approximately 4,400 vpd. However, the capacity analysis in the MTS for intersections within this segment of Titan Road indicated that each intersection would operate overall at LOS C or better in both peak hours in Year 2040 with a six-lane cross-section and the appropriate auxiliary lanes or alternative interchange design.

Overall, the roadways that lead into and out of the Chatfield Basin, including Sterling Ranch, have available capacity. Titan Road east of Moore Road was shown to exceed the roadway capacity in the MTS and additional future volumes will continue to be over the 55,000 vehicles per day capacity set for six-lane roadways. Note that the thresholds are theoretical limits that a roadway can accommodate and does not take into account for the performance of intersections.

## **Land Use and Trip Generation**

The Waterton Business Park includes approximately 225 acres of developable land. The property currently lies in the Louviers Rural Community, but the Comprehensive Plan Amendment proposes to include the Waterton Business Park into the Chatfield Urban Area.

The Douglas County's 2040 TMP identified the property to be within TAZ #2352 which included up to two (2) households and 585 employees by Year 2040. It is understood that historically the site was thought to become heavy industrial facilities or Douglas County light industrial uses.

A trip generation estimate was performed to determine the trips associated with the TMP assumptions and with four scenarios of development if the Comprehensive Plan Amendment were successful. Note that these scenarios are subject to change and are preliminary assumptions for the purpose of this traffic memorandum.

The trip rates contained in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*<sup>1</sup> were utilized to estimate the trip volumes associated with the Waterton Business Park. **Table 2** provides daily and peak hour trip volumes for four scenarios. The values for households and employment provided in the TMP for TAZ #2352 were utilized to understand the forecasted trips within the TMP models. For potential development scenarios, the acreage was utilized to determine possible density that could be constructed on the land if it were within the Chatfield Urban Area. The housing options were assumed to be at a density between nine (9) units per acre and 18 units per acre. For industrial land uses, it was assumed that the floor area ratio (FAR) will be 0.26.

---

<sup>1</sup> Trip Generation 11<sup>th</sup> Edition, Institute of Transportation Engineers, 2021.

---



**Sterling Ranch: Waterton Business Park**  
**Traffic Memorandum**

November 25, 2024

As shown in **Table 2**, the estimated daily and peak hour trip volumes increase with the change in area and potential land use scenarios when compared to the TMP models. The increase in daily volumes is anticipated to be between 1,300 and 5,600 vehicles per day. The difference in the AM peak hour is between -90 and 424 vehicles per hour. The difference in the PM peak hour is between 47 and 542 vehicles per hour.

**Table 2. Trip Generation Comparison**

Land Use	Size	Unit	Non-Auto Factor <sup>(1)</sup>	Average Daily Trips				AM Peak Hour Trips				PM Peak Hour Trips			
				Rate	Total	In	Out	Rate	Total	In	Out	Rate	Total	In	Out
Douglas County Transportation Master Plan Assumptions for TAZ #2352 - Industrial															
ITE 210 - Single-Family Detached Housing	2	Dwelling Units	0.95	9.43	18	9	9	0.70	1	0	1	0.94	2	1	1
ITE 110 - General Light Industrial	585	employees	1.00	3.10	1,814	907	907	0.53	310	257	53	0.49	287	63	224
Total for TMP Assumptions					1,832	916	916		311	257	54		289	64	225
Douglas County Transportation Master Plan Assumptions for TAZ #2352 - Office															
ITE 210 - Single-Family Detached Housing	2	Dwelling Units	0.95	9.43	18	9	9	0.70	1	0	1	0.94	2	1	1
ITE 710 - General Office Building	293	employees	0.95	3.33	927	464	463	0.49	136	120	16	0.45	125	21	104
ITE 730 - Government Office Building	292	employees	0.95	7.45	2,067	1,034	1,033	1.10	305	229	76	0.71	197	39	158
Total for TMP Assumptions					3,012	1,507	1,505		442	349	93		324	61	263
Potential Option 1 - High Density Residential															
ITE 221 - Multifamily Housing (Mid-Rise)	2,000	Dwelling Units	0.95	4.54	8,626	4,313	4,313	0.37	703	162	541	0.39	741	452	289
Difference Compare to TMP					5,614	2,806	2,808		261	-187	448		417	391	26
Potential Option 2 - Medium Density Residential															
ITE 221 - Multifamily Housing (Mid-Rise)	1,000	Dwelling Units	0.95	4.54	4,313	2,157	2,156	0.37	352	81	271	0.39	371	226	145
Difference Compare to TMP					1,301	650	651		-90	-268	178		47	165	-118
Potential Option 3 - Industrial															
ITE 130 - Industrial Park (assumed FAR of 0.26)	2,548	ksf	1.00	3.37	8,588	4,294	4,294	0.34	866	701	165	0.34	866	191	675
Difference Compare to TMP					5,576	2,787	2,789		424	352	72		542	130	412
Potential Option 4 - Mix of Residential and Industrial															
ITE 221 - Multifamily Housing (Mid-Rise)	1,000	Dwelling Units	0.95	4.54	4,313	2,157	2,156	0.37	352	81	271	0.39	371	226	145
ITE 130 - Industrial Park (assumed FAR of 0.26)	1,274	ksf	1.00	3.37	4,294	2,147	2,147	0.34	433	351	82	0.34	433	95	338
Total for Option 4					8,607	4,304	4,303		785	432	353		804	321	483
Difference Compare to TMP					5,595	2,797	2,798		343	83	260		480	260	220

Source: ITE Trip Generation 11th Edition, 2021.

<sup>(1)</sup> Non-Auto Use Factor applies a trip reduction to account for TDM, transit trips, pedestrian trips, and bicycle trips that will occur that are not represented in the ITE rates. Sterling Ranch is built next to several recreational amenities and near multi-modal facilities that encourage non-auto travel. The design of Sterling Ranch is to be inclusive of people powered transportation with roadway and intersection designs facilitating and protecting those users. Based on this, it is assumed there will be 5% non-auto trips which is consistent with previous traffic studies in the area.

November 25, 2024

---

## Trip Distribution

For a high-level assessment of roadway capacity for the Waterton Business Park project, the estimated trip generation was distributed to the roadway network per the assumptions of the MTS. The approved and validated methodology in the *Sterling Ranch MTS* follows the National Cooperative Highway Research Program (NCHRP) report for *Travel Estimation Techniques for Urban Planning*, which provides trip characteristics for and data to support household-based approaches for trip estimation and modeling. The following list summarized the utilized assumptions and percentages for trip distribution, per the MTS:

- **Residential Trips:** 60% will be **external** to the Chatfield Basin
  - 32-35% to/from Titan Road and US 85 to the east and north
  - 17-20% to/from Waterton Road and the Wadsworth corridor
  - 8% to/from Waterton Road (Southern Connector)
- **Production Trips (industrial):** 85% will be **external** to the Chatfield Basin
  - 33% to/from Titan Road and US 85 to the east and north
  - 10% to/from Waterton Road and the Wadsworth corridor
  - 7% to/from Waterton Road (Southern Connector)

The details of the methodology are attached to this memo, which were provided in the appendix of the MTS.

Adjustments were made to the MTS distributions since there is available capacity on Waterton Road (Southern Connector) and Airport Road. Since Titan Road was forecasted to be over the roadway capacity threshold, it is likely that future drivers will adjust their route to reduce their experienced congestion and reroute to the fastest path. For this analysis, it was assumed that all Waterton Business Park trips headed to US 85 will utilize the Southern Connector.

Applying the above percentages to each of the preliminary development options for Waterton Business Park and adjusting traffic routing to US 85, the daily and peak hour volumes were estimated for each of the external roadways. **Table 3** provides the calculations for the estimated trip distribution.



**Sterling Ranch: Waterton Business Park  
Traffic Memorandum**

November 25, 2024

**Table 3. Trip Distribution per Development Option**

<i>Industrial:</i>	<i>Total New</i>	<i>85% external per MTS</i>			<i>0% to/from Titan Rd/US 85</i>			<i>40% to/from S. Waterton</i>			<i>10% to/from W. Waterton</i>		
<i>Residential:</i>	<i>Trips</i>	<i>60% external per MTS</i>			<i>0% to/from Titan Rd/US 85</i>			<i>43% to/from S. Waterton</i>			<i>20% to/from W. Waterton</i>		
	<i>(a)</i>	<i>(b)</i>			<i>(c)</i>			<i>(c)</i>			<i>(c)</i>		
<b>Option</b>		<b>Daily</b>	<b>AM</b>	<b>PM</b>	<b>Daily</b>	<b>AM</b>	<b>PM</b>	<b>Daily</b>	<b>AM</b>	<b>PM</b>	<b>Daily</b>	<b>AM</b>	<b>PM</b>
1	5,614	3,370	157	250	0	0	0	1,450	68	108	675	31	50
2	1,301	780	-54	28	0	0	0	335	-23	12	155	-11	6
3	5,576	4,740	360	461	0	0	0	1,895	144	184	475	36	46
4	5,595	4,055	249	348	0	0	0	1,685	103	144	610	37	52

(a) Difference in Trips between TMP and potential Waterton Business Park options [refer to Table 2]

(b) Multiply New Trips per option (a) by percentage of external trips.

(c) Multiple external trips per option (b) by percentage distributed to the specific roadway.

Note: Highest trip volume bold and highlighted in blue.

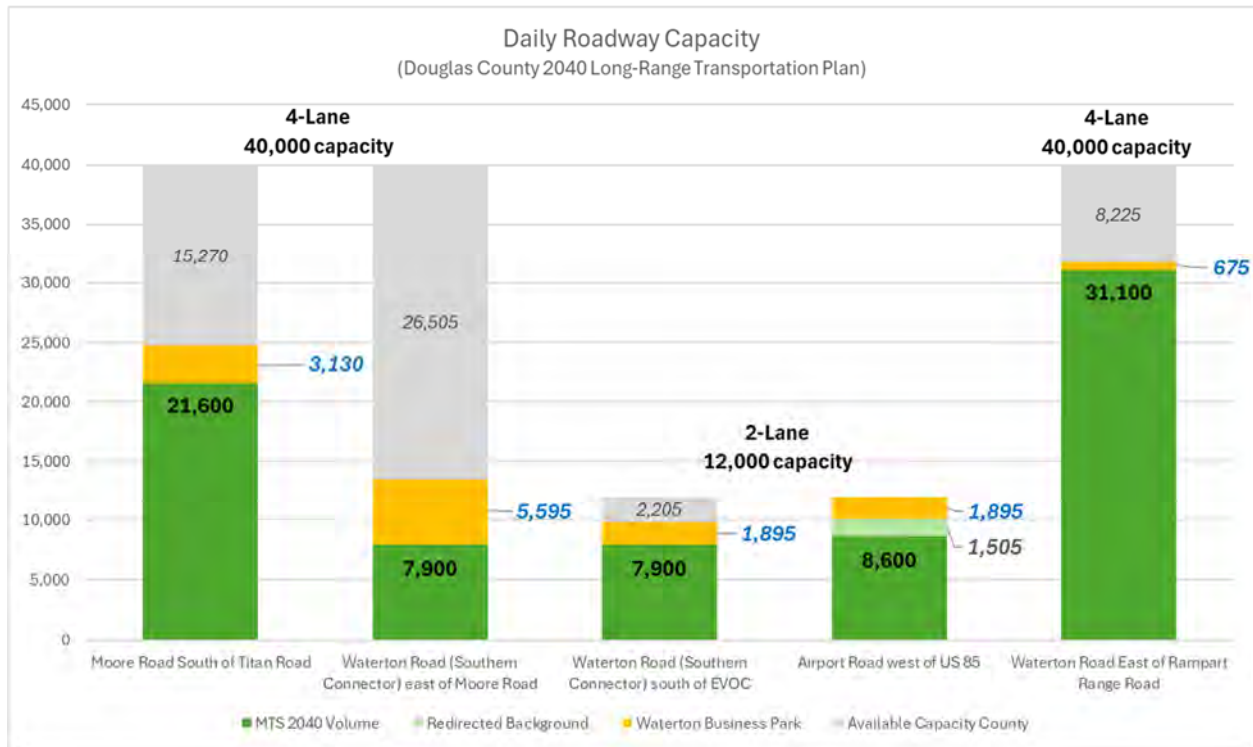
The highest daily trip volumes per roadway were added to the graphs to illustrate the change in roadway capacity on Titan Road, Moore Road, and Waterton Road. The Waterton Business Park trips are shown in yellow in **Graph 3**.

Additionally, it is possible that other traffic will also reroute from Titan Road to Airport Road. If the roadway capacity on Titan Road is "filled up" and redirected to Airport Road, then approximately 1,505 vehicles from the MTS were rerouted to the Southern Connector for the purpose of this analysis (shown in light green). **Graph 3** illustrates the change in traffic on each listed roadway with the inclusion of Waterton Business Park and rerouting from Titan Road to Airport Road.

It was estimated that there will continue to be available capacity on Moore Road and segments of Waterton Road. Titan Road east of Moore Road to US 85 (Santa Fe Drive) will continue to exceed the volume capacity for a six-lane road with the buildout of the Chatfield Basin by approximately 2,895 vpd. Additional analysis is needed at a later phase when the exact land uses are defined for the Waterton Business Park to understand the performance of intersections.

**Sterling Ranch: Waterton Business Park  
Traffic Memorandum**

November 25, 2024



**Graph 3. Capacity Availability with Waterton Business Park – Moore Road, Waterton Road, Airport Road**

## Changes in Trip Rates

It should be noted that trip rates in the ITE *Trip Generation Manual* have adjusted over time and shown trends of changed trip rates and travel patterns in peak periods. This could be a result from a variety of reasons: more data available, shift in human behavior, shift in linked trips, shift in multi-modal travel, proximity to complimentary land uses, telecommuting, etc. **Table 4** provides some examples of how trip rates in the national database have reduced over time and are anticipated to have an impact on the traffic forecasts within the Chatfield Basin.



November 25, 2024

*Table 4. Comparison of ITE Trip Rates*

Land Use	ITE Trip Generation Version and Trip Rates		
	9 <sup>th</sup> (2012)	10 <sup>th</sup> (2017)	11 <sup>th</sup> (2021)
210: Single-Family Detached Housing	Daily: 9.52 AM: 0.75 PM: 1.00	Daily: 9.44 AM: 0.74 PM: 0.99	Daily: 9.43 AM: 0.70 PM: 0.94
220: Multi-Family Housing (Low-Rise)	Daily: 6.59 AM: 0.46 PM: 0.58	Daily: 7.32 AM: 0.46 PM: 0.56	Daily: 6.74 AM: 0.40 PM: 0.51
221: Multi-Family Housing (Mid-Rise)	Daily: 6.65 AM: 0.51 PM: 0.62	Daily: 5.44 AM: 0.36 PM: 0.44	Daily: 4.54 AM: 0.37 PM: 0.39
110: General Light Industrial	Daily: 6.97 AM: 0.92 PM: 0.97	Daily: 4.96 AM: 0.70 PM: 0.63	Daily: 4.87 AM: 0.74 PM: 0.65
710: General Office	Daily: 11.03 AM: 1.56 PM: 1.49	Daily: 9.74 AM: 1.16 PM: 1.15	Daily: 10.84 AM: 1.52 PM: 1.44

## Interchange and Intersection Capacity

The US85/Titan Parkway Interchange has been evaluated for several years to determine the most appropriate design to maximum traffic flow and safety. Sterling Ranch, Douglas County, and CDOT have been working together to identify the various options that will accommodate the future traffic volumes and if there will be different interim and ultimate designs. For the Titan Parkway Interchange upgrades were identified in the *US 85 Corridor Improvements Planning and Environmental Linkages (PEL) Report (December 2016)*, which stated that a directional ramp for eastbound-to-northbound was recommended and a continuous flow intersection was a feasible alternative. Recent evaluations in Sterling Ranch's *Preliminary Plan 7 Traffic Impact Study (August 2022)* indicated that a continuous flow design at the Titan Parkway interchange will operate at LOS C in both peak periods with all movements estimated to operate at LOS C or better during the AM and PM peak hours with full buildout of the Chatfield Basin.

The *Range Traffic Impact Analysis (FHU, August 2024)* provided an alternative analysis for Year 2040 conditions which state that if a diamond interchange is constructed at the US 85/Airport Road intersection, then this intersection is anticipated to operate overall at LOS B or better in the

November 25, 2024

---

peak periods and each movement on the ramp terminals were projected to operate at LOS C or better during the AM and PM peak hours.

## **Next Steps**

The Sterling Ranch team is committed to preparing a traffic impact study of the proposed internal and external roads/connections during subsequent planning phases for the Waterton Business Park. It is acknowledged that additional improvements to Moore Road (South) and Waterton Road (Southern Connector) may be required based on the land uses, associated trips, and access.

The Sterling Ranch team understands the need to update the Sterling Ranch MTS due to the changes in development, implementation of the new roadway network, and potential additional developable land. In partnership with Douglas County, the methodology for the updated MTS will be defined at the initial stage. New count data will be collected to update the baseline conditions and account for newly built homes throughout the Chatfield Basin. Recent internal data indicated that homes in Sterling Ranch have different trip rates than the national data; more data will be collected per ITE guidelines to further understand the travel patterns and impacts on the surrounding roadway network. Data will be shared with Douglas County for review and discussion. Additionally, the MTS will be updated with available “big data” that supports the future internal travel when commercial and civic land uses are provided to reduce vehicular travel outside the community.

## **Attachments:**

MTS Figure 3: Roadway Network Plan

MTS Figure 9: Year 2040 Total – Daily Volumes

MTS Figure 12: Year 2040 Buildout – Intersection and Roadway Geometry

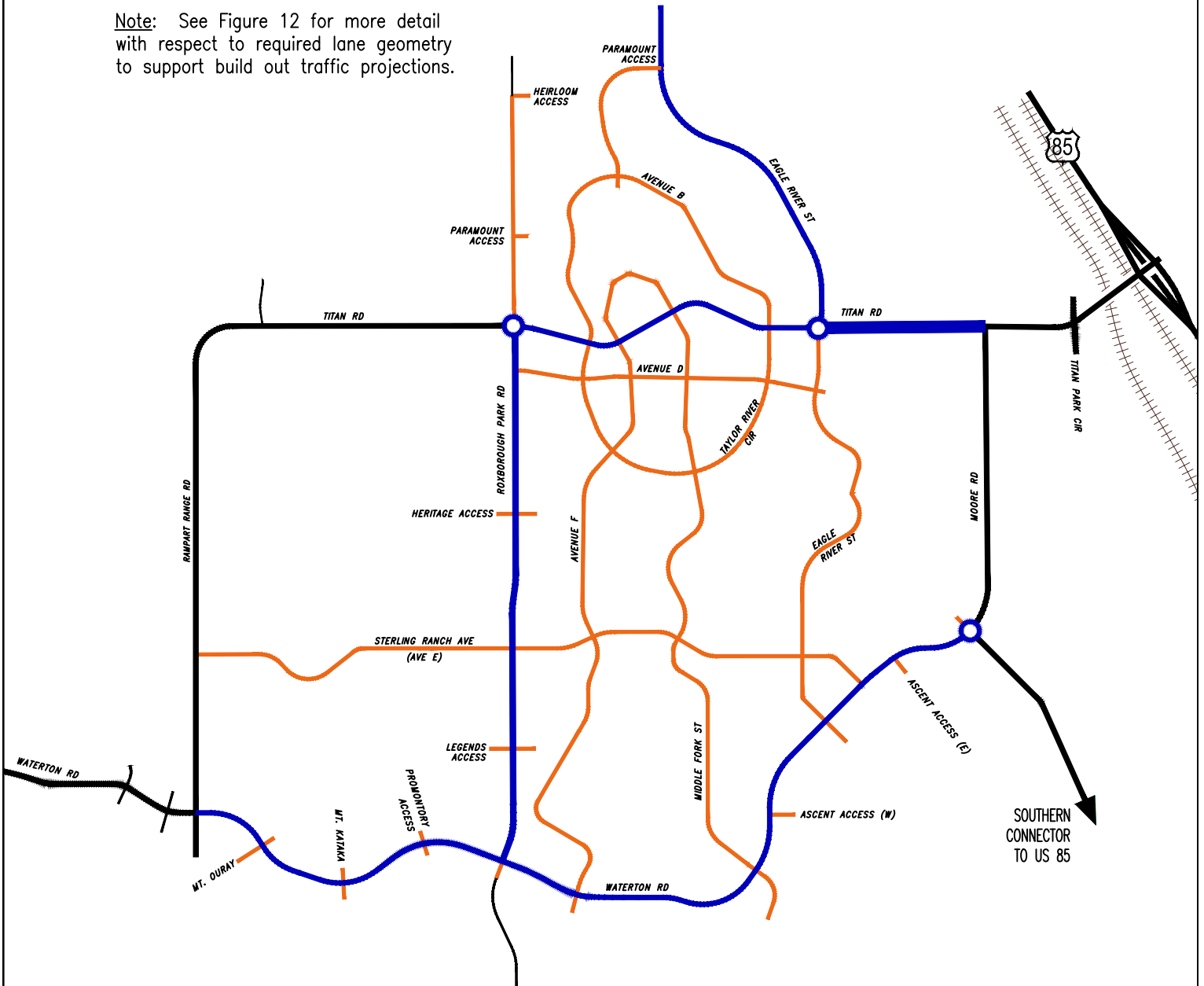
MTS Appendix for Trip Estimation and Distribution



# KEY

- Proposed Avenue
- Proposed 4-Lane Boulevard
- Proposed 6-Lane Boulevard

Note: See Figure 12 for more detail with respect to required lane geometry to support build out traffic projections.



**NOTE:** This plan is a conceptual schematic and roadway classifications, alignments, and laneage subject to change with final planning and County approval of individual Filings.

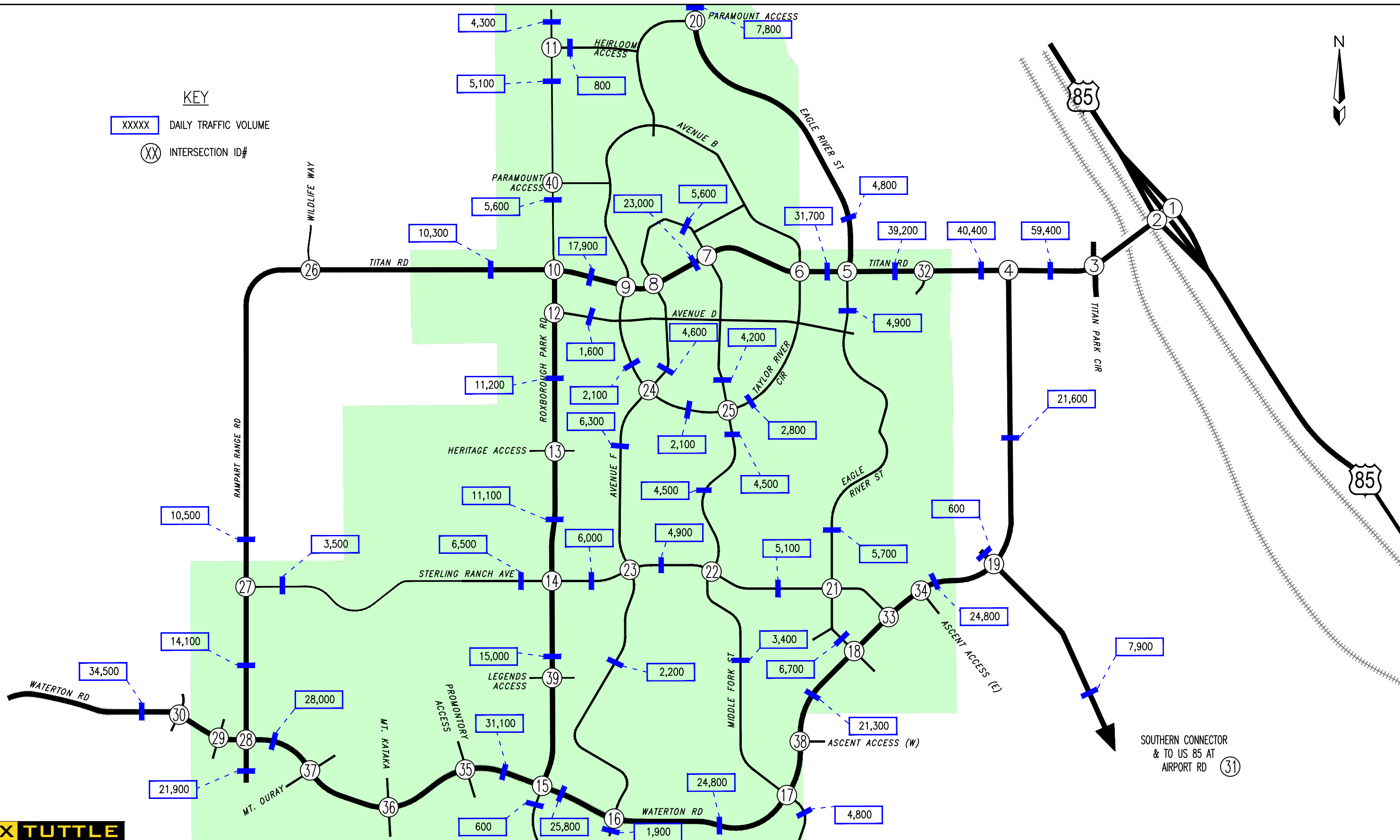


## STERLING RANCH MASTER TRANSPORTATION STUDY ROADWAY NETWORK PLAN

KEY

XXXXX DAILY TRAFFIC VOLUME

(XX) INTERSECTION ID#






STERLING RANCH MASTER TRANSPORTATION STUDY  
YEAR 2040 TOTAL - DAILY VOLUMES

FT Project #	13022	Original Scale	NTS	Date	12/30/19	Drawn by	SGT	Figure #	9
--------------	-------	----------------	-----	------	----------	----------	-----	----------	---

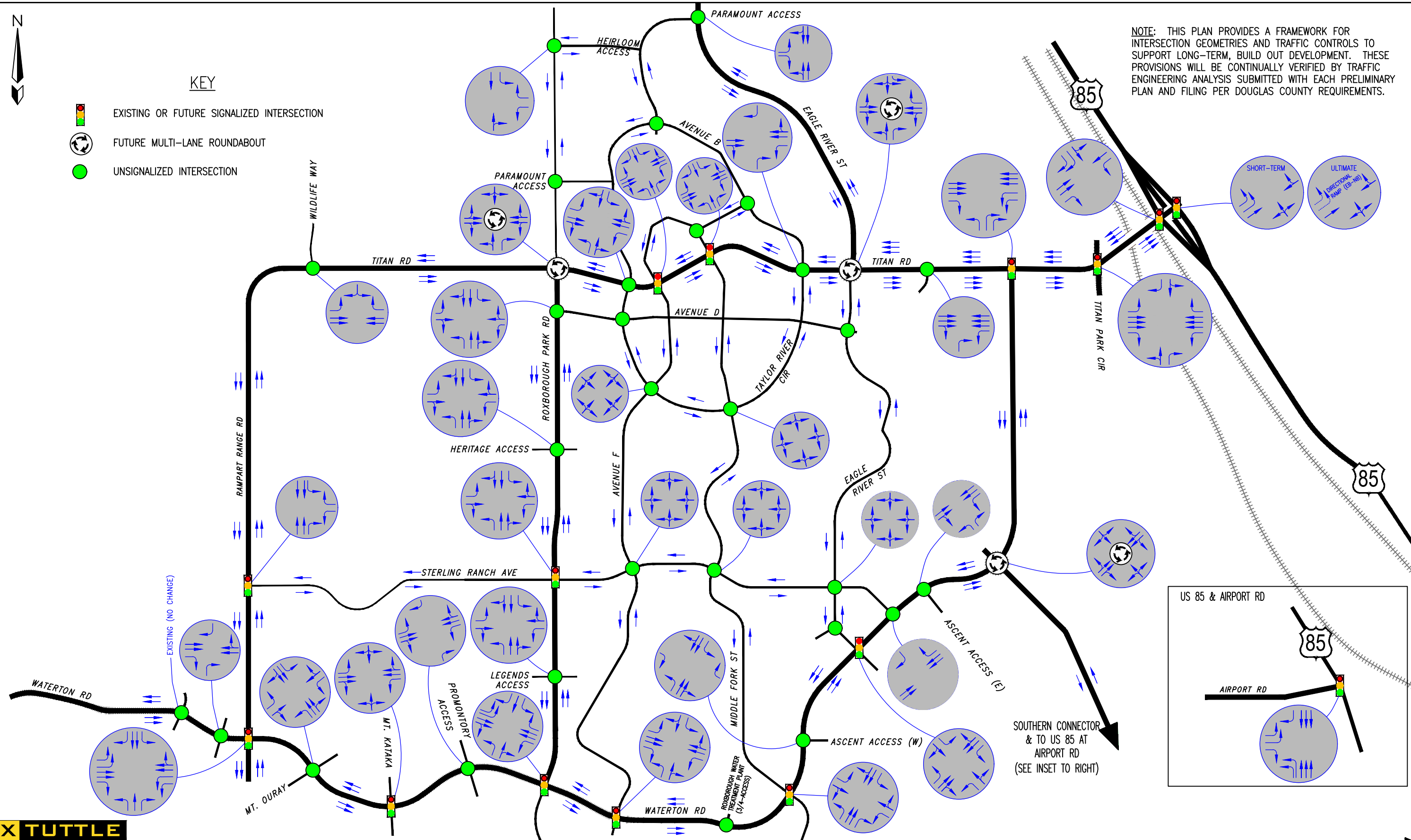


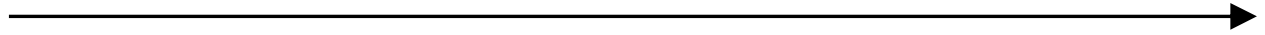


KEY

-  EXISTING OR FUTURE SIGNALIZED INTERSECTION
-  FUTURE MULTI-LANE ROUNDABOUT
-  UNSIGNALIZED INTERSECTION

NOTE: THIS PLAN PROVIDES A FRAMEWORK FOR INTERSECTION GEOMETRIES AND TRAFFIC CONTROLS TO SUPPORT LONG-TERM, BUILD OUT DEVELOPMENT. THESE PROVISIONS WILL BE CONTINUALLY VERIFIED BY TRAFFIC ENGINEERING ANALYSIS SUBMITTED WITH EACH PRELIMINARY PLAN AND FILING PER DOUGLAS COUNTY REQUIREMENTS.





# ***ITE Trip Rate Forecasts***

## ***Methodology***





## ITE Trip Generation - Methodology

Trip generation estimates for the proposed buildout of the Sterling Ranch development were prepared based on data contained in the Institute of Transportation Engineers (ITE) Trip Generation manual<sup>1</sup>. The trips rates used for this analysis are provided on Table A1.

Trip generation estimates for Sterling Ranch, as well as trip distribution and assignment, were performed for 9 unique “trip analysis zones” corresponding to the nine proposed Sterling Ranch “villages” to create detailed traffic estimates throughout the development. Breaking down the overall development into these zone will also serve to aid in future conformance analyses as individual village Preliminary Plans and filings are refined and submitted for approval. The ITE-based approach was used in conjunction with the modified regional model as it provides more detail at the level necessary to evaluate lower street classification operations, more accurate trip data for the wide variety of non-residential uses proposed, and can be more easily adjusted and modified in response to future plan submittals. These zones were delineated based on proposed land use areas, major roadways, and access and are depicted on Figure A1 in the Appendix.

Using the ITE rates, prior to applying any reduction factors, the site is calculated to generate 127,765 trips per day. However, this volume is based upon stand-alone land use and does not account for trip activity between land uses. For example, a portion of trips generated by the residential dwelling units on the site will travel to/from project school sites, retail sites, and other non-residential uses. Thus, these trips are being double-counted. In addition, a trip from a residence on the site may go to/from both a school and one or more other uses on site in a single trip, thereby is triple-counted on the basis of counting unique, new trips to the system. There will also be non-auto trips, particularly where residential use are adjacent to retail, school, church, recreational, and other uses, as well as multi-use retail trips where a driver parks once then walks to one or more uses in a single-auto trip or where an office employee walks to a nearby restaurant for lunch.

To address the multiple counting of a single, unique auto trip, several reductions to the base ITE rates were made, consistent with ITE and industry methodologies. As a baseline parameter, the basis for new trips estimates was assumed to be on a per-residence basis, with later adjustments made to account for external trips (outside of Sterling Ranch) to/from site non-residential use (such as an employee who commutes to a Sterling Ranch retail use), or a parent from Roxborough Park who drives to the new middle school on site.

The National Cooperative Highway Research Program (NCHRP) Report 365, Travel Estimation Techniques for Urban Planning<sup>2</sup> provides trip characteristics for and data to support household-based approaches for trip estimation and modeling. Data in NCHRP 365 shows that on average 20% of home-based trips are

---

<sup>1</sup> Trip Generation (9<sup>th</sup> Edition). Institute of Transportation Engineers. Washington, DC. 2012

<sup>2</sup> NCHRP Report 365 – Travel Estimation Techniques for Urban Planning. Transportation Research Board. Washington, D.C. 1998.

## Table A1 - Trip Generation Rates

Land Use	Unit	Weekday		
		Average Daily Trips	AM Peak Hour Trips	PM Peak Hour Trips
		Rate	Rate	Rate
Single-Family Detached Housing (ITE 210)	DU	9.44	0.74	0.99
Multifamily Housing (Low-Rise) (ITE 220)	DU	7.32	0.46	0.56
Multifamily Housing (Mid-Rise) (ITE 221)	DU	5.44	0.36	0.44
Senior Adult Housing - Detached (ITE 251)	DU	4.27	0.24	0.30
Senior Adult Housing - Attached (ITE 252)	DU	3.70	0.20	0.26
General Office Building (ITE 710)	1,000 SF	9.74	1.16	1.15
Medical-Dental Office Building	1,000 SF	34.80	2.78	3.46
Shopping Center (ITE 820) (Primary Trips**)	1,000 SF	18.88	0.47	1.91
Multi-Plex Movie (ITE 445)	Screens	292.50	0.00	13.73
Hotel (ITE 310)	Rooms	8.36	0.47	0.60
Hospital (ITE 610)	1,000 SF	10.72	0.89	0.97
General Light Industrial (ITE 110)	1,000 SF	4.96	0.70	0.63
Junior/Community College (ITE 540)	Empl.	14.61	1.49	1.34
Elementary School (ITE 520)	Students	1.89	0.67	0.17
Middle School/Junior High School (ITE 522)	Students	2.13	0.58	0.17
Day Care (ITE 565)	1,000 SF	47.62	11.00	11.12
Church (ITE 560)	1,000 SF	6.95	0.33	0.49
Sports Village (*FHU 06-123)	Visitors	2.00	0.02	0.27

Source: ITE Trip Generation 10th Edition, 2017.

\*(FHU 06-123), Sterling Ranch Zoning Resolution (Concurrency) Traffic Impact Analysis, Felsburg, Holt & Ullevig, FHU Reference No. 06-013, March 2011.

\*\* Accounts for 30% average pass-by trip rate and 20% multi-use trip reduction; example for a multi-use trip is a resident who stops at more than one closely located retail shops on the same trip. Pass-by trips were assigned to intersections adjacent to proposed retail centers.

Non-Adjusted Retail Rates:

Shopping Center (ITE 820) (Primary Trips Only)	1,000 SF	37.75	0.94	3.81
--	----------	-------	------	------



to/from work, 57% are “home-based other”, which would include trips to/from schools, to/from retail, etc., and the remaining 23% being “non-home based”, which could be deliveries, mail, and other services.

Assumptions for Sterling Ranch residential trips were made using the NCHRP data as a basis and are shown on the table below. As shown, it is assumed that the majority of home based work trips would be external to Sterling Ranch and the Chatfield Basin. For home-based-other trips, given that Sterling Ranch will develop schools and mixed-use commercial on site, a higher percentage of this traffic (roughly one-third) would be expected to remain internal to Sterling Ranch.

<b>Residential Automobile Trip Type</b>				
	<b>NCHRP 365</b>	<b>Assumed Breakdown</b>		
		<b>Internal</b>	<b>Chatfield</b>	<b>External</b>
<b>Home Based Work</b>	<b>20%</b>	3%	1%	16%
<b>Home Based Other</b> (example: to/from schools, retail)	<b>57%</b>	20%	7%	30%
<b>Non-Home Based</b> (example: services)	<b>23%</b>	6%	3%	14%
		<b>29%</b>	<b>11%</b>	<b>60%</b>

Using these assumptions, a distribution (by use) of Sterling Ranch residential automobile trips was prepared. This data is provided on Table A2 in the Appendix. Table A2 was also utilized as a cross-check to determine if the volume of trips generated on the residential side for Sterling Ranch and assumed to go to/from Sterling Ranch schools, retail, office, etc. roughly equaled the volume of those non-residential trips assumed to be internally generated by those non-residential uses. The cumulative distribution in Table A1 provides an estimate that roughly 60% of the site residential trips will be external to Chatfield Basin, with 29% internal to Sterling Ranch, and 11% to/from other uses in the Chatfield Basin (primarily retail/groceries and recreational trips).

On the non-residential trip generation side, it was assumed that the non-residential uses would have the following distributions relative to internal (generated from within Sterling Ranch) or external (generated from outside Sterling Ranch) trips:

- Retail: 85% internal, 15% external
- Office: 30% internal, 70% external
- Production: 15% internal, 85% external
- Movie Theater: 35% internal, 65% external
- Church: 90% internal, 10% external
- Higher Education: 20% internal, 80% external
- Schools: 90% internal, 10% external
- Sports Village: 35% internal, 65% external

Using these distributions applied to the ITE trip estimates per land use, a total internal volume of non-residential traffic was estimated for each use. This represents bottom row of Table A1 which was used to cross-check against the residential automobile trips generated from the residential side, to ensure that

**Table A2 - Distribution of Sterling Ranch Residential Automobile Trips**

Trip Zone	Residential Daily Auto Trip Total*	To/From SR Retail	To/From SR Office, Hotel, Hospital	To/From SR Production	To/From SR Movie Theater	To/From SR Schools, Churches	To/From SR Higher Ed	To/From SR Sports Village	Residential-Residential and Other**	To/From Other Chatfield Basin Uses (Retail, Empl., Parks/Rec)	External-to-Chatfield Basin Residential Trips
		3.6%	2.6%	0.2%	2.1%	11.1%	0.7%	1.1%	8.6%	11.0%	59.0%
1	3,515	127	91	0	74	390	25	39	302	387	2,074
2	17,463	629	454	35	367	1,938	122	192	1,502	1,921	10,303
3	7,761	279	202	16	163	861	54	85	667	854	4,579
4	14,090	507	366	28	296	1,564	99	155	1,212	1,550	8,313
5	6,609	238	172	13	139	734	46	73	568	727	3,899
6	5,839	210	152	12	123	648	41	64	502	642	3,445
7	6,512	234	169	13	137	723	46	72	560	716	3,842
8	14,067	506	366	28	295	1,561	98	155	1,210	1,547	8,299
9	8,614	310	224	17	181	956	60	95	741	948	5,082
<i>Total</i> <b>84,470</b>		<b>3,041</b>	<b>2,196</b>	<b>162</b>	<b>1,774</b>	<b>9,376</b>	<b>591</b>	<b>929</b>	<i>&lt;&lt; Total Residential to Non-Res Land Uses = Approx 17,000 trips</i>		
<i>Total Trip Generated by Non-Res Land Use per ITE Rates (for Cross-Check)</i>		<b>3,048</b>	<b>2,222</b>	<b>186</b>	<b>1,741</b>	<b>9,334</b>	<b>584</b>	<b>926</b>			

\* Reduced by non-auto trip reduction (6%-20%) based on proximity to nearby attractions (retail, commercial, recreation)

\*\* Accounts for auto trips between residential uses and other desintations that do not have a unique trip generation category (a neighborhood park, for example), as well as service trips ("home-based-other per NCHRP)



Table A3- Sterling Ranch Land Use Distribution by Zone (Cumulative Land Use Growth)

Zone	Village	Residential						Retail / Office					Employer		Institutional					Sports Village
		Total Households	Single Family Detached	Single Family Attached	Multi-Family Medium Density	Senior Housing Detached	Senior Housing Attached	Professional (Office)	Medical Office Building	Retail -- Shopping Center	Movie Theater	Hotel	Hospital	Production	Higher Education	Elementary School	Middle/ High School	Day Care	Church	
1	Heirloom	449	252	197	0	0	0	0	0	0	0	0	0	0	0	700	500	0	0	0
2	Paramount	2,962	1,045	817	1,100	0	0	324,000	0	110,000	17	400	50,000	0	200	600	1,000	0	15,000	1,323
3	Providence	960	709	201	50	0	0	18,000	8,000	4,000	0	0	0	0	0	0	0	14,000	0	0
4	Ascent	2,104	968	231	582	219	104	0	0	46,000	0	0	0	250,000	0	0	0	10,000	0	0
5	Pinnacle	835	469	366	0	0	0	0	0	0	0	0	0	0	0	600	500	0	0	0
6	Promontory	756	396	310	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Prospect	921	389	232	300	0	0	10,000	0	10,000	0	0	0	0	0	0	0	0	10,000	0
8	Legends	1,905	901	704	300	0	0	10,000	0	20,000	0	0	0	0	0	600	0	0	10,000	0
9	Heritage	1,158	542	423	193	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	12,050 D.U.	5,671 D.U.	3,481 D.U.	2,575 D.U.	219 D.U.	104 D.U.	362,000 S.F.	8,000 S.F.	190,000 S.F.	17 Screens	400 Rooms	50,000 S.F.	250,000 S.F.	200 Employees	2,500 students	2,000 students	24,000 S.F.	35,000 S.F.	1,323 Visitors

both the residential and non-residential internal volumes match. This technique insured that the assumed volume of internal auto trips is consistent with both ITE trip rate and NCHRP methodologies.

A 7% to 8% reduction was applied to the base ITE rates for residential uses to account for the integrated and substantial pedestrian and bicycle network planned for the site, the mixed-use opportunities of the development which will can effect home-to-retail, home-to-school, and home-office type non-auto trips, as well as all of the TDM measures discussed in Section 8.0 of this Master TIS. Given the potential for these non-auto trips, we feel that these reductions are conservative. The lower reduction applied to single family development proposed furthest away from the non-residential, mixed uses. A 20% non-auto reduction was applied for the primarily multi-family, higher density residential development in the Town Center area where there will be excellent opportunity for short, non-auto trips to adjacent mixed-use commercial, schools, etc. Initial non-automobile (and internal capture) rates will be lower than when the site is fully built out with all uses and interactivity.

A 20% multi-use trip factor was assumed for site retail uses, to account for trips between two or more uses on a retail site that occur from a single auto-mobile trip. An example of this would be a bank patron who walked to a nearby retail store while only parking their car once.

A 30% pass-by trip factor was also applied to retail. Pass-by trips account for vehicles that are already on the adjacent roadway (and accounted for in the overall trip generation) but would divert into a retail use, before continuing on their original trip. An example would be a driver who stopped to get coffee on their way to work. The trip is already accounted for on the residential trip side. However, pass-by trips are not reductions; these trips are still accounted for at the driveway accesses.

### **6.3 Trip Distribution and Assignment**

Residential and non-residential Sterling Ranch trips were distributed onto the proposed buildout roadway network for each of the 9 trip analysis zones. Assumed distribution percentages were based on existing traffic data, regional traffic modeling, model results for the NWDC Feasibility Study, and consistent with the methodologies previously described in the trip generation section relative to home-based trip distributions:

#### Residential Trip Distribution:

- **60% external to Chatfield Basin**
  - Between 32% and 35% to/from Titan Road and US 85 to the east/north, depending upon the location of the trip analysis zone within the development and relative convenience of US 85 vs. Wadsworth
  - Between 17% and 20% to/from Waterton Road and the Wadsworth corridor to/from the west



- 8% to/from the south on US 85 (use of the southern connector varied based on location within the development and relative convenience of the southern connector vs. Titan Road to US 85)
- **11% internal to Chatfield Basin**
  - 3% to/from the north on Roxborough Park Road
  - 1% to/from future non-residential use along Rampart Range Road
  - 6% to/from existing retail uses near Waterton Road & Rampart Range Road
  - 1% to/from existing and future commercial use between Moore Road and US 85 (primarily accessed from Titan Park Circle)
- **29% internal to Sterling Ranch**
  - Distributed to/from school sites, retail areas, and other non-residential uses based on proximity of each specific zone to these sites; specific for each travel analysis zone.
  - Localized distributions for each zone were applied down to the Avenue roadway classification level. However, distributions took into account likely restricted access median treatments where streets intersect Boulevards, in order to consolidate volumes at locations where potential signal warrants could be met, to provide a conservative basis for signal warrant analyses

Non-Residential Trip Distribution:

- **38% internal to Sterling Ranch**, assigned via the residential distributions above
- **62% external to Sterling Ranch**
  - 33% to/from Titan Road and US 85 to the east/north
  - 10% to/from Waterton Road and Wadsworth corridor to the west
  - 7% to/from the south on US 85 (split between Titan Road and Southern Connector based on location)
  - 6% from mostly existing residential use located southwest of the project along Rampart Range Road south of Waterton Road
  - 2% from mostly future development projected south of Titan Road and east of Rampart Range Road (immediately adjacent to Sterling Ranch to the west)
  - 4% from existing development and future possible Solstice development along Roxborough Park Road north of Sterling Ranch

The 38%/62% internal/external non-residential trip split shown above was calculated based on the cross-check of internal residential-based trips to non-residential uses vs. the internal non-residential-generated trips calculated with ITE rates and the non-residential use internal distributions discussed previously.

Using these assumptions, the site-generated daily trips were distributed onto the buildout roadway network and are shown on **Figure 6**. Peak hour intersection volumes are summarized on **Figure 7**.



October 8, 2024

Douglas County Planning Services  
100 Third Street  
Castle Rock, CO 80104

Re: Wholesale Water and Wastewater Service Commitment  
for Waterton Business Park (Chemours)

Dear Matt Jakubowski:

Dominion Water & Sanitation District ("Dominion" or "DWSD") is a wholesale water and wastewater provider, whose service area is located in Northwest Douglas County. Dominion was established in 2004 as an overlay district to provide services for the master planned community of Sterling Ranch and those existing communities located within its service area that are on non-renewable declining groundwater supplies. Per Dominion's Service Plan wholesale water and wastewater service can be provided within Dominion's Service Area. In addition, the Dominion Board codified Rules and Regulations<sup>1</sup> providing for potential wholesale water and/or wastewater service to new developments located within its Service Area, subject to review and approval by the Dominion Board.

Sterling Ranch Development Company ("DevCo") has requested that Dominion provide wholesale water and wastewater service to its development that will consist of 1,000 to 2,000 residential dwelling units and up to 25 acres of irrigated area, located at Waterton Road and North Moore Road, which is within Dominion's Service Area. Dominion has reviewed the application and request and has determined the following:

- The Waterton Business Park will be included within the Sterling Ranch Planned Development ("SR PD")
- The Waterton Business Park will receive retail water and wastewater service from Sterling Ranch Community Authority Board ("CAB")
- The Waterton Business Park is located within Dominion's Primary Service Area ("PSA")<sup>2</sup>
- DevCo has dedicated sufficient renewable water supplies to Dominion based on Dominion's Adopted Demand Standard<sup>3</sup> for the projected 320.78 AF/yr to 580.78 AF/yr for the Waterton Business Park.

On July 15, 2013, DWSD provided to the Douglas County Planning Department a "Letter of Intent

---

<sup>1</sup> Codified by Resolution October 18, 2022, Amended August 15, 2023, and May 22, 2024

<sup>2</sup> Dominion Rules & Regulations, User Definition Section 5.01 (A)

<sup>3</sup> Resolution adopting demand standards - August 2024



to Serve” the SR PD and its approved 12,050 residential dwelling units, 130 acres of commercial plus irrigated open space (“Will Serve Letter”). This Commitment to Serve Letter states that the entire SR PD is located within DWSD’s service areas, and DWSD “is committed to provide water, stormwater, and wastewater treatment to the Sterling Ranch Community Authority Board (CAB)”. The CAB and DWSD entered into the Water and Wastewater Service Agreement on January 6, 2014 (“Service Agreement”). The Service Agreement requires DWSD to provide water and wastewater service to the CAB and is amendable only by written agreement of both parties. As a result, the Service Agreement serves as the key legally enforceable foundation of DWSD’s irrevocable commitment to provide water and wastewater service to the CAB.

Based on Dominion Staff’s evaluation and the Dominion Board authorized and approved 2013 Will Serve Letter and 2014 Service Agreement, Dominion is committed to providing wholesale water and wastewater service to the Waterton Business Park to be served by CAB.

As stated above the calculated water supply needed for the Waterton Business Park ranges from 320.78 to 580.78 AF/yr, based on Dominion’s adopted water demand standard for wholesale water and wastewater service within Dominion’s PSA.<sup>4</sup> The intended use of the 320.78 to 580.78 AF/yr is for both indoor use and outdoor irrigation, subject to Dominion’s Rules and Regulations and Water Efficiency Plan. Dominion intends to provide the wholesale water service using its robust conjunctive use supply that allows for water supplies to be used for both indoor and outdoor uses.

Wholesale wastewater service will be provided from the CAB collection system to the Titan Road Lift Station and Forcemain and is currently conveyed through the Roxborough Lift Station and Forcemain for treatment at the South Platte Renew Facility. The Chatfield Basin Water Reclamation Facility (“CBWRF”) is anticipated to be online and fully operational in 2027 meeting the anticipated growth projections of the Waterton Business Park.

DWSD remains committed to providing wholesale service to the SR PD based upon the water supply sources, upon payment of the requisite fees and charges and compliance with DWSD’s rules, regulations and resolutions, as now or hereinafter constituted.

**Dominion Water & Sanitation District**



By: Andrea R. Cole  
General Manager

cc: DWSD Board of Directors

---

<sup>4</sup> Dominion PSA Demand Standard for New Development is the Sterling Ranch CAB Adopted 2021 Demand Standard, Resolution No. 2021-10-02 adopting amended and restated water demand standards on October 20, 2021

**AMENDED AND RESTATED INTERGOVERNMENTAL AGREEMENT  
BETWEEN DOMINION WATER & SANITATION DISTRICT ACTING  
THROUGH ITS STERLING RANCH WATER ENTERPRISE FUND AND  
DOUGLAS COUNTY FOR THE NORTHERN HIGHWAY 85  
WASTEWATER COLLECTION AND TREATMENT SYSTEM, THE  
LOUVIERS RENEWABLE WATERLINE, MASTER METER AND  
CORROSION STUDY**

This **INTERGOVERNMENTAL AGREEMENT** (the “Agreement”) is made and entered into this 13<sup>th</sup> day of August, 2024 (the “Effective Date”), by and between Dominion Water & Sanitation District through its Sterling Ranch Water and Wastewater Enterprise Funds (“Dominion”), a quasi-municipal corporation and political subdivision of the State of Colorado, and the Board of County Commissioners of the County of Douglas (“Douglas County”) (each, individually, a “Party” and, collectively, the “Parties”).

**WITNESSETH:**

**WHEREAS**, C.R.S. § 29-1-203 authorizes the Parties to cooperate and contract with one another regarding functions, services and facilities each is authorized to provide; and

**WHEREAS**, Dominion is a wholesale water and wastewater provider located in Northwest Douglas County organized in 2004 to provide service to Sterling Ranch Community Authority Board (“Sterling Ranch CAB”) and those communities within Dominion’s service area that rely on declining groundwater (collectively, the “Retail Customer”); and

**WHEREAS**, Douglas County desires to utilize American Rescue Plan Act (“ARPA”) funding to design and construct a wastewater collection and treatment system (“Northern Highway 85 Wastewater System”) inclusive of an approximately one million gallon per day (MGD) plant (the “Wastewater Plant”) to be known as the Chatfield Basin Water Reclamation (“CBWRF”) facility, a force main, and lift station near Louviers, as more particularly identified in the attached Exhibit A.

**WHEREAS**, Douglas County also desires that Dominion design and construct a master-meter vault and renewable waterline that extends from the Sterling Ranch CAB distribution system to a master meter vault that will connect to the water tank belonging to Louviers Water & Sanitation District in order to provide renewable water supplies, a portion of the funds will be from ARPA, as more particularly identified in the attached Exhibit A and shown on the map attached hereto as Exhibit A-1 (the “Waterton Road Water System”); and

**WHEREAS**, Douglas County desires to expand municipal facilities to include the Code 303 Emergency Vehicle Operations Training Center and future maintenance facility and said expansion requires access to fire flows (the “EVOTC Facilities”); and

**WHEREAS**, Dominion has experienced project engineering and management staff that are needed to help Douglas County design and construct the Northern Highway 85 Wastewater System and Waterton Road Water System; and



**WHEREAS**, Dominion also has the operational capacity and experience to own, operate, maintain, and, if necessary, replace the Northern Highway 85 Wastewater System and Waterton Road Water System, and/or manage the contracting for these services, for the benefit of the future customers that benefit from the Northern Highway 85 Wastewater System and Waterton Road Water System; and

**WHEREAS**, Dominion is willing to make available wastewater service and renewable water supplies to the existing customers of Louviers, defined as those receiving service from Louviers as of January 1, 2023. Water service shall initially consist of an emergency connection pursuant to the Dominion and Louviers Water Service Agreement (the “Dominion/Louviers WSA”); and

**WHEREAS**, Dominion is willing to make available renewable water supplies on a permanent basis to existing customers of Louviers, upon payment of certain Connection Fees as defined herein, and subject to Dominion’s Rules and Regulations and terms of the Dominion/Louviers WSA; and

**WHEREAS**, Dominion is willing to make available water supplies at a sufficient quantity and pressure to provide fire flows to the EVOTC Facilities and potential future County facilities for public benefit; and

**WHEREAS**, Douglas County and Dominion believe the Waterton Road Water System will reduce the reliance on non-renewable groundwater supplies and provide high quality reliable and renewable supplies to the unincorporated Town of Louviers; and

**WHEREAS**, Douglas County and Dominion believe the decommissioning of the Louviers sewer lagoon and connection to centralized wastewater system will improve and protect the water quality of Plum Creek and ultimately Chatfield Reservoir; and

**WHEREAS**, Douglas County and Dominion believe that the construction of the CBWRF will allow for the capture of wholly consumable return flows continuing to advance the desire to bring renewable water supplies to Douglas County; and

**WHEREAS**, Dominion has accelerated the construction of the CBWRF by approximately six years in order to serve wastewater along the Highway 85 corridor including Louviers; and

**WHEREAS**, Dominion has already constructed regional water improvements and interconnections as a regional provider and partner to **existing communities** (emphasis added) along the Highway 85 corridor as was the intent when Dominion was formed in 2004. This infrastructure to provide connections with existing communities have cost over \$140 million in infrastructure spending by Dominion with the following infrastructure already in place: over 30 miles of transmission waterlines and storage, connection to the Water Infrastructure and Efficiency System (WISE) regional project, storage in Chatfield Reservoir, chloramination station(s), the Larry D. Moore Water Treatment Plant, meter vaults, and other ancillary equipment to provide service to the Sterling Ranch Community Authority Board. In addition, Dominion has connections with the Town of Castle Rock, the Town of Parker, Sedalia Water and Sanitation District (future),

Centennial Water and Sanitation District (emergency interconnection to serve the community of Solstice), and Roxborough Water and Sanitation District. Most of this infrastructure will be used to also connect to Louvier's Water and Sanitation District for future municipal water service to Louviers as outlined on the conditions below; and

**WHEREAS**, Dominion has already constructed regional wastewater improvements as a regional provider and partner to **existing communities** (emphasis added) along the Highway-85 corridor as was the intent when Dominion was founded in 2004. The infrastructure to provide connections with existing communities have cost over \$30 million in infrastructure spending by Dominion with the following infrastructure already in place two lift stations and over 3 miles of forcemains, an existing wastewater treatment facility and discharge permit, connection with Roxborough Water and Sanitation District and license for conveyance in the Roxborough O-line, forcemain and lift station. Most of this infrastructure will be used to also connect to Louvier's Water and Sanitation District for future municipal wastewater service to Louviers as outlined on the conditions below; and

**WHEREAS**, Douglas County believes that the Northern Highway 85 Wastewater System and Waterton Road Water System will stimulate economic development and growth within the corridor; and

**WHEREAS**, Louviers is under an enforcement order by the Colorado Department of Public Health and Environment due to elevated levels of radium in its drinking water and Dominion and Douglas County wish to cooperate to address this public health issue; and

**WHEREAS**, based upon the foregoing reasons, the Parties find and determine that it is in the best interests of their respective customers and citizens to enter into this Agreement; and

**NOW, THEREFORE**, the Parties, in and for the consideration of the performance of the mutual promises set forth herein, the receipt and adequacy of which is hereby acknowledged, for themselves and their successors, do hereby agree as follows.

## 1. DEFINITIONS.

Unless previously defined, the following terms, when capitalized, shall have the meanings indicated below:

- A. "Capital Recovery Fee" means that fee that may be collected by Dominion as an additive Sewer Infrastructure and Treatment Fee, to the extent collected in accordance with this Agreement.
- B. "Connection Fee" is as defined in Section 5.03 of the Dominion Rules and Regulations as promulgated.
- C. "Dominion/Louviers WSA" means the intergovernmental agreement between Dominion and Louviers that will be executed to provide emergency renewable water supplies until such time as Louviers is ready to connect on a permanent basis.



- D. “Estimated Project Costs” means the estimated costs of designing, constructing and installing the Northern Highway 85 Wastewater System and Waterton Road Water System, as more particularly described in the attached Exhibit B.
- E. “Final Project Costs” means the final costs of designing, constructing and installing the Northern Highway 85 Wastewater System and Waterton Road Water System, as more particularly described in the amended Exhibit B.
- F. “Louviere” means the Louviere Water & Sanitation District, a quasi-municipal special district organized and existing pursuant to the provisions of Title 32 of the Colorado Revised Statutes.
- G. “Northern Highway 85 Wastewater System” means the force main and lift station that connects Louviere to the Sterling Ranch Community Authority Board (“CAB”) system for wholesale wastewater service from Dominion, and the CBWRF, which shall include an allocation of 0.2 MGD for the County.
- H. “Project” means the design, construction, and installation of the Northern Highway 85 Wastewater System and Waterton Road Water System and completion of a corrosion study for Louviere.
- I. “Project Management Fee” means the fee that Dominion charges Douglas County to manage the Project, which fee shall be equal to one percent (1%) of the total Project costs.
- J. “Waterton Road Water System” means the renewable water line that connects the CAB system to Louviere for wholesale water service from Dominion, previously referred to as the Louviere Renewable Waterline.

## 2. DESCRIPTION OF PROJECT.

- A. Consideration from Douglas County. Douglas County agrees to use available ARPA Funds to help finance a portion of the costs of design, construction, and installation of the infrastructure described in Exhibit A. Douglas County agrees to make a contribution of twenty million four-hundred eighty-two thousand four-hundred dollars (\$20,482,400) of ARPA Funds (“ARPA Funds”) to complete the Project, including identified contingencies as set forth on Exhibit B. Out of the ARPA Funds, (i), Dominion shall collect a Project Management Fee and (ii) four-hundred eighty-two thousand four-hundred dollars (\$482,400) is for design services previously contracted under the original waterline agreement. ARPA Funds may be used for any of the infrastructure described in Exhibit A, provided that all ARPA Funds must be expended by December 31, 2026. If Dominion fails to expend all ARPA Funds by December 31, 2026, its obligations under this agreement remain in full force and affect, but Douglas County is under no obligation to replace any lost ARPA Funds.

- B. Consideration from Dominion. In exchange for the County investment, Dominion shall:
- (i) Cause the construction of the infrastructure described in Exhibit A by the performance milestones described in Section 2.C. of this Agreement. Douglas County acknowledges the significant fiscal contributions required of Dominion (estimated at \$13 million to over \$25 million under this agreement) are undertaken approximately six years sooner than otherwise anticipated, and during a period of increased borrowing costs when compared to anticipated future borrowing costs.
  - (ii) Allocate capacity in the Project to Douglas County and Louviers as described in Section 4 of this Agreement.
  - (iii) Allow wastewater from the Northern Highway 85 Wastewater System's force main and lift station to be conveyed through Dominion's existing system to the CBWRF without additional fees or surcharges other than those expressly authorized herein.
  - (iv) Provide water and wastewater service to all existing and future County-owned facilities, structures, or public buildings that connect to the Water Road Water and the Northern Highway 85 Wastewater System. In recognition of the significant financial contributions to this Project by Douglas County, the parties will identify and implement mutually agreeable mechanisms to offset, reduce, or eliminate applicable Connection Fees.
  - (v) Provide water and sewer service to the approximately 124 existing homes in Louviers subject to execution of a Dominion and Louviers WSA that will outline the Connection Fees and terms of service for wholesale water and sewer service. Dominion will negotiate in good faith with Louviers in order to execute the WSA with reasonable conditions of service. In recognition of the significant financial contributions to this Project by Douglas County, the parties will identify and implement mutually agreeable mechanisms to offset, reduce, or eliminate applicable Connection Fees.
  - (vi) Collect, on behalf of Douglas County, if requested by Douglas County, a Capital Recovery Fee as described in Section 4.B.
- C. Performance Milestones. Dominion shall cause the construction of the Northern Highway 85 Wastewater System and Waterton Road Water System. Dominion shall cause construction of the CBWRF by December 1, 2027, the Louviers lift station and force main by December 31, 2030, and the Waterton Road Water System by December 31, 2030.
- D. Ownership. Dominion shall own, operate, maintain, repair and replace the Northern Highway 85 Wastewater System and Waterton Road Water System. Douglas



County shall not at any time access the System or other facilities or property owned or controlled by Dominion, except pursuant to the terms, restrictions and conditions set forth in this Agreement.

### 3. PROJECT DESIGN, CONSTRUCTION, AND INSTALLATION.

- A. Scope of Work. The general proposed scope of work for the Project and the estimated timeline are provided in the attached Exhibit C for the Waterton Road Water System and for the Northern Highway 85 Wastewater System (the “Scope of Work”).
- B. Examination of Records; Dispute Resolution. At Douglas County’s request, Dominion shall provide records relating to the design, construction, and installation of the Project, including copies of each draw request from the general contractor, together with paid invoices or such other documentation as may be available and reasonably requested for Douglas County to verify the Final Project Costs. The Parties shall cooperate to resolve any disputes concerning the Final Project Costs. If the Parties are unable to resolve their dispute informally, they shall submit the dispute to non-binding mediation before a mutually agreeable mediator. If the Parties remain unable to resolve their dispute within sixty (60) days of commencing mediation, the Parties may pursue any remedies lawfully available to them.
- C. Costs in Excess of Contingency. Dominion shall administer the Project in substantially the same manner and with the same care as other Dominion design and construction projects of a similar scope and nature. Dominion shall manage all change orders and costs adjustments within a contingency amount agreed to by the Parties. Adjusted cost estimates will be made based upon actual construction bids or change orders. If the Estimated Project Costs need to be adjusted over and above the contingency amount, the Parties acknowledge that no additional ARPA Funds are anticipated to be available for allocation to the Project. Dominion may, but shall not be obligated to, enter into water service agreements with new development to facilitate capital funding requirements for the construction of the Northern Highway 85 Wastewater System and Waterton Road Water System, per the Dominion Rules and Regulations, promulgated at the time of the water service agreement. For the avoidance of doubt, Dominion is under no obligation to serve new development along the E-85 corridor unless a new development meets Dominion’s Rules and Regulations of service, provides renewable water acceptable to Dominion in terms of quantity, quality, and dependability, and pays all applicable Connection Fees and Capital Recovery Fees.
- F. Easements. Dominion agrees to undertake the acquisition of all easements, whether temporary or permanent, rights-of-way, and other real property interests as may be necessary to construct, operate, maintain, repair, and replace the Project.

- G. Contract Solicitation. Dominion will undertake the contracting for design, property acquisition, and construction services utilizing its standard design and construction contracting processes. Selected consultants and contractors will be recommended to Douglas County by Dominion with Douglas County confirming approval of each contract prior to signing until the ARPA Funds have been expended in full; provided, that, Dominion shall not be required to obtain Douglas County approval, nor follow Douglas County contract solicitation requirements, for any portion of the Project Costs not otherwise funded by ARPA Funds. Douglas County shall fully fund each contract prior to award by Dominion until the ARPA Funds have been expended in full. For any construction contract being paid for out of ARPA Funds, the Parties will enter into a separate agreement to establish a segregated account within Douglas County's accounting system, which account shall be funded by Douglas County to the full amount of each such contract, plus a reasonable contingency until the ARPA Funds have been expended in full. This segregated account will be used for payment of all invoices for each such contract. The Parties acknowledge and agree that the construction of the Project may be phased as the Parties may deem appropriate, and that separate construction contracts may be entered into for each phase of the Project.
- H. Segregated Account. Dominion will review and approve all contractor invoices and then forward said invoices to Douglas County for approval on a monthly basis. Douglas County will review and approve said invoices within fifteen (15) days following receipt of the invoice and then submit the approved invoices for payment to the contractor. Payment from the escrow or segregated account shall be made in full within thirty (30) days following receipt of the invoice from the contractor. Dominion and Douglas County may also mutually select a payment process that does not require a third party escrow of funds.
- I. Insurance. Dominion will require each Project contractor to procure and maintain the following types and amounts of insurance in accordance with the requirements of Dominion's policies, with each policy to be issued to include Douglas County, its officers and employees, as an additional named insured:
- (i) Commercial General Liability Insurance with minimum limits of liability of not less than \$2,000,000 per occurrence for bodily injury and property damage liability; \$2,000,000 designated location, general aggregate; and \$1,000,000 umbrella. Such insurance will include coverage for contractual liability, personal injury, and broad form property damage, and shall include all major divisions of coverage and be on a comprehensive basis including, but not limited to:
    - a. premises operations;
    - b. personal injury liability without employment exclusion;
    - c. limited contractual;
    - d. broad form property damages, including completed operations;
    - e. medical payments;
    - f. products and completed operations;

- g. independent consultants coverage; and
  - h. coverage inclusive of construction means, methods, techniques, sequences, and procedures, employed in the capacity of a construction consultant.
- (ii) Comprehensive Automobile Liability Insurance, including coverage for each of the contractor's owned, hired and/or non-owned vehicles assigned to or used in performance of the services, with minimum combined single limits for bodily injury and property damage of not less than \$1,000,000 for each occurrence and \$1,000,000 aggregate.
  - (iii) Workers' Compensation Insurance to cover obligations imposed by the Workers Compensation Act of Colorado and any other applicable laws for any employee engaged in the performance of work under the contract, and Employer's Liability insurance with minimum limits of \$500,000 each accident, \$500,000 disease-policy limit, and \$500,000 disease-each employee.
  - (iv) Builder's Risk or Installation Floater Policy, at Dominion's discretion, in an amount equal to the value of the Project where the possibility exists of loss or damage to the Project (for the construction contract only).
  - (v) Professional Liability Insurance, including coverage for damages or claims for damages arising out of the rendering, or failure to render, any professional services, with minimum combined single limits of \$2,000,000 for each occurrence and \$2,000,000 aggregate (for the design contract only).

#### 4. CAPACITY ALLOCATION.

- A. Waterton Road Water System Capacity Reservation and Allocation. Capacity in the Waterton Road Water System shall be reserved and allocated as follows:
  - (i) Concurrent with the substantial completion of the Project and initial acceptance of the Waterton Road Water System, Dominion shall reserve capacity for the existing customers of Louviers in the Waterton Road Water System (as of January 1, 2023) on an immediate basis for emergency interconnection and on a future basis for permanent connection, per the agreed upon terms of the Dominion/Louviers WSA, including the payment of all Connection Fees, as defined in the then current Dominion Rules and Regulations, at the time the Dominion/Louviers WSA is executed. At the County's sole discretion, Capital Recovery Fees may be used to pay for Louviers Connection Fees.
  - (ii) Capacity in the Waterton Road Water System shall be reserved for Douglas County for the EVOTC Facilities and other existing public facilities of Douglas County. Douglas County will pay Dominion Connection Fees, as defined in the current Dominion Rules and Regulations. At the County's



sole discretion, Capital Recovery Fees may be used by Douglas County for the payment of Dominion's Connection Fees for the EVOTC Facilities and potential future County Facilities.

- (iii) Dominion is under no obligation to serve new development along the Highway 85 corridor with water or wastewater service unless Douglas County requests Dominion to serve new development with wastewater service only and said service is allocated to the 0.2 MGD of Douglas County wastewater capacity in the Northern Highway 85 Wastewater System. Any new development or existing community that connects to Douglas County's 0.2 MGD capacity in the Northern Highway 85 Wastewater System and CBWRF must meet Dominion's wastewater service Rules and Regulations as promulgated at the time of the request for service for connection including any sewer pre-treatment standards (as may be amended from time to time). however, any new development or redevelopment may request capacity in the Waterton Road Water System or the Northern Highway 85 Wastewater System or water and wastewater service in accordance with the Dominions Rules and Regulations as promulgated at the time of the request for service, including, but not limited to, full payment to Dominion of all Connection Fees, and compliance with Dominion's current promulgated Rules and Regulations and approval by Dominion's Board.
- (iv) Northern Highway 85 Wastewater System Capacity Reservation and Allocation. Concurrent with the substantial completion and initial acceptance of the Northern Highway 85 Wastewater System, Dominion shall grant Douglas County a license for 0.2 MGD of capacity in the Northern Highway 85 Wastewater System. As new customers connect to the Northern Highway 85 Wastewater System, Dominion's share of the allocation of permanent capacity shall increase, while Douglas County's share of the allocation of permanent capacity will decrease, by the amount of permanent capacity needed to serve each new customer that Douglas County designates. Douglas County will allocate a portion of its 0.2 MGD capacity to Louviers Water and Sanitation District upon its connection to the Northern Highway 85 Wastewater System. Prior to the full allocation of Douglas County's share of permanent 0.2 MGD capacity, Dominion may acquire, through purchase or temporary lease from the County, the use of any unused excess capacity. All service provided by Dominion shall be subject to Dominion's Rules and Regulations and the payment of any applicable Connection Fees, Capital Recovery Fees (if required by Douglas County), and approval by Dominion's Board.

- B. Capital Recovery Fees. Dominion may collect upon request from the Board of Douglas County Commissioners ("BOCC") an additional Sewer Infrastructure and Treatment Fee (above those charges defined in Dominion's Schedule of Fees, Rates, and Charges) from new development that directly connects into the Lift Station in Louviers until such time as either (i) the fee has generated at least \$7,400,000 (the estimated pro rata value of 0.2 MGD of capacity at this time based

on the current Project Cost) or (ii) Douglas County waives the fee for a new development in return for the construction of regional infrastructure by new Development with an aggregate equivalent value. Dominion may propose water and wastewater projects for reinvestment of Capital Recovery Fees for consideration by Douglas County, or Douglas County may elect to recoup the Capital Recovery Fees for County purposes. Douglas County may also waive collection of Capital Recovery Fees. Not less than annually, Dominion shall present to Douglas County a written summary of Capital Recovery Fees collected by Dominion if requested by Douglas County.

- D. Limitations. The allocation of costs set forth herein between Dominion and Douglas County is intended to apply solely to the costs of designing, constructing, and installing the Project, and shall not be construed to include costs and fees unrelated to the operation, maintenance, repair, or replacement of the Project. Such costs and other related terms and conditions, shall be managed by Dominion as the wholesale water and wastewater provider for the area served by the Systems and will be billed through as water and sewer rates to Dominion's customers.
- E. Warranty. Upon the completion of construction, initial acceptance, and conveyance of the System, Dominion shall be the sole owner of the Systems and all warranties associated therewith. Dominion represents and warrants that it either has, or will obtain, all necessary right, title and interest in the Systems to convey the capacity set forth in Subsections A and B of this Section.
- F. Insurance. Dominion shall procure and maintain property insurance for the Systems that is substantially similar to the coverage maintained by Dominion for other similar Dominion-owned water and wastewater infrastructure. If the Systems are damaged, Dominion shall allocate all proceeds from the insurance policy towards repairing the Systems.

## 5. AMERICAN RESCUE PLAN ACT PROVISIONS.

- A. Acknowledgement. Dominion acknowledges and agrees that the funds encumbered by Douglas County to pay for the Project, and the acquisition of all easements, rights-of way, and other real property interests necessary and appurtenant thereto, have been provided in accordance with Section 603(b) of the Social Security Act, as added by Section 9901 of the American Rescue Plan Act, Public Law No. 117-2 (March 11, 2021) (together with all rules and regulations promulgated thereunder). The Parties acknowledge that all funding from ARPA may only be used to cover those eligible costs incurred by Douglas County by December 31, 2024, and expended by December 31, 2026 including costs incurred to make necessary investments in water infrastructure. The Parties anticipate that the total amount of ARPA Funds available for the Project shall not exceed twenty million four-hundred eighty-two thousand four-hundred dollars (\$20,482,400).

- B. Use of ARPA Funds. Dominion shall only utilize ARPA Funds for the purposes described in this Agreement. Dominion agrees and acknowledges that, as a condition to receiving the ARPA Funds, it shall strictly follow the Coronavirus Local Fiscal Recovery Fund Award Terms and Conditions attached as Exhibit D. All invoices submitted by Dominion to Douglas County pursuant to this Agreement shall use “COVID-19” or “Coronavirus” as a descriptor for those costs that are paid by ARPA Funds to facilitate the tracking of Agreement-related spending related to COVID-19. Dominion shall segregate and specifically identify the time and expenditures billed to Douglas County on each invoice to allow for future review and analysis of COVID-19 related expenses. To avoid an unlawful duplication of federal benefits, the Parties agree and acknowledge that the services provided by Dominion for which ARPA Funds are used shall not, to the extent that ARPA Funds are used, also be paid for or reimbursed by monies provided under any other federal program.
  
- C. ARPA Deadlines. Douglas County agrees and acknowledges that it shall obligate the use of ARPA Funds for the services performed by Dominion under this Agreement no later than December 31, 2024. Dominion agrees and acknowledges that all services performed by Dominion using ARPA Funds must be performed by no later than December 31, 2026.
  
- D. Reporting Requirements. To the extent that Dominion’s services hereunder contemplate the spending of ARPA Funds, Dominion shall provide to Douglas County information responsive to mandatory performance measures, including programmatic data sufficient to conduct oversight as well as understand aggregate program outcomes. Further, in providing the ARPA-required information to Dominion, to the extent possible, Dominion shall provide this programmatic data related to such services disaggregated by race, ethnicity, gender, income, and other relevant demographic factors as may be determined by Douglas County. Dominion shall insert the foregoing requirement into all subcontracts related to this Agreement, thereby obligating all subcontractors to the same reporting requirement as Dominion.
  
- E. Inspection of Records. Dominion shall maintain records of the documentation supporting the use of ARPA Funds in an auditable format, for the later of five (5) years after final payment on this Agreement or the expiration of the applicable statute of limitations. Any authorized agent of Douglas County or of the Federal government, including the Special Inspector General for Pandemic Recovery, have the right to access, and the right to examine, copy and retain copies, at the official’s election in paper or electronic form, any pertinent books, documents, papers and records related to Dominion’s use of ARPA Funds pursuant to this Agreement. Dominion shall cooperate with Federal and Douglas County representatives and such representatives shall be granted access to the foregoing documents and information during reasonable business hours and until the latter of five (5) years after the final payment under this Agreement or expiration of the applicable statute



of limitations. No examination of records and audits pursuant to this section shall require Dominion to make disclosures in violation of state or federal privacy laws.

**6. DEFAULT/REMEDIES.** In the event a Party deems the other Party to be in default, it shall provide written notice indicating the event of default. The defaulting party shall have thirty (30) days from the date of the notice to cure the stated default or, if such default is not capable of being cured within thirty (30) days, cure of such default shall commence and be diligently pursued. In no event shall the cure period exceed thirty (30) days for monetary defaults, or sixty (60) days for non-monetary defaults, except by written consent of the non-defaulting party. In the event the defaulting party has failed to cure in accordance with this Section, the non-defaulting party may pursue all available remedies at law or equity. In addition, Dominion shall have the ability to withhold services to manage the design and construction of the System due to a monetary default by Douglas County.

**7. MISCELLANEOUS.**

- A. Governing Law and Venue. The Parties hereto agree that exclusive jurisdiction and venue for the resolution of any dispute relating to this Agreement shall lie in the District Court for Douglas County, State of Colorado.
- B. Entire Agreement. This Agreement constitutes the entire agreement between the Parties relating to the subject matter thereof, and there are no prior or contemporaneous agreements, either oral or written, relating to the subject matter hereof except as expressly set forth herein.
- C. Agreement Modification. The Agreement may not be amended, altered, or otherwise changed except by a written agreement between the Parties.
- D. Counterpart Execution. The Agreement may be executed in one or more counterparts, each of which when executed shall be deemed an original, all of which together shall constitute one and the same instrument. Executed copies hereof may be delivered by electronic delivery and, upon receipt, shall be deemed originals and binding upon the parties hereto.
- E. Governmental Immunity. Nothing in this Agreement shall be construed to waive, limit, or otherwise modify, in whole or in part, any governmental immunity that may be available by law to the Parties or their officials, employees, contractors, or agents, or any other person acting on behalf of the Parties and, in particular, governmental immunity that may be afforded or available to the Parties pursuant to the Colorado Governmental Immunity Act, Title 24, Article 10, Part 1 of the Colorado Revised Statutes.
- F. Assignability. This Agreement and the capacity granted herein may not be assigned, pledged or transferred, in whole or in part, without the express written consent of the other Party which consent shall not be unreasonably withheld.

- G. No Public Dedication/No Third-Party Beneficiary. Nothing contained herein shall be deemed to be a grant or dedication of any rights or use to the public in general, and no third-party beneficiary interests are created nor intended to be created by this Agreement.
- H. Headings for Convenience. The headings and captions in this Agreement are intended solely for the convenience of reference and shall be given no effect in the construction or interpretation of this Agreement.
- I. Notice. Any notice required or permitted by this Agreement shall be in writing and shall be deemed to have been sufficiently given for all purposes if sent by certified mail or registered mail, postage and fees prepaid, addressed to the party to whom such notice is to be given, at the address set forth below, or at such other address as has been previously furnished in writing, to the other party. Such notice shall be deemed to have been given when deposited in the United States mail.

If to Dominion: Dominion Water & Sanitation District  
9250 E. Costilla Ave., Ste. 400  
Greenwood Village, CO 80112  
Attn: Andrea Cole, District Manager  
Email: [Andrea.Cole@Dominionwsd.com](mailto:Andrea.Cole@Dominionwsd.com)

with copy to: WHITE BEAR ANKELE TANAKA & WALDRON  
2154 E. Commons Ave., Suite 2000  
Centennial, CO 80122  
Attn: Blair M. Dickhoner  
Phone: (303) 858-1800  
E-mail: [bdickhoner@wbapc.com](mailto:bdickhoner@wbapc.com)

If to Douglas County: Douglas County  
Attn: Special Projects Manager  
100 Third Street  
Castle Rock, CO 80104

with copy to: Douglas County  
Attn: County Attorney  
100 Third Street  
Castle Rock, CO 80104

- J. No Waiver. No waiver of any of the provisions of this Agreement shall be deemed to constitute a waiver of any other of the provisions of this Agreement, nor shall such waiver constitute a continuing waiver unless otherwise expressly provided herein, nor shall the waiver of any default hereunder be deemed a waiver of any subsequent default hereunder.

- K. Recordation. The Parties agree that this Agreement may be recorded in the records of the Clerk and Recorder for Douglas County.
- L. Binding Agreement. The benefits and burdens of this Agreement shall inure to and be binding upon on the successors and assigns of the Parties.
- M. Definitions and Interpretations. Except as otherwise provided herein, nouns, pronouns and variations thereof shall be deemed to refer to the singular or plural, and masculine or feminine, as the context may require. Any reference to a policy, procedure, law, regulation, rule or document shall mean such policy, procedure, law, regulation, rule or document as it may be amended from time to time.
- N. Survival of Representations. Each and every covenant, promise, and payment contained in this Agreement shall survive each and be binding and obligatory upon each of the Parties and shall not merge into any deed, assignment, covenant, escrow agreement, easement, lease or any other document.
- O. Non-Severability. Each Section of this Agreement is intertwined with the others and is not severable unless by mutual consent of the Parties.
- P. Effect of Invalidity. If any portion of this Agreement is held invalid or unenforceable for any reason by a court of competent jurisdiction as to either Party or as to both Parties, the Parties will immediately negotiate valid alternative portion(s) that as near as possible give effect to any stricken portion(s).
- Q. Force Majeure. Each Party shall be excused from performing its obligations under this Agreement during the time and to the extent that it is prevented from performing by a cause beyond its control, including, but not limited to: any incidence of fire, flood, or strike; acts of God; action of the government (except the parties hereto); war or civil disorder; violence or the threat thereof; severe weather; commandeering of material, products, plants or facilities by the federal, state or local government (except the parties hereto); and national fuel shortage, when satisfactory evidence of such cause is presented to the other Party, and provided further, that such nonperformance is beyond the reasonable control of, and is not due to the fault or negligence of, the Party not performing.


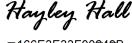
**IN WITNESS WHEREOF**, Douglas County and Dominion have executed this Agreement as of the date(s) set forth below.

*[Signature Pages Follow]*




**BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF DOUGLAS, STATE OF COLORADO**

Signed by:   
By: \_\_\_\_\_ DATE: 8/23/2024  
George Teal, Chair

ATTEST: (seal)   
Signed by: \_\_\_\_\_  
DocuSigned by:   
By: \_\_\_\_\_ DATE: 8/26/2024  
Hayley Hall  
Deputy Clerk to the Board

**APPROVED AS TO LEGAL FORM:**

DocuSigned by:   
By: \_\_\_\_\_ DATE: 8/22/2024  
~~XXXXXX Edwards~~  
Chris Pratt  
Senior Assistant County Attorney

**APPROVED AS TO FISCAL CONTENT:**

Signed by:   
BY: \_\_\_\_\_ DATE: 8/23/2024  
Andrew Copland, Finance Director

**APPROVED AS TO CONTENT:**

Signed by:   
BY: \_\_\_\_\_ DATE: 8/23/2024  
Douglas J. DeBord, County Manager

**DOMINION WATER & SANITATION DISTRICT**

DocuSigned by:  
By: John Ostermiller  
5093A8015D784D4...

Printed Name: John Ostermiller

Title: Board Assistant Secretary

Date: August 21, 2024

**ATTEST:**

By: Trina Hartman

Printed Name: Trina Hartman

Title: Secretary

Date: 08/21/2021

**EXHIBIT A**  
**DESCRIPTION OF PROJECT INFRASTRUCTURE**



## EXHIBIT A

### DESCRIPTION OF PROJECT INFRASTRUCTURE

There are three major components of the Project. The first is the Corrosion Study of the Louviers Distribution System, and this component has been completed. The second is the Waterton Road Water System, which was previously titled 'The Louviers Renewable Water Line and Master Meter'. The third is the Highway 85 Wastewater Collection and Distribution System. The infrastructure for the second and third components are described as follows:

#### The Waterton Road Water System

- Approximately 12,000 lineal feet of renewable water line extending from Sterling Ranch CAB distribution system to a water tank belonging to Louviers Water & Sanitation District.
- A master meter vault located at the Louviers water tank to effectively connect and meter flows from the regional renewable water line to the existing Louviers Water and Sanitation District distribution system.

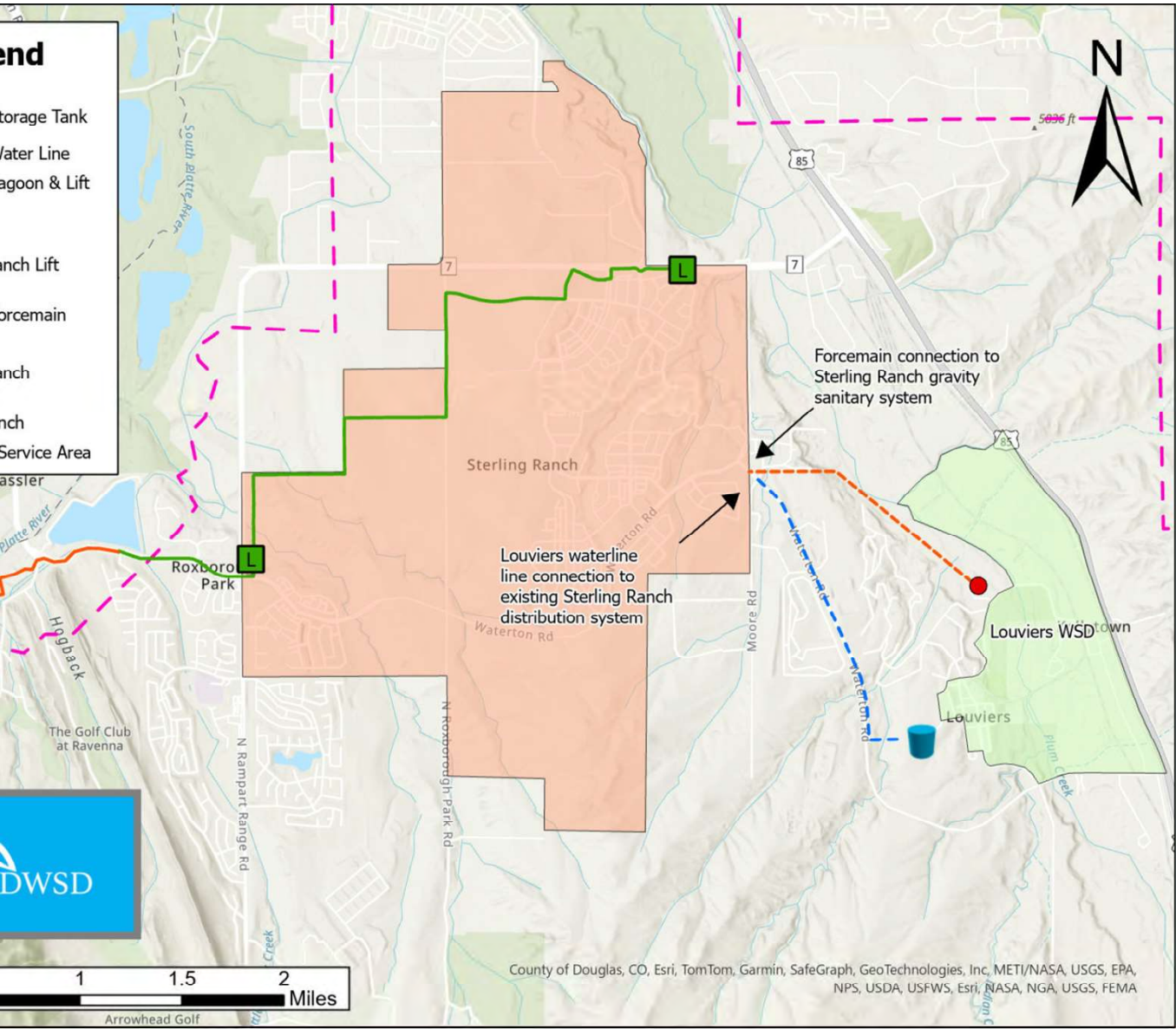
#### The Highway 85 Wastewater Collection and Distribution System

- A wastewater treatment plant known as the Chatfield Basin Water Reclamation Facility (CBWRF), with a treatment capacity of approximately one million gallons per day.
- A lift station near Louviers.
- A force main to convey sanitary waste from the lift station near Louviers to the Sterling Ranch CAB collection system.

**EXHIBIT A-1**  
**MAP OF PROJECT INFRASTRUCTURE**

EXHIBIT A-1

MAP OF PROJECT INFRASTRUCTURE





## **EXHIBIT B**

### **ESTIMATED COSTS OF PROJECT INFRASTRUCTURE**

EXHIBIT B

ESTIMATED COSTS OF PROJECT INFRASTRUCTURE							
	Construction	Construction Contingency	Easement Acquisition **	Construction Phase Services	TOTAL COST	ARPA Funded	Privately Funded
00	\$ 3,801,610	\$ 589,250	\$ -	\$ 304,129	\$ 5,194,989	\$ 482,200	\$ 4,712,789
00	\$ 25,000,000	\$ 3,750,000	\$ -	\$ 2,000,000	\$ 33,250,000	\$ 20,000,000	\$ 13,250,000
00	\$ 5,500,000	\$ 660,000	\$ -	\$ 440,000	\$ 7,260,000	0	\$ 7,260,000
					\$ 45,704,989	\$ 20,482,200	\$ 25,222,789

\*\*Assumes all easements are within Douglas County, Louviers, and Sterling Ranch properties

## **EXHIBIT C**

### **SCOPE OF WORK**



## **EXHIBIT C**

### **SCOPE OF WORK**

The scope of work for this project is to complete both the Water Road Water System to convey water from the Sterling Ranch CAB distribution system to the Louviers Water & Sanitation District water tank and the Highway 85 Wastewater Collection and Distribution System to convey wastewater from the Louviers, Colorado area to the Sterling Ranch CAB collection system. Dominion Water and Sanitation District will manage all aspects of the scope of work which includes the permitting, easement acquisition, design and construction of the Project Infrastructure. Dominion Water and Sanitation will work with Douglas County to manage outreach and communications with stakeholders for the project including Louviers Water & Sanitation District and future developments.

Permitting scope will include permits from the Colorado Department of Public Health and Environment and Douglas County, and may require permits from other agencies.

The easement scope includes acquiring the permanent and temporary easements for the water line, lift station, and force main. It is assumed that construction of all elements of this project will be contained within the properties owned by Douglas County, Louviers, and Sterling Ranch.

Design and construction scope includes complete investigation, design, construction, and commissioning for each of the Project Infrastructure components. The Corrosion Study referenced in the Agreement has been completed.

Construction Phase Services include managing cost, schedule, quality, and communication during the construction of the Project Infrastructure.

The approximate timeline for the project is:

Waterline: Design to be finalized Q4 of 2024

Bid Q1 of 2025

Construction complete Q4 of 2025

CBWRF: Design to begin in August of 2024.

Construction begin Q1 of 2025

Construction complete Q4 of 2027 (ARPA funds to be expended by Dec 2026)

Lift Station/Force Main:

Design complete Q2 of 2025

Bid Q3 of 2025

Construction complete Q2 of 2026

## EXHIBIT D

### U.S. DEPARTMENT OF THE TREASURY CORONAVIRUS LOCAL FISCAL RECOVERY FUND AWARD TERMS AND CONDITIONS

1. Use of Funds.
  - a. Recipient understands and agrees that the funds disbursed under this award may only be used in compliance with section 603(c) of the Social Security Act (the Act), Treasury's regulations implementing that section, and guidance issued by Treasury regarding the foregoing.
  - b. Recipient will determine prior to engaging in any project using this assistance that it has the institutional, managerial, and financial capability to ensure proper planning, management, and completion of such project.
2. Period of Performance. The period of performance for this award begins on the date hereof and ends on December 31, 2026. As set forth in Treasury's implementing regulations, Recipient may use award funds to cover eligible costs incurred during the period that begins on March 3, 2021, and ends on December 31, 2024.
3. Reporting. Recipient agrees to comply with any reporting obligations established by Treasury as they relate to this award.
4. Maintenance of and Access to Records.
  - a. Recipient shall maintain records and financial documents sufficient to evidence compliance with section 603(c) of the Act, Treasury's regulations implementing that section, and guidance issued by Treasury regarding the foregoing.
  - b. The Treasury Office of Inspector General and the Government Accountability Office, or their authorized representatives, shall have the right of access to records (electronic and otherwise) of Recipient in order to conduct audits or other investigations.
  - c. Records shall be maintained by Recipient for a period of five (5) years after all funds have been expended or returned to Treasury, whichever is later.
5. Pre-award Costs. Pre-award costs, as defined in 2 C.F.R. § 200.458, may not be paid with funding from this award.
6. Administrative Costs. Recipient may use funds provided under this award to cover both direct and indirect costs.
7. Cost Sharing. Cost sharing or matching funds are not required to be provided by Recipient.

8. Conflicts of Interest. Recipient understands and agrees it must maintain a conflict of interest policy consistent with 2 C.F.R. § 200.318(c) and that such conflict of interest policy is applicable to each activity funded under this award. Recipient and subrecipients must disclose in writing to Treasury or the pass-through entity, as appropriate, any potential conflict of interest affecting the awarded funds in accordance with 2 C.F.R. § 200.112.
9. Compliance with Applicable Law and Regulations.
  - a. Recipient agrees to comply with the requirements of section 602 of the Act, regulations adopted by Treasury pursuant to section 602(f) of the Act, and guidance issued by Treasury regarding the foregoing. Recipient also agrees to comply with all other applicable federal statutes, regulations, and executive orders, and Recipient shall provide for such compliance by other parties in any agreements it enters into with other parties relating to this award.
  - b. Federal regulations applicable to this award include, without limitation, the following:
    - i. Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, 2 C.F.R. Part 200, other than such provisions as Treasury may determine are inapplicable to this Award and subject to such exceptions as may be otherwise provided by Treasury. Subpart F – Audit Requirements of the Uniform Guidance, implementing the Single Audit Act, shall apply to this award.
    - ii. Universal Identifier and System for Award Management (SAM), 2 C.F.R. Part 25, pursuant to which the award term set forth in Appendix A to 2 C.F.R. Part 25 is hereby incorporated by reference.
    - iii. Reporting Subaward and Executive Compensation Information, 2 C.F.R. Part 170, pursuant to which the award term set forth in Appendix A to 2 C.F.R. Part 170 is hereby incorporated by reference.
    - iv. OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement), 2 C.F.R. Part 180, including the requirement to include a term or condition in all lower tier covered transactions (contracts and subcontracts described in 2 C.F.R. Part 180, subpart B) that the award is subject to 2 C.F.R. Part 180 and Treasury's implementing regulation at 31 C.F.R. Part 19.
    - v. Recipient Integrity and Performance Matters, pursuant to which the award term set forth in 2 C.F.R. Part 200, Appendix XII to Part 200 is hereby incorporated by reference.
    - vi. Governmentwide Requirements for Drug-Free Workplace, 31 C.F.R. Part 20.



- vii. New Restrictions on Lobbying, 31 C.F.R. Part 21.
  - viii. Uniform Relocation Assistance and Real Property Acquisitions Act of 1970 (42 U.S.C. §§ 4601-4655) and implementing regulations.
  - ix. Generally applicable federal environmental laws and regulations.
- c. Statutes and regulations prohibiting discrimination applicable to this award include, without limitation, the following:
- i. Title VI of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d et seq.) and Treasury's implementing regulations at 31 C.F.R. Part 22, which prohibit discrimination on the basis of race, color, or national origin under programs or activities receiving federal financial assistance;
  - ii. The Fair Housing Act, Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§ 3601 et seq.), which prohibits discrimination in housing on the basis of race, color, religion, national origin, sex, familial status, or disability;
  - iii. Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794), which prohibits discrimination on the basis of disability under any program or activity receiving federal financial assistance;
  - iv. The Age Discrimination Act of 1975, as amended (42 U.S.C. §§ 6101 et seq.), and Treasury's implementing regulations at 31 C.F.R. Part 23, which prohibit discrimination on the basis of age in programs or activities receiving federal financial assistance; and
  - v. Title II of the Americans with Disabilities Act of 1990, as amended (42 U.S.C. §§ 12101 et seq.), which prohibits discrimination on the basis of disability under programs, activities, and services provided or made available by state and local governments or instrumentalities or agencies thereto.
10. Remedial Actions. In the event of Recipient's noncompliance with section 602 of the Act, other applicable laws, Treasury's implementing regulations, guidance, or any reporting or other program requirements, Treasury may impose additional conditions on the receipt of a subsequent tranche of future award funds, if any, or take other available remedies as set forth in 2 C.F.R. § 200.339. In the case of a violation of section 602(c) of the Act regarding the use of funds, previous payments shall be subject to recoupment as provided in section 602(e) of the Act and any additional payments may be subject to withholding as provided in sections 602(b)(6)(A)(ii)(III) of the Act, as applicable.
11. Hatch Act. Recipient agrees to comply, as applicable, with requirements of the Hatch Act (5 U.S.C. §§ 1501-1508 and 7324-7328), which limit certain political activities of State or

local government employees whose principal employment is in connection with an activity financed in whole or in part by this federal assistance.

12. False Statements. Recipient understands that making false statements or claims in connection with this award is a violation of federal law and may result in criminal, civil, or administrative sanctions, including fines, imprisonment, civil damages and penalties, debarment from participating in federal awards or contracts, and/or any other remedy available by law.
13. Publications. Any publications produced with funds from this award must display the following language: “This project [is being] [was] supported, in whole or in part, by federal award number [enter project FAIN] awarded to [name of Recipient] by the U.S. Department of the Treasury.”
14. Debts Owed the Federal Government.
  - a. Any funds paid to Recipient (1) in excess of the amount to which Recipient is finally determined to be authorized to retain under the terms of this award; (2) that are determined by the Treasury Office of Inspector General to have been misused; or (3) that are determined by Treasury to be subject to a repayment obligation pursuant to sections 602(e) and 603(b)(2)(D) of the Act and have not been repaid by Recipient shall constitute a debt to the federal government.
  - b. Any debts determined to be owed the federal government must be paid promptly by Recipient. A debt is delinquent if it has not been paid by the date specified in Treasury’s initial written demand for payment, unless other satisfactory arrangements have been made or if the Recipient knowingly or improperly retains funds that are a debt as defined in paragraph 14(a). Treasury will take any actions available to it to collect such a debt.
15. Disclaimer.
  - a. The United States expressly disclaims any and all responsibility or liability to Recipient or third persons for the actions of Recipient or third persons resulting in death, bodily injury, property damages, or any other losses resulting in any way from the performance of this award or any other losses resulting in any way from the performance of this award or any contract, or subcontract under this award.
  - b. The acceptance of this award by Recipient does not in any way establish an agency relationship between the United States and Recipient.
16. Protections for Whistleblowers.
  - a. In accordance with 41 U.S.C. § 4712, Recipient may not discharge, demote, or otherwise discriminate against an employee in reprisal for disclosing to any of the list of persons or entities provided below, information that the employee reasonably

- Chatfield Urban Area Expansion - CMP Land Use Map Amendment  
Project File: DR2025-011  
Planning Commission Staff Report - Page 189 of 345



## **ASSURANCES OF COMPLIANCE WITH TITLE VI OF THE CIVIL RIGHTS ACT OF 1964**

As a condition of receipt of federal financial assistance from the Department of the Treasury, the recipient named below (hereinafter referred to as the “Recipient”) provides the assurances stated herein. The federal financial assistance may include federal grants, loans and contracts to provide assistance to the Recipient’s beneficiaries, the use or rent of Federal land or property at below market value, Federal training, a loan of Federal personnel, subsidies, and other arrangements with the intention of providing assistance. Federal financial assistance does not encompass contracts of guarantee or insurance, regulated programs, licenses, procurement contracts by the Federal government at market value, or programs that provide direct benefits.

The assurances apply to all federal financial assistance from or funds made available through the Department of the Treasury, including any assistance that the Recipient may request in the future.

The Civil Rights Restoration Act of 1987 provides that the provisions of the assurances apply to all of the operations of the Recipient’s program(s) and activity(ies), so long as any portion of the Recipient’s program(s) or activity(ies) is federally assisted in the manner prescribed above.

1. Recipient ensures its current and future compliance with Title VI of the Civil Rights Act of 1964, as amended, which prohibits exclusion from participation, denial of the benefits of, or subjection to discrimination under programs and activities receiving federal financial assistance, of any person in the United States on the ground of race, color, or national origin (42 U.S.C. § 2000d et seq.), as implemented by the Department of the Treasury Title VI regulations at 31 CFR Part 22 and other pertinent executive orders such as Executive Order 13166, directives, circulars, policies, memoranda, and/or guidance documents.
  
2. Recipient acknowledges that Executive Order 13166, “Improving Access to Services for Persons with Limited English Proficiency,” seeks to improve access to federally assisted programs and activities for individuals who, because of national origin, have Limited English proficiency (LEP). Recipient understands that denying a person access to its programs, services, and activities because of LEP is a form of national origin discrimination prohibited under Title VI of the Civil Rights Act of 1964 and the Department of the Treasury’s implementing regulations. Accordingly, Recipient shall initiate reasonable steps, or comply with the Department of the Treasury’s directives, to ensure that LEP persons have meaningful access to its programs, services, and activities. Recipient understands and agrees that meaningful access may entail providing language assistance services, including oral interpretation and written translation where necessary, to ensure effective communication in the Recipient’s programs, services, and activities.
  
3. Recipient agrees to consider the need for language services for LEP persons when Recipient develops applicable budgets and conducts programs, services, and activities. As a resource, the Department of the Treasury has published its LEP guidance at 70 FR 6067. For more information on taking reasonable steps to provide meaningful access for LEP persons, please visit <http://www.lep.gov>.

4. Recipient acknowledges and agrees that compliance with the assurances constitutes a condition of continued receipt of federal financial assistance and is binding upon Recipient and Recipient's successors, transferees, and assignees for the period in which such assistance is provided.
5. Recipient acknowledges and agrees that it must require any sub-grantees, contractors, subcontractors, successors, transferees, and assignees to comply with assurances 1-4 above, and agrees to incorporate the following language in every contract or agreement subject to Title VI and its regulations between the Recipient and the Recipient's sub-grantees, contractors, subcontractors, successors, transferees, and assignees:

*The sub-grantee, contractor, subcontractor, successor, transferee, and assignee shall comply with Title VI of the Civil Rights Act of 1964, which prohibits recipients of federal financial assistance from excluding from a program or activity, denying benefits of, or otherwise discriminating against a person on the basis of race, color, or national origin (42 U.S.C. § 2000d et seq.), as implemented by the Department of the Treasury's Title VI regulations, 31 CFR Part 22, which are herein incorporated by reference and made a part of this contract (or agreement). Title VI also includes protection to persons with "Limited English Proficiency" in any program or activity receiving federal financial assistance, 42 U.S.C. § 2000d et seq., as implemented by the Department of the Treasury's Title VI regulations, 31 CFR Part 22, and herein incorporated by reference and made a part of this contract or agreement.*

6. Recipient understands and agrees that if any real property or structure is provided or improved with the aid of federal financial assistance by the Department of the Treasury, this assurance obligates the Recipient, or in the case of a subsequent transfer, the transferee, for the period during which the real property or structure is used for a purpose for which the federal financial assistance is extended or for another purpose involving the provision of similar services or benefits. If any personal property is provided, this assurance obligates the Recipient for the period during which it retains ownership or possession of the property.
7. Recipient shall cooperate in any enforcement or compliance review activities by the Department of the Treasury of the aforementioned obligations. Enforcement may include investigation, arbitration, mediation, litigation, and monitoring of any settlement agreements that may result from these actions. The Recipient shall comply with information requests, on-site compliance reviews and reporting requirements.
8. Recipient shall maintain a complaint log and inform the Department of the Treasury of any complaints of discrimination on the grounds of race, color, or national origin, and limited English proficiency covered by Title VI of the Civil Rights Act of 1964 and implementing regulations and provide, upon request, a list of all such reviews or proceedings based on the complaint, pending or completed, including outcome. Recipient also must inform the Department of the Treasury if Recipient has received no complaints under Title VI.

9. Recipient must provide documentation of an administrative agency's or court's findings of non-compliance of Title VI and efforts to address the non-compliance, including any voluntary compliance or other agreements between the Recipient and the administrative agency that made the finding. If the Recipient settles a case or matter alleging such discrimination, the Recipient must provide documentation of the settlement. If Recipient has not been the subject of any court or administrative agency finding of discrimination, please so state.
10. If the Recipient makes sub-awards to other agencies or other entities, the Recipient is responsible for ensuring that sub-recipients also comply with Title VI and other applicable authorities covered in this document State agencies that make sub-awards must have in place standard grant assurances and review procedures to demonstrate that that they are effectively monitoring the civil rights compliance of subrecipients.

The United States of America has the right to seek judicial enforcement of the terms of this assurances document and nothing in this document alters or limits the federal enforcement measures that the United States may take in order to address violations of this document or applicable federal law.

Under penalty of perjury, the undersigned official(s) certifies that official(s) has read and understood the Recipient's obligations as herein described, that any information submitted in conjunction with this assurances document is accurate and complete, and that the Recipient is in compliance with the aforementioned nondiscrimination requirements.



**PRAIRIE CONSERVATION  
MANAGEMENT PLAN  
INDEX**

---

**STERLING RANCH  
COMMUNITY AUTHORITY BOARD (CAB)**

---

**DATE APPROVED  
MAY 17, 2016**

---

**PARTIES:**

**OWNER:** ..... Sterling Ranch, LLC, a Colorado limited liability company

**PROPERTY:** ..... 3,400 acres located in Douglas County, Colorado

**COUNSEL:** ..... Ronda Sandquist, Brownstein Hyatt Farber Schreck, LLP

**COUNSEL:** ..... MaryAnn McGeady, McGeady Becher, P.C.

---

**MANAGEMENT PLAN INDEX**

**I. MANAGEMENT PLAN DOCUMENTS:**

Prairie Conservation Management Plan in final form dated May 17, 2016

**II. FIGURES:**

Figure 1: Prairie Conservation Conceptual Plan

**III. EXHIBITS:**

Exhibit A: Prairie Conservation Areas in Relation to Other Land Uses on Sterling Ranch

Exhibit B: Prairie Conservation Area (PCA) Decision Planning Tree

Exhibit C: Prairie Dog Management Decision Tree

**IV. APPENDICES:**

Appendix A: Plant Species Likely to Occur on Sterling Ranch Based on Current and Projected Vegetation Communities

Appendix B: Prairie Dog Management Policy

Appendix C: Burrowing Owl Management

Appendix D: Unanticipated Discovery Protocol

Appendix E: Migratory Bird Treaty Act Compliance Procedure

Appendix F: Raptor Management Guidelines and Strategy

Prairie Conservation Management Plan  
Community Authority Board (CAB)

**V. RESOLUTION NO. 2016-05-01:**

Resolution of the Sterling Ranch Community Authority Board Regarding the Prairie  
Conservation Management Plan

Prairie Conservation Management Plan  
Community Authority Board (CAB)



# **PRAIRIE CONSERVATION MANAGEMENT PLAN**

## **STERLING RANCH COMMUNITY AUTHORITY BOARD (CAB)**

**MAY 17, 2016**

Approved by Resolution of the Board of Directors on May 17, 2016

# **PRAIRIE CONSERVATION MANAGEMENT PLAN**

## **TABLE OF CONTENTS**

1.0	INTRODUCTION .....	1
2.0	EXISTING CONDITIONS.....	2
2.1	PHYSICAL LANDSCAPE.....	2
2.2	VEGETATION COMMUNITIES .....	2
2.2.1	MID-GRASS PRAIRIE .....	3
2.2.2	MEDIUM/HIGH-DENSITY SHRUBLAND.....	4
2.2.3	LOW-DENSITY SHRUBLAND.....	4
2.2.4	WETLANDS AND RIPARIAN AREAS .....	5
2.3	WILDLIFE RESOURCES.....	5
2.3.1	MAMMALS .....	5
2.3.2	BIRDS.....	7
2.3.3	RAPTORS.....	8
2.3.4	REPTILES AND AMPHIBIANS.....	9
2.4	CULTURAL RESOURCES .....	9
3.0	PLAN FRAMEWORK .....	12
3.1	VISION .....	12
3.2	GOALS.....	12
3.3	IDENTIFICATION OF PRAIRIE CONSERVATION AREAS .....	12
3.4	PROJECT PHASING.....	13
4.0	CONSERVATION PLAN.....	14
4.1	GOAL 1: PROMOTE A SUSTAINABLE HUMAN COMMUNITY THAT PROMOTES/ENCOURAGES A HEALTHY/SUSTAINABLE NATURAL LANDSCAPE.	14
4.2	GOAL 2: PROTECT CULTURAL/PALEONTOLOGICAL RESOURCES.....	18
4.3	GOAL 3: BUILD AND MAINTAIN POSITIVE COMMUNITY AND AGENCY RELATIONS THROUGH SOUND MANAGEMENT AND COORDINATION OF CONSERVATION EFFORTS.....	18
4.4	GOAL 4: MINIMIZE WILDLIFE-HUMAN CONFLICTS.....	20
4.5	GOAL 5: COMPLY WITH FEDERAL AND STATE LAWS AND REGULATIONS PERTAINING TO THREATENED, ENDANGERED, AND SENSITIVE SPECIES THAT RESIDE ON THE STERLING RANCH PROPERTY.....	21
	REFERENCES .....	27

## **FIGURES**

Figure 1: Prairie Conservation Conceptual Plan

## **EXHIBITS**

Exhibit A: Prairie Conservation Areas in Relation to Other Land Uses on Sterling Ranch

Exhibit B: Prairie Conservation Area (PCA) Decision Planning Tree

Exhibit C: Prairie Dog Management Decision Tree

## **APPENDICES**

APPENDIX A: PLANT SPECIES LIKELY TO OCCUR ON STERLING RANCH BASED ON  
CURRENT AND PROJECTED VEGETATION COMMUNITIES.

APPENDIX B: PRAIRIE DOG MANAGEMENT POLICY

APPENDIX C: BURROWING OWL MANAGEMENT

APPENDIX D: UNANTICIPATED DISCOVERY PROTOCOL.

APPENDIX E: MIGRATORY BIRD TREATY ACT COMPLIANCE PROCEDURE

APPENDIX F: RAPTOR MANAGEMENT GUIDELINES AND STRATEGY



## **1.0 INTRODUCTION**

Sterling Ranch, LLC (“the Owner”) owns and manages a 3,400-acre mixed-use master-planned community located in Douglas County, Colorado, known as Sterling Ranch. This Prairie Conservation Management Plan (“PCMP”) is the current concept for creating native prairie ecosystems within the Sterling Ranch community. This PCMP describes current thoughts for maintaining the ranching heritage and accommodating wildlife habitats in a phased approach as development proceeds. Further, it describes how interim and long-term Prairie Conservation Areas (“PCAs”) may be identified and managed. As Sterling Ranch and associated development progresses, the PCMP’s concepts and plans, including PCAs, will be modified and adapted by the Owner.

The Owner seeks to conserve a natural area within its vibrant, successful urban development. The purpose of the PCMP is to describe the Owner’s current plans for enhancing the urban community through the creation and management of public and private recreational areas and natural spaces. The Bird Conservancy of the Rockies (“Bird Conservancy”—formerly the Rocky Mountain Bird Observatory) provided an independent review of this PCMP. Their suggestions and guidance have been incorporated.

The vision and goals described in this plan have informed objectives and specific strategies for Open Space areas.<sup>1</sup> The initial concepts for the PCMP are depicted in Figure 1, and the PCMP represents a working draft that will continue to evolve with project planning and implementation. The PCMP also supports the ranching heritage that currently exists on the ranch in an interactive manner until development of the ranch areas commences.

This PCMP is not regulatory. The PCMP does not create, impose, or imply binding rights or obligations on any party for the establishment or management of Open Space, PCAs, prairie conservation, wildlife corridors or habitat or greenspace above and beyond the July 2013 zoning

---

<sup>1</sup> “Open Space” refers to areas that are designated and dedicated as “Open Space Conservation” areas during the subdivision and platting process as set forth in the Douglas County Zoning Code. Open Space will be established only when Sterling Ranch, LLC deeds such areas to the Community Authority Board. “Prairie Conservation Areas” refer to interim designations that temporarily dedicate the areas to one or more conservation goals.

commitments.<sup>2</sup> Additionally, the PCMP applies only to undeveloped and undedicated areas owned and delineated by the Owner, as may be amended by the Owner from time to time.

This PCMP describes the general existing conditions in Section 2 and the Plan Framework in Section 3, which includes the plan vision and goals. Based on these goals, Section 4 finally sets forth objectives and specific management strategies. More detailed policies and management protocols are provided in Appendices B through F.

## **2.0 EXISTING CONDITIONS**

This section describes the current general ecological conditions at Sterling Ranch to provide an understanding of what resources exist on the property and identify potential resource opportunities and constraints to consider when implementing the PCMP.

### **2.1 Physical Landscape**

Sterling Ranch is a 3,400-acre mixed-use master-planned community located in Douglas County, Colorado. It began as an agricultural property that was ranched by previous owners. Decades of poor range management, including overgrazing, resulted in a substantial loss of vegetation, the spread of noxious weeds, severe soil erosion, and large denuded areas. Environmentally responsible ranching activities have been implemented in the recent decade, with a range management program to improve the rangeland health and provide sustainable habitat for livestock and wildlife.

### **2.2 Vegetation Communities**

The topography of the property is generally flat with a few small rolling hills and valleys. Six vegetation communities exist on Sterling Ranch: 1) mid-grass prairie, 2) medium/high-density shrubland, 3) low-density shrubland, 4) wetland, 5) riparian areas, and 6) disturbed areas characterized by bare ground, structures and weedy vegetation. Mid-grass prairie is the dominant plant community with high and low density shrubland scattered along drainages and the north slopes of hills in the south end of the ranch. Common and scientific names of plant and animal species commonly found at Sterling Ranch are provided in Appendix A.

---

<sup>2</sup> The Owner recognizes that coordinated implementation of this Policy with adjacent landowners may result in more efficient execution of the policies contained herein and greater overall success. Accordingly, this Policy is recommended to the Community Authority Board ("CAB") and Sterling Ranch Districts 1 – 7 (the "Districts"), as well as by Dominion Water & Sanitation District ("Dominion") with implementation delegated to the CAB.

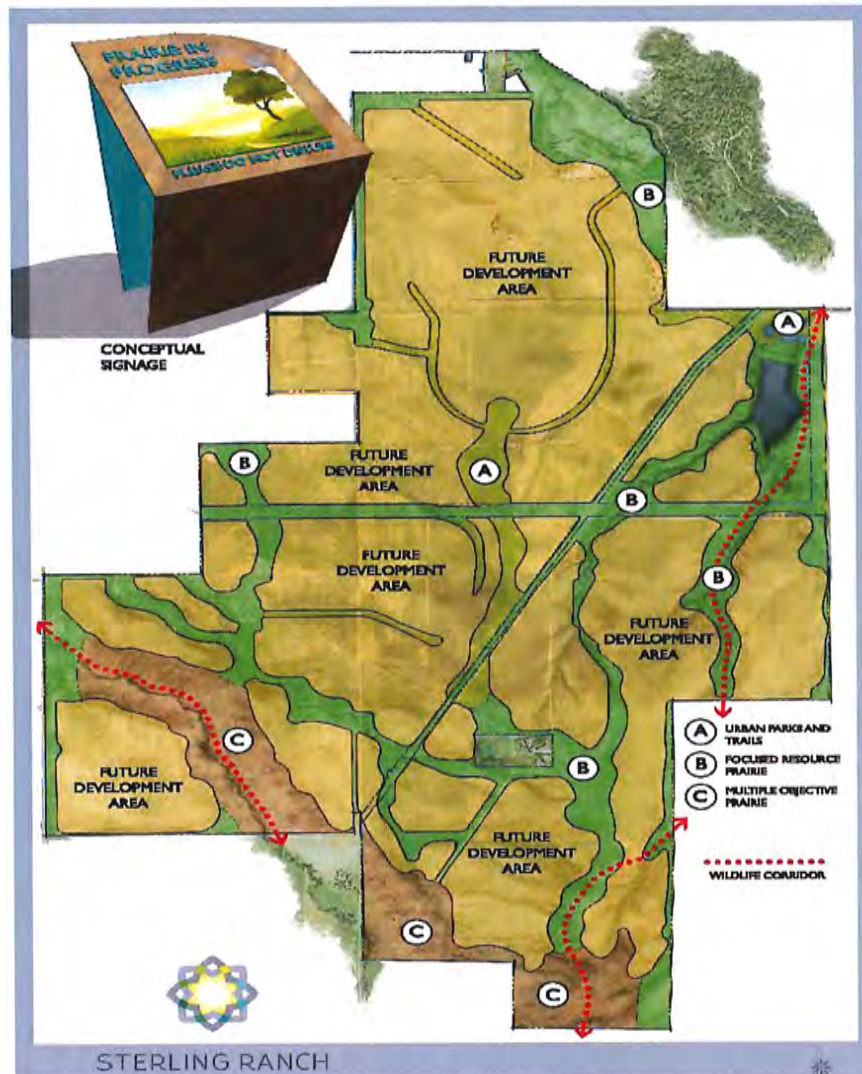


### 2.2.1 Mid-grass Prairie

The most dominant vegetation community at Sterling Ranch is the mid-grass prairie type. Historically, the grassland areas in the Chatfield Basin, including Sterling Ranch, were dominated by mid- and tall-grass populations supporting a diverse group of wildlife species distinct from those found on short-grass lands (Chatfield Basin Conservation Network (CBCN) 2006). Large areas of mid-grass prairie still exist on Sterling Ranch, providing areas of medium- and high-quality vegetation communities, particularly in the southern portion of the ranch. Typical grassland species include blue grama grass, side-oats grama, buffalograss, big bluestem, little bluestem, needle-and-threadgrass, western wheatgrass, and introduced species such as smooth brome, cheatgrass, and Kentucky bluegrass. The grassland areas also supports a variety of flowers including Indian paintbrush, prairie smoke, and scarlet globemallow.

Portions of the existing mid-grass prairie have been altered by seeding with both native and non-native pasture/hayfield grasses. In these areas, introduced pasture grasses are intermixed and dominate native species. Introduced pasture grasses include smooth brome and western wheatgrass. Subshrubs such as broom snakeweed, buckwheat, and yucca are scattered throughout most rangeland areas.





**Figure 1. Prairie Conservation Conceptual Plan**

### 2.2.2 Medium/High-Density Shrubland

Medium- to high-density shrubland areas are generally dominated by mixed shrub and subshrub species. The shrubby areas are typically found on east- or north-facing slopes on Sterling Ranch. Common shrub species include silver mountain mahogany, rubber rabbitbrush, black chokecherry, American plum, skunkbush sumac, and roundleaf snowberry.

### 2.2.3 Low-density Shrubland

Within the low-density shrubland areas is a mix of mid-grass prairie species and shrubby species. Twistspine pricklypear, prairie sagewort, and broom snakeweed are common shrubs found in the low-density shrubland areas.

#### **2.2.4 Wetlands and Riparian Areas**

There are little or no wetlands on the property. If wetland areas can be enhanced, in conformance with the development plan, such enhancements will be considered.

Riparian areas (plant communities adjacent to and affected by surface and ground water associated with creeks, streams, lakes, and other water bodies), occur within Sterling Ranch mostly along Willow Creek, with small remnant riparian areas sporadically along East Willow Creek and Sterling Gulch (although the overall habitat conditions of East Willow Creek and Sterling Gulch are more characteristic of a dry wash or arroyo). Most of the riparian community along Willow Creek is degraded from incision of the drainageway, past cattle grazing practices and current prairie dog grazing, and infestation of noxious weeds, particularly hairy willow-herb. Native riparian vegetation is characterized by various understory shrubs such as coyote willow and American plum.

### **2.3 Wildlife Resources**

Prairie habitats at Sterling Ranch can provide habitat and corridors for a diverse wildlife community. The grasslands on the ranch, including mid-grass prairie and pastures, provide breeding habitat for numerous ground-nesting prairie bird species. Linear riparian systems at the ranch, such as Willow Creek, provide suitable habitat for breeding songbirds and migration corridors for large mammals such as mule deer and coyote. Shrubland areas with intermixed grassland along Sterling Gulch and the southern portion of the ranch also provide food and cover for diverse wildlife.

#### **2.3.1 Mammals**

Sterling Ranch contains some large areas of open habitat and remnant native vegetation. This provides a diversity of habitats that can attract native mammal species. The entire ranch is within the overall range for elk, mule deer, and white-tailed deer in Colorado (CPW 2015). The ranch also provides suitable habitat for a variety of small mammals such as desert cottontail rabbit, deer mouse, prairie vole, northern pocket gopher, and black-tailed prairie dog. Predators contribute to the overall health and function of the wildlife community. Mountain lion and black bear occur in northern Douglas County, and the southern half of Sterling Ranch is mapped as possible overall range for mountain lion and bear (CPW 2015).

The Preble's meadow jumping mouse ("Preble's") is protected as a threatened species under the federal Endangered Species Act ("ESA"). Douglas County has identified a Riparian Conservation Zone to protect potential Preble's habitat, which includes wetland and riparian habitat along most drainages in the county. Although Preble's populations may occur upstream and downstream of Sterling Ranch, no Preble's habitat exists within Sterling Ranch. Habitat along Willow Creek is generally poor and unlikely to support Preble's population. However, it is included in the Riparian Conservation Zone<sup>3</sup> and has been identified by Sterling Ranch as Open Space as part of the Willow Creek wildlife corridor. No Preble's critical habitat is designated on Sterling Ranch.

Black-tailed prairie dogs present a unique set of management challenges because of their ecological importance and because of the conflicts that arise as a result of their feeding and burrowing activities, potential disease transmission, and over-population. Prairie dogs can cause damage to property, creating hazards for both humans and livestock, and, as vectors of diseases transmittable to humans and/or their pets, they raise human health and safety concerns. Prairie dog burrowing activity has also damaged cultural resources in northern Douglas County. Prairie dogs may negatively impact native plant communities by overgrazing relatively small confined areas, often leading to severe noxious weed infestations.

However, if balanced, prairie dogs can benefit the landscape. Their burrowing and grazing activity have subtle effects on soil fertility and the nutrient contents in plants. These effects are beneficial to grasslands under natural conditions. Several animal species either rely directly on prairie dogs or indirectly on the effects they have on native grasslands. The western burrowing owl, listed as a threatened species by the State of Colorado, uses prairie dog burrows for shelter and nesting. Other species specifically found at Sterling Ranch that use prairie dog burrows for shelter or that prey on prairie dogs include coyote, red fox, desert cottontail, red-tailed hawk, prairie rattlesnake, and tiger salamander.

Sterling Ranch is committed to maintaining prairie dogs and prairie dog habitat on the ranch where appropriate, while balancing the need to manage and control the species where it conflicts

---

<sup>3</sup> The U.S. Fish and Wildlife Service, in conjunction with Douglas County, established the RCZs within Sterling Ranch as part of a Habitat Conservation Plan. RCZs are not PCAs, as PCAs are established by Sterling Ranch and exist on an interim basis. In contrast, RCZs may be amended from time to time by the U.S. Fish and Wildlife Service through a formal review process.



with higher priority resources or community values, including the protection of human health and private property. As further discussed in section 4 below, Sterling Ranch proposes to establish one or more Multiple- Objective PCAs in which prairie dog conservation and management is an integral component of that prairie community. In establishing Multiple-Objective PCAs, one primary objective is that potential areas suitable for prairie dogs are limited, so prairie dogs are not allowed to spread into areas with existing development, areas planned for development, or areas reserved for other uses. Other management questions are likely to arise, including those related to the protection of human health and private property, prairie dog relocation, live capture and donation to a wildlife recovery program, lethal control, visual barriers, and plague.

Large carnivore species that may appear within Sterling Ranch—including coyotes and red fox, as well as an occasional black bear or mountain lion—can be a threat or a perceived threat to humans and pets. Interactions between humans and these species are uncommon, but are potentially dangerous. The availability of pet food and the presence of small domestic animals may attract wild predators or reinforce a positive association with humans.

Currently muskrats and beavers are not present at Sterling Ranch. However, with the creation of storage and recreation reservoirs, these two aquatic mammals could move into the area. Beaver can contribute to wetland and riparian restoration, however, both beaver and muskrat cause also severe damage by digging holes into dikes and earthen dams and beaver build lodges and log dams that block water intakes and storm drainages.

### 2.3.2 Birds

More than 280 species of migratory birds have been observed at nearby Chatfield Reservoir (Kellnor 2009; NDIS 2010). Many of the grassland species found at Chatfield Reservoir could also occur on Sterling Ranch (Appendix A). Three federal programs govern migratory birds and/or raptor nest sites: (1) the Migratory Bird Treaty Act (“MBTA”), (2) the Bald and Golden Eagle Protection Act, and (3) the ESA. Additionally, the State of Colorado has regulations and guidelines pertaining to raptors. These regulations protect migratory birds, as well as their eggs and nests. In Colorado, most birds, except for grouse species, European starling, house sparrow, rock pigeon, and Eurasian collared dove, are protected under the MBTA. Even species such as the magpie and great horned owl, which tend to be present throughout the year, are protected

under the MBTA. Habitat-disturbing activities in migratory bird habitats should be conducted, when practical, during the nonbreeding season (September through March for most songbirds) to avoid the disturbance or taking of an active migratory bird nest, including nests of ground-nesting species.

Another migratory bird species protected under the MBTA is the burrowing owl. CPW has designated the burrowing owl as a state threatened species (CPW 2015). As such, the harassment or taking of a state species of concern like the burrowing owl is prohibited unless limited exceptions apply. *See* C.R.S §§ 33-2-105(4), -106(4); 2 C.C.R. § 406-1000. The burrowing owl nests in sparsely vegetated areas, typically in vegetation less than four inches high. The owl is active during the day and uses abandoned prairie dog burrows for nesting and roosting (Haug et al. 1993). Burrowing owls may demonstrate a tendency to return to the general area of the previous year's nest burrow and owls may use the same burrow (Conway et al., 2006). Burrowing owls generally stop nesting in prairie dog colonies within one to three years after a colony has been abandoned by the prairie dogs (Dechant et al. 1999). Burrowing owls are typically present in Colorado between March 15 and October 31. The inadvertent killing of burrowing owls could occur during prairie dog poisoning, construction, or earth-moving projects. In an effort to avoid accidental killing of owls, the CPW has issued guidelines for conducting clearance surveys in areas subject to poisoning and/or construction projects during the period from March 15 through October 31 (see Appendix C for current guidelines).

Of particular importance to Sterling Ranch activities is the MBTA stipulation that it is unlawful to destroy an active migratory bird nest, nestling, or eggs. The U.S. Fish and Wildlife Service allows vacant nests to be destroyed, but nests with active birds, young, or eggs must be left alone. For most migratory bird species, the active nesting season in Colorado is between March and August, which may also coincide with the peak construction season for development and infrastructure activities on Sterling Ranch. Appendix E provides guidelines for avoiding and minimizing the taking of migratory birds.

### 2.3.3 Raptors

Raptors potentially have nested in the vicinity of Sterling Ranch. Sterling Ranch is working with the Bird Conservancy to enhance habitat for raptors post build-out. As development is phased across the ranch, Sterling Ranch will comply with federal regulations and Colorado Parks



and Wildlife (“CPW”) guidelines pertaining to raptors. CPW has developed buffer and seasonal restriction guidelines to protect active raptor nests. Appendix F provides guidelines for avoiding and minimizing take of raptors.

Raptors occasionally forage on Sterling Ranch during migration and summer breeding seasons. Properly phased management of native prairie and rangelands as described in this PCMP will continue to provide quality foraging habitat for raptors during, and post-development. Any raptors nesting or foraging on the property benefits Sterling Ranch in helping control snakes, rodents, and birds that can present health and sanitation hazards and damage private property. In particular, red-tailed hawks are efficient predators of snakes and rodents.

#### **2.3.4 Reptiles and Amphibians**

Seventeen reptile and amphibian species have been recorded at Chatfield State Park (Farrah and Baker 2009). Most of these species are uncommon and inconspicuous; however, several species are common in northern Douglas County and could be encountered on Sterling Ranch. Certain snakes, particularly the bullsnake, are beneficial and help control rodent populations that could be a sanitation concern. The only poisonous snake in the Sterling Ranch area is the western rattlesnake, which could pose a safety hazard if activity occurs in areas close to human residences and activity areas (parks and trails). The final species of note is the bullfrog, a nonnative species that can also be an ecological hazard due to its voracious propensity to deplete populations of other frogs, fish, and even ducklings.

As of January 2001, all but three of Colorado’s native species or subspecies of reptiles and amphibians are classified as “nongame wildlife.” Three species, including the larval form of the tiger salamander, the prairie (western) rattlesnake, and the common snapping turtle are classified as “game” species, and are regulated under Chapters 1 (fishing) and 3 (small game) of the Colorado Wildlife Commission Regulations. All other reptiles and amphibians are classified as nongame wildlife and are protected by state law.

## **2.4 Cultural Resources**

Sterling Ranch is situated in the northwest corner of the Palmer Divide (“Divide”). The Divide is unique environmentally, essentially forming an ecological extension of montane environments from the foot of the Front Range east onto the plains. The Divide acts as a weather



barrier between the South Platte and Arkansas River basins, which creates unique weather and vegetation patterns. The area north of the Divide is both wetter and cooler than the plains to the east and has a longer growing season than the crest of the Divide. Many of the creeks draining the northern side of the Divide are spring fed and flow year-round and may have provided a reliable water source to prehistoric inhabitants. The Divide's unique characteristics have created favorable conditions for both prehistoric and historic plants and animals, including humans.

Because the Divide is more environmentally similar to the foothills than it is to the surrounding plains, settlement patterns and use of the area are unique when compared with the adjacent mountains and the plains. Settlement patterns and use through time are also different between the wetter northern side compared with the drier southern side of the Divide (Gilmore et al. 1999, Zier and Kalasz 1999). Based on the distribution of sites by period, there seems to be a general trend of greater use of the plains and less use of the mountains from the Early Archaic to the Middle Ceramic periods (about 8,500 BC to 300 AD) (Zier and Kalasz 1999, Gilmore et al. 1999, Gilmore and Larmore 2003).

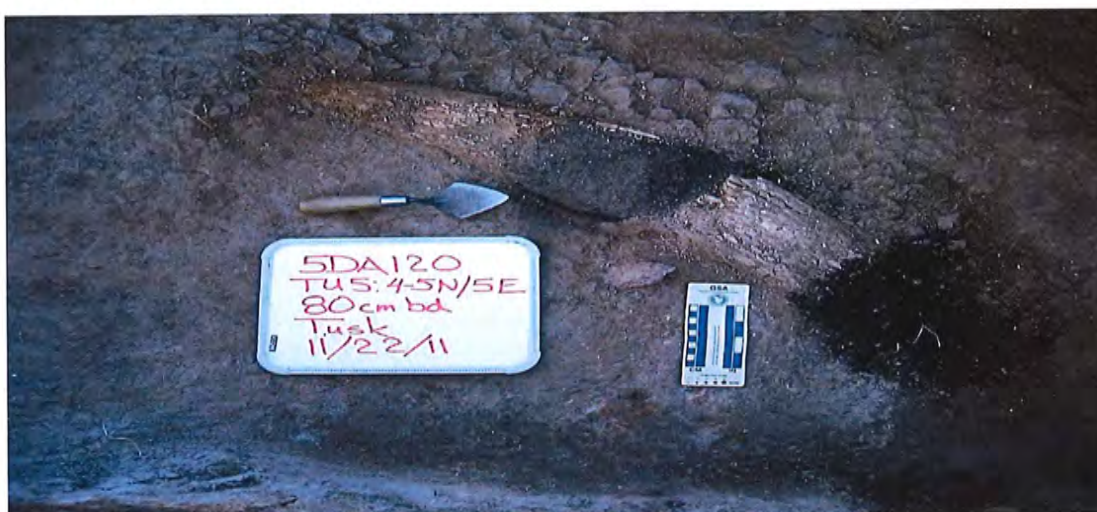
Extensive surveys and excavation of cultural resources have been conducted on limited portions of Sterling Ranch and surrounding areas. Historic and prehistoric resources include signs of Native American and early European settlement, arrowheads, mammoth bones and tusks, and evidence of early horse and camel species. Many of these resources on Sterling Ranch and the nearby Lamb Spring Archaeological Preserve have suffered damage and loss from wildlife activities, particularly burrowing activities of prairie dogs. Mammoth tusks have been exposed by burrowing and have suffered the consequences of water and other weathering forces (e.g., Photos 1 and 2) or have completely been destroyed or scattered by burrow construction (e.g., Photo 3).



**Photo 1. Mammoth tusk fragments.**



**Photo 2. Mammoth tusk in prairie dog burrow.**



**Photo 3. Mammoth tusk exposed to weather.**



### **3.0 PLAN FRAMEWORK**

This section describes the purpose of the PCMP and how it will broadly operate through the articulation of the plan's vision, goals, objectives, and specific strategies.

#### **3.1 Vision**

The Owner's vision is to create a new community with residential and commercial uses that also has public and private recreational areas and natural spaces.

Conserving, creating, and/or enhancing native habitats within the urban landscape is part of the Owner's long-term vision. The Owner believes this can be done in a way that is not only aesthetically appealing, but also in a way that allows residents to become more attuned to the landscape, wildlife, and ranching activities around them.

The Owner will consider opportunities to enhance the natural landscape for ranching, food production, and wildlife conservation on both an interim basis (while development is phased over the property), and long-term basis.

#### **3.2 Goals**

The PCMP goals operationalize the above vision and provide a foundation for determining short term and long-term PCAs. The goals include:

1. Develop a sustainable residential, commercial, and industrial community adjacent to, and coexistent with, undeveloped areas for wildlife, vegetation, rangeland management, recreation, and public infrastructure;
2. Protect or preserve important cultural/paleontological resources;
3. Minimize wildlife-human conflicts and the spread of disease or pests from wildlife areas through informed landscape and restoration planning, proper siting and phasing of PCAs, sound management policies, and PCMP oversight.

#### **3.3 Identification of Prairie Conservation Areas**

During the zoning process, general areas were identified for Open Space and wildlife corridors. This PCMP complements those zoning and planning efforts by considering PCAs that may be compatible with Open Spaces and zoned uses on an interim bases. PCAs are not "wilderness" but are intended to focus on management and coexistent human uses that are compatible and beneficial to the conservation of prairie wildlife and vegetation, including



environmentally responsible range management. To that end, land improvements and development may occur within PCAs while still furthering conservation goals, for example infrastructure may bisect, disrupt, or otherwise interfere with some PCAs.

PCAs have been identified both on a larger landscape level and a localized community level. Larger PCAs include undeveloped areas and wildlife corridors, such as the Willow Creek wildlife corridor, that contribute to the biodiversity of Sterling Ranch and the surrounding area. The community-based level may provide habitat and varying degrees of connectivity throughout the developed portion of Sterling Ranch public spaces (Figure 1), including connecting and enhancing areas identified as Urban Parks and Trails. Thus, PCAs have been characterized into two basic types: (1) Multiple Objective PCAs, and (2) Focused Resource PCAs, defined as follows:

- Multiple Objective PCAs: Areas capable of supporting a sustainable prairie community that does not conflict with other ecological, social, and community values. Community values include trails, nature interpretation, scenic overlooks, and other passive human uses that do not conflict with the prairie conservation objectives of a particular PCA. These PCAs allow for suitable native wildlife to coexist at ecologically sustainable densities as long as the objectives and functions of the overall prairie community are not compromised. Ranching heritage, burrowing owls, prairie dogs, raptors and songbirds are components of the Multiple Objective PCA, but any single species will not be the highest management priority of any particular PCA.
- Focused Resource PCAs: Areas that are currently or at some point in the future capable of providing a sustainable prairie community, but the presence of potentially destructive or harmful species directly conflicts with other higher priority resources and community values. For example, in areas with sensitive resources, such as archaeological, paleontological, and rare and sensitive biological communities, burrowing animals will be managed to protect higher priority resources.

### **3.4 Project Phasing**

The transition from ranching to mixed-uses at Sterling Ranch will continue over at least the next twenty years. Through this transition, undeveloped areas (both Open Space and rangeland slated for future development) and wildlife will be managed to protect sensitive biological and cultural resource areas. The Owner values the importance of the native prairie ecosystem and, as such, conservation and enhancement of native prairie is a primary goal for designated Open Space and active rangelands at Sterling Ranch.

## **4.0 CONSERVATION PLAN**

The Owner's present goals, objectives, and strategies for prairie conservation on Sterling Ranch are set forth below. These strategies support the overall goals and objectives of prairie conservation at Sterling Ranch but are not binding criteria. As such, they are recommendations, contingent upon development phasing and overall management focus.

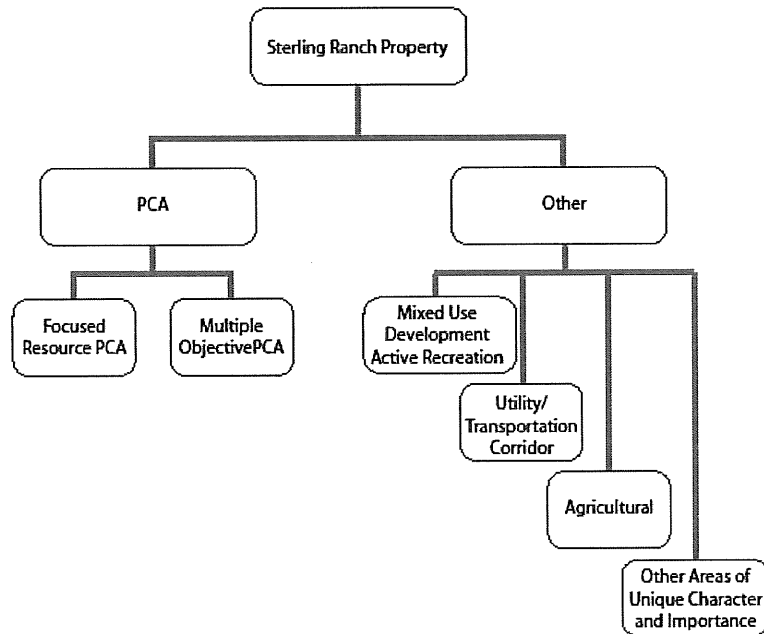
### **4.1 Goal 1: Promote a sustainable human community that promotes/encourages a healthy/sustainable natural landscape**

**Objective 1:** The Owner will identify and manage select areas for prairie conservation, ranching, heritage, nature observation, and educational opportunities for the community.

Strategy 1: The Owner may identify PCAs that distinguish zones suitable for wildlife preservation/conservation, areas of archaeological preservation, areas for cattle production, and areas focused on providing a safe, healthy, and interactive nature experience within the framework of the Sterling Ranch mixed-use community (Exhibit A). PCAs can correspond with dedicated Open Space as the property develops or they can be interim, using areas for PCA opportunities as phasing of development progresses. After final platting, the Owner may at any time, make permanent designation of native prairie communities or PCAs within Open Spaces.

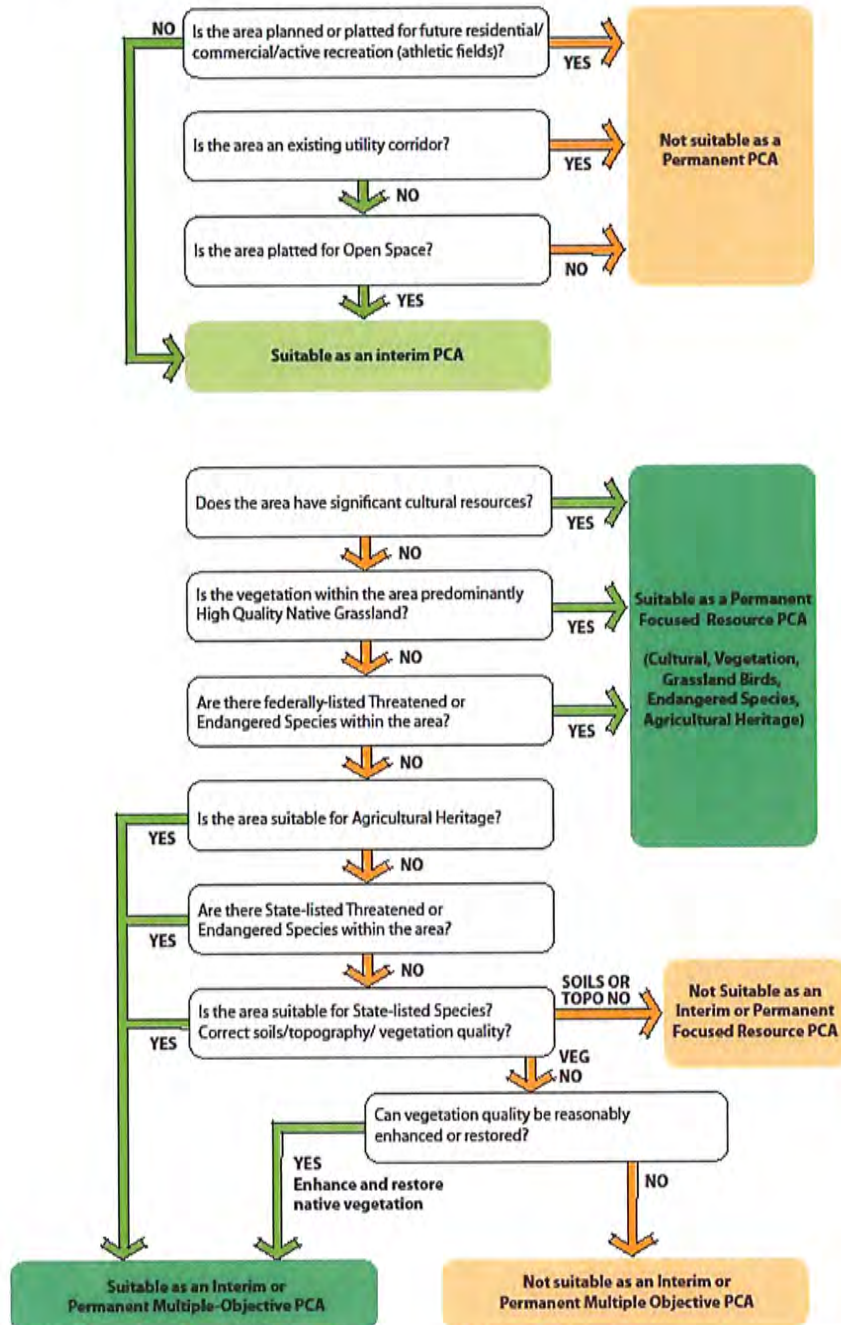
Strategy 2: The Owner may identify and manage Focused Resource PCAs. Focused Resource PCAs contain most of the ecological services and functions of Multiple- Objective PCAs, but also contain high priority resources and/or values that would be damaged or impaired by potentially damaging/dangerous native species, such as prairie dogs and rattlesnakes. Resources and values could be harmed or impaired by some wildlife include higher priority resources (archaeological resources, threatened and endangered species, mid-grass prairie); sound ranch management; management constraints (utility corridors); or other social values (human health, private property, and other concerns) (Exhibit B). These areas would be managed for Focused Resources Area and/or uses and identified as "no prairie dog zones" to protect the priority resources and values. Details of managing prairie dogs are provided in Appendix B.

**Exhibit A. Prairie Conservation Areas in Relation to  
Other Land Uses on Sterling Ranch**





# Exhibit B. Prairie Conservation Area (PCA) Decision Planning Tree<sup>1</sup>



<sup>1</sup>Planning tree incorporates the process implemented for identifying open space during the Douglas County Planned Development Zoning Process

Strategy 3: The Owner will identify and manage Multiple-Objective PCAs. The Multiple-Objective PCAs will conserve the native prairie ecosystem by supporting the ecological functions (habitat structure, patch size, and soil characteristics) capable of supporting burrowing owls as an umbrella species (Appendix C). Cattle and/or prairie dogs constitute an integral component of these areas and must be managed for ecologically sustainable densities and vegetative health. Details of managing prairie dogs at ecologically sustainable densities are provided in Appendix B. Agricultural practices, such as grazing or rangeland management (mowing/haying) are compatible with Multiple-Objective PCAs and are recognized tools for managing habitat structure.

Strategy 4: The Owner will manage rangeland and livestock grazing to restore and preserve prairie functions. Proper rangeland management techniques such as rotational grazing, proper stocking densities, seasonal timing, and other techniques contribute to vegetation structure, soil aeration, species composition, weed management, and nutrient cycling—all important functions of sustainable prairie. Work with the Bird Conservancy to implement concepts and guidelines for integrating bird conservation with rangeland management. Cut and harvest hay in bird nesting areas after July 15 to avoid ground nesting bird nests and young.

**Objective 2:** The Owner may evaluate baseline ecological information within PCAs to provide a sound basis for native prairie management and conservation.

Strategy 1: Periodically update mapping of ecological resources (vegetation, wetlands, wildlife habitat, topography, and noxious weeds).

Strategy 2: Identify habitat enhancement needs and opportunities.

**Objective 3:** The Owner may maintain core wildlife habitats within the PCAs and corridors identified in the Douglas County Comprehensive Master Plan (CMP; Douglas County 2014).<sup>4</sup>

Strategy 1: Preserve and enhance the Willow Creek corridor through hydrological improvements, restoration of native vegetation, and noxious weed management.

Strategy 2: Preserve and enhance select high-quality native grasslands, shrublands, wetlands, and riparian areas for wildlife habitats.

---

<sup>4</sup> Section 10 of the 2035 Douglas County CMP identifies Willow and Plum Creeks as wildlife migration corridors and a broad area from Roxborough State Park east to the Highlands Ranch Back Country and Cherokee Ranch as an overland wildlife connection.

Strategy 3: Identify potential wildlife corridors along East Willow Creek and Sterling Gulch and habitat connectors, such as utility rights-of-way.

**Objective 4:** The Owner may manage both interim and long-term PCAs to conserve and enhance native plant communities.

Strategy 1: Prioritize vegetation management activities by specific areas. Management activities may include, but are not limited to:

- Use/modify appropriate grazing and other rangeland management practices to encourage native vegetation and control invasive/noxious vegetation;
- Reseed/over-seed with appropriate native seed mixes in degraded areas;
- Develop and implement an integrated weed management plan that incorporates state-of-the-art management practices for horticultural, mechanical, biological, and chemical control for noxious weeds; and
- Create/enhance habitat for native birds.

Strategy 2: Implement prairie dog management in accordance with Appendix B to protect sensitive vegetation communities and wildlife habitat; maintain prairie dogs within designated multi-objective PCAs at ecologically sustainable densities.

#### **4.2 Goal 2: Protect cultural/paleontological resources**

**Objective 1:** Attempt to identify all significant paleontological, archaeological, historic, and other cultural resources on-site.

Strategy 1: Conduct Class III cultural resource surveys prior to land disturbances for development phasing, roads, utilities, and other infrastructure.

**Objective 2:** Protect or avoid cultural/paleontological resources to the extent practicable.

Strategy 2: Voluntarily designate significant cultural resource areas, and a sufficient buffer determined by the Owner, as “Focused Resource PCAs” or “No Prairie Dog Zones” to protect cultural/paleontological resources.

Strategy 3: Implement the “Discovery” protocol provided in Appendix D.

#### **4.3 Goal 3: The Owner or community may provide recommendations to residents and Business on human/animal conflicts**

**Objective 1:** Avoid conflict between human activity and large mammals.



Strategy 1: Further resident education regarding coexistence with large carnivores, including knowing how to behave to avoid incidents and how to respond when encountering a lion, bear, or coyote, including:

- Keeping pets under control; implementing and enforcing leash laws in designated areas.
- Not leaving pet food outside.
- Bringing in pets at night.
- Storing and disposing of garbage properly.
- Making noise, talking, or singing to reduce chances of surprising a bear, lion, or coyote.
- Ensuring children are close or at least within sight at all times.
- Using extra caution in places where hearing or visibility is limited, such as brushy areas, near a stream, trail bends, or on windy days.
- Using extra caution when hiking/biking at dawn or dusk, which can increase chances of seeing wildlife and risk of encountering a bear, lion, or coyote.

Strategy 2: Prevent wildlife-vehicle collisions, which are likely to occur as the ranch develops in areas where these corridors cross roads and other high-traffic areas, by:

- Identifying any potential collision areas.
- Implementing project design features that avoid and minimize potential collision areas.
- Removing vegetation and improve sight lines next to roads in problem areas.
- Posting signs directing vehicle drivers to slow down and be aware of ungulates in corridors and deer-crossing areas.
- Providing alternate travel routes for ungulates that direct animals away from problem areas or to natural underpasses; trees, shrubs, and fencing can be used to direct ungulates toward alternate travel routes.

Strategy 3: Avoid property damage and conflict with beaver and muskrats by denying habitat:

- Removing lodges and dams from undesirable areas.
- Fencing and enclosing culverts and performing seasonal maintenance (i.e. semicircular fences of 2-inch by 4-inch wire mesh around road culverts, or for greater protection, 4-foot-high semicircular welded fencing around culverts with 4-inch PVC drainpipes anchored through the fence)
- Plugging holes in dikes and dams and covering problem areas with rocks or other material to discourage further digging.
- If dams are built in appropriate areas, water levels can be controlled by inserting a series of drain pipes at the desired water level.
- If required, live-trapping and relocating beaver and muskrats.<sup>5</sup>

---

<sup>5</sup> C.R.S. § 33-6-203 prohibits the use of leghold traps and other kill traps for controlling beavers and muskrats. Also note that relocation entails significant drawbacks, including finding areas to relocate the animals, high

**Objective 2:** Avoid conflict between human activity and reptiles and amphibians.

Strategy 1: Discourage snakes from entering into buildings or other areas of human activity:

- Eliminate cool, damp areas where snakes hide; remove brush and rock piles; keep shrubbery away from foundations; and cut tall grass in human activity areas.
- Control prey populations (primarily rodents) in human activity areas.
- Prevent snakes from entering buildings and crawl spaces by sealing all openings ¼ inch or larger with mortar, caulking compound, or ⅛-inch hardware cloth; check for access points around doors, windows, water pipes, and electrical lines.

Strategy 2: When necessary, remove snakes by one of the following methods:

- Consulting a professional animal control service to remove the snake.
- Sweeping a nonpoisonous snake into a large bucket, then releasing it away from buildings.
- Drawing out snakes from buildings by creating den sites adjacent to walls (i.e. placing damp burlap sacks, covered with dry sacks to retain moisture, along a wall where snakes have invaded; check bags daily and remove with a shovel).
- Any other method not prohibited by law or regulation for a holder of a valid Colorado small game hunting license.

Strategy 3: When necessary, exercise lethal control to protect residents and property, consistent with C.R.S. § 33-6-107(9) (“Any person may kill . . . rattlesnakes when necessary to protect life or property.”).

#### **4.4 Goal 4: Minimize prairie dog-human conflicts**

**Objective 1:** The Owner may recommend or employ strategies to reduce the effects and potentially damaging and harmful wildlife on the Owner’s properties.

Strategy 1: Identify a (500-foot) buffer between prairie dogs and residences, parks, and other areas of high human activity.

Strategy 2: Periodically monitor prairie dog populations and distribution for indications of disease and/or encroachment on private property. Maintain awareness of disease outbreaks in surrounding areas and take precautionary measures, as needed, to protect the health and safety of residents.

---

expenses, labor, and severe stress caused to the relocated animal, and the fact that animals removed from a territory are typically just replaced by another animal that migrates in.

Strategy 3: Periodically monitor prairie dog populations and distribution on Sterling Ranch for indications of exceeding sustainable densities or encroachment on other properties or higher priority resources.

Strategy 4: Develop and update an adaptive management approach to determine prairie dog densities, as further described in Appendix B.

Strategy 5: Identify areas of potential conflict between humans and rattlesnakes and implement rattlesnake management procedure.

Strategy 6: Identify areas of potential conflict between humans and potentially dangerous predators (coyotes, mountain lions, and bears) and other potential wildlife conflicts and work with CPW to implement the strategies described in “Living with Wildlife.”

Strategy 7: Utilize trail signage and informational bulletins to inform residents of wildlife habitat, movement patterns, behavior, safe observing distances, and any potential risks.

#### **4.5 Goal 5: Comply with federal and state laws and regulations pertaining to threatened, endangered, and sensitive species that reside on the Sterling Ranch property**

**Objective 1:** Balance protection of species and private property rights.

Strategy 1: Work with state and federal agencies and local governments to develop a process that protects private property rights and permits thoughtful development while maintaining or improving the Riparian Conservation Zone, resulting in benefits for federal and state protected species.

Strategy 2: Develop individual or programmatic Biological Assessments, as necessary, in consultation with the U.S. Fish and Wildlife Service that permits development activities in compliance the Endangered Species Act.

**Objective 2:** Restore and enhance Willow Creek stream banks to reduce erosion and potentially provide areas.

Strategy: Identify the Willow Creek corridor as dedicated Open Space per the Preliminary Development Plan (Figure 1).



Strategy: Restore the natural hydrology of Willow Creek, stabilizing creek banks, planting native riparian shrub vegetation, and managing noxious weeds.

Strategy: Coordinate with the Army Corps of Engineers for Willow Creek stream restoration activities to be authorized in accordance with Section 404 of the Clean Water Act.

**Objective 3:** Delineate the number and extent of burrowing owl habitat on Sterling Ranch.

Strategy 1: Identify existing burrowing owl habitat on Sterling Ranch. Identify potential habitat including active and inactive prairie dog towns and suitable grasslands that could support owls.

**Objective 4:** Minimize the direct impacts of project development and construction on burrowing owls.

Strategy 1: Identify immediate areas at risk to avoid and minimize adverse impacts on owls (see Appendix C).

Strategy 2: Implement 500-foot spatial buffer from March 15 through October 31 around active burrowing owl nesting burrows.

**Objective 5:** Identify data gaps where the lack of site-specific and general biological knowledge of burrowing owls hinders effective conservation of the owls.

Strategy 1: Work with the Bird Conservancy in an advisory capacity to identify data gaps and collect sound scientific data to support management/conservation decisions.

**Objective 6:** Identify adaptive management strategies for both short-term and long-term conservation of burrowing owls and habitat in areas slated for future development.

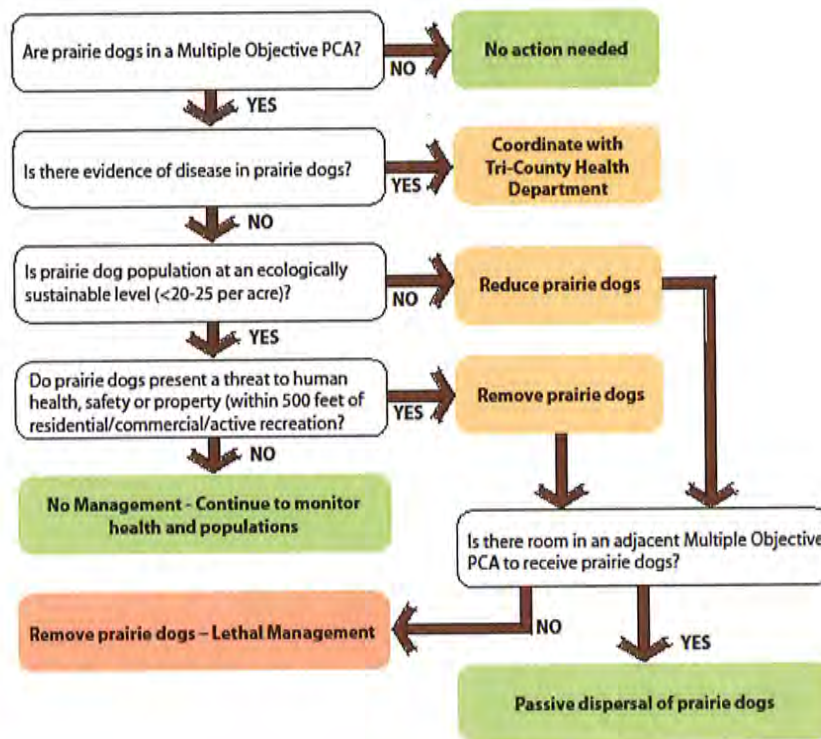
Strategy 1: Work with the Bird Conservancy in an advisory capacity to adapt, improve, and implement the conservation activities identified in Appendix C.

**Objective 7:** Minimize conflict between human activity and prairie dogs, including risk to human health and private property.

Strategy 1: Establish and implement a 500-foot prairie dog buffer around schools, parks, residences, and other private properties. Numerous agencies and local governments have established prairie dog buffers that exclude prairie dogs from areas adjacent to areas of high human activity, private properties, and other areas where prairie dogs and their activities

create a human health and safety concern. Buffer distances vary widely from a few hundred feet in residential neighborhoods to ¼ mile at a national park (NPS 2007). The City and County of Broomfield (2003) has successfully implemented a 500-foot buffer separating prairie dogs from residences since 2003, establishing a precedent for sound prairie dog management. Additional details of applicable regulations and managing prairie dogs at ecologically sustainable densities are provided in Appendix B.

#### Exhibit C. Prairie Dog Management Decision Tree



**Objective 8:** Explore and pursue viable and economically reasonable prairie dog management options.

Strategy 1: Manage populations by performing passive dispersal, supporting independent efforts to relocate prairie dogs off Sterling Ranch, and performing lethal control when appropriate.

*Passive Dispersal:* The objective of passive dispersal is to discourage prairie dog occupancy in areas slated for development or for higher priority activities and to encourage prairie dogs to occupy (self-relocate) to more appropriate interim or long-term PCAs. This dispersal technique considers and mitigates, as best as possible, impacts on prairie dogs while still allowing development to occur. Details for passive dispersal are provided in Appendix B.

*Relocation:* Although well-intentioned, relocation is not completely effective in saving a colony or preventing prairie dog mortality: Data indicates that only around half of the relocated prairie dogs become established at new sites while the remainder die from increased vulnerability to predators, physiological stress, injury inflicted by other prairie dogs, or being hit by vehicles while dispersing from the release site. Occasionally, prairie dogs found outside of the established Multiple- Objective PCAs may be moved off of Sterling Ranch. Among the challenges with relocating prairie dogs off Sterling Ranch is locating a receiving site and the cost of relocation. For intercounty relocations, Colorado law (C.R.S. § 35-7-203) requires that county commissioners in the receiving county approve the release of prairie dogs. Even with Douglas County, relocation is complicated by black-tailed prairie dogs' need for level open ground below 7,000 feet in elevation.<sup>6</sup> However, should an independent organization wish to legally relocate prairie dogs to an off-site location, Sterling Ranch will assist with obtaining access to property, which will only be granted to organizations that will use acceptable methods and that possess all required permits and legal documentation of the acceptability and availability of the receiving site (including any resolution from county

---

<sup>6</sup> Issues associated with Douglas County include:

- Much of the elevations exceeds 7,000 feet;
- The topography is steep and rolling and/or heavily wooded;
- Most low areas below 7,000 feet are within the rapidly developing northern portion of the county;
- Most suitable areas are already zoned, platted, or otherwise slated for development;
- Some suitable areas are already occupied by prairie dogs;
- Some suitable areas are County Open Space parcels that preclude relocation per Open Space policy; and
- Many private land owners are unwilling to accept prairie dogs.



commissioners for any inter-county relocation as needed).<sup>7</sup> Because of biological and genetic integrity concerns as well as animal welfare concerns over long-distance relocation, transport and holding conditions, capture techniques, and other logistical issues, the Owner reserves the right to refuse access to any individual or organization at any time.

*Lethal Control:* Sterling Ranch may find that, despite a willingness to relocate, efforts are hindered by the lack of receiving sites and the fact that all animals cannot be captured by re-locators. If lethal control must proceed, the guidelines provided in Appendix B will be followed. Management options will consider costs and budget per fiduciary responsibilities.

**Objective 9:** Avoid inadvertently killing migratory birds or disturbing active migratory bird nests (see Appendix E for more detail).

*Strategy 1:* Comply with federal regulations pertaining to the MBTA by implementing the step-down avoidance and minimization approach provided in Appendix E. The step-down approach encourages conducting habitat-disturbing activities in the nonbreeding season to the extent practicable, removing or altering vegetation prior to the nesting season to discourage future nesting within construction sites, conducting preconstruction surveys to identify and locate active Burrowing Owl bird nests, and implementing avoidance measures around active bird nests until after nesting is completed.<sup>8</sup>

**Objective 10:** Implement bird-friendly construction guidelines.

*Strategy 1:* Provide bird-friendly construction guidelines for every residential builder at Sterling Ranch.

**Objective 11:** Avoid conflicts with Canada geese.

*Strategy 1:* Outline vegetation and landscape management recommendations to minimize providing geese attractants (open water, turf).

*Strategy 2:* Share information from the Bird Conservancy with residents to educate and inform them on landscaping principles that discourage geese.

---

<sup>7</sup> Organizations must also develop a management plan specifically addressing the applicant's long-term plans for the maintenance or control of the prairie dog population on the receiving property per Colorado Wildlife Regulation 303(A)(3). Relocation will be discouraged during the birthing, nursing, and early rearing period, which generally occur from March 1 to May 31.

<sup>8</sup> Note: Implementing this approach demonstrates a "Good Faith" effort to avoid incidental violation of the MBTA, but does not guarantee that migratory birds will not nest in some areas despite these efforts.

**Objective 12:** Avoid and mitigate impacts on active raptor nests. Currently, there are no anticipated permanent impacts on existing raptor nests; however, it is possible that breeding raptors could build new active raptor nests. The intent of any avoidance and mitigation strategy is to encourage individual raptor pairs to nest at selected and secure locations. A high priority is to maintain a raptor pair within their normal home range despite disturbance or destruction of traditional nest sites.

Strategy 1: Comply with federal and state regulations and guidelines by implementing avoidance and mitigation options for the Sterling Ranch property. These mitigation options may consist of (1) avoidance, (2) habitat modification to avoid temporary impacts, and (3) habitat modification to avoid permanent impacts. Additional details of this strategy are provided in Appendix F.

**Objective 13:** Implement proactive habitat management and enhancement activities to attract raptors to appropriate locations post-construction.

Strategy 1: Work with Bird Conservancy in an advisory capacity for implementation of habitat improvement activities. Activities are often site- and species-dependent and will often be developed in that manner as areas are developed. Homebuilders will be provided guidance on bird-friendly options and landscaping. Homeowners will be provided information on bird habitat creation and protecting birds through several venues. Other activities may include, but are not limited to installing permanent and seasonal raptor perches, installing nest structures, and/or enhancing alternative prey habitat.

## **REFERENCES**

- Center for Disease Control (CDC) 2015. Preventing hantavirus Pulmonary Syndrome (HPS). Available online at: <http://www.cdc.gov/hantavirus/hps/prevention.html>. Last accessed August 2015.
- Chatfield Basin Conservation Network (CBCN). 2006. Chatfield Basin Conservation Network Green Infrastructure System: Conserving Connections for Nature and People. Available at: <http://www.douglas.co.us/documents/section-1-6.pdf>. Last accessed: June 22, 2015.
- City and County of Broomfield. 2003. City and County of Broomfield Policies for Prairie Dog Conservation and Management. Available at: <http://www.ci.broomfield.co.us/DocumentCenter/View/1385>. Last accessed August 2015.
- Colorado Division of Wildlife (CDOW). 2008. Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptor Nests.
- Colorado Parks and Wildlife (CPW). 2014. CPW Wildlife Shapefile Download. From: Species Activity Data Collection. Redlands, CA: ESRI. Available at: <http://www.arcgis.com/home/search.html?q=Colorado%20Parks%20and%20Wildlife&t=groups>. Last accessed December 22, 2014.
- Conway, C. J., V. Garcia, M. D. Smith, L. A. Ellis, and J. L. Whitney. 2006. Comparative demography of Burrowing Owls in agricultural and urban landscapes in southeastern Washington. *Journal of Field Ornithology* 77(3): 280-290.
- Cully J.F., Jr. and E.S. Williams. 2001. Interspecific comparisons of sylvatic plague in prairie dogs. *J Mammal* 2001; 82:894-905.
- Dahl, T.E. 1990. Wetland losses in the United States 1780's to 1980's. U.S. Department of the Interior, Fish and Wildlife Service. Washington. D.C.
- Dechant, J.A., M.L. Sondreal, D.H. Johnson, L.D. Igl, C.M. Goldade, P.A. Rabie, and B.R. Euliss. 1999 (revised 2002). Effects of management practices on grassland birds: Burrowing owl. Northern Prairie Wildlife Research Center, Jamestown, ND.
- Douglas County Comprehensive Master Plan (CMP). 2014. Douglas County Comprehensive Master Plan 2015, Section 10. Adopted by the Douglas County Planning Commission June 16, 2014. Available at: <http://www.douglas.co.us/land/comprehensive-master-plan/>. Last accessed June 2015.
- Farrah, J. and D. Baker. 2009. A Survey of the Reptiles and Amphibians of Chatfield State Park Douglas & Jefferson Counties, Colorado. Available at: <http://www.nafha.org/rocky-mountain-chapter/chatfield-state-park>. Last accessed June 22, 2015.
- Gershman, M. 2005. Colorado State Parks Stewardship Prescription: Large Predator Management. Created November 11, 1999 and revised April 1, 2005.
- Gilmore, K.P. and S. Larmore. 2003. The Palmer Divide Archaeology Project: Documentation of Artifact Collections from the Tenth Fairway (5DA123), Rainbow Creek (5DA124), and Jarre Creek (5DA541) Sites, Douglas County, Colorado. University of Denver, Archaeological Research Institute, Denver, CO and submitted to the Colorado Historical Society, Denver.



- Gilmore, K.P., M. Tate, M. Chenault, B. Clark, T. McBride, and M. Wood (eds.). 1999. Late Prehistoric Stage. In *Colorado Prehistory: A Context for the Platte River Basin*, pp. 175-305. Colorado Council of Professional Archaeologists.
- Haug, E.A., B.A. Millsap, and M.S. Martell. 1993. The burrowing owl (*Speotyto cunicularia*) in *The Birds of North America*, No. 61, edited by A. Poole and F. Gill. Philadelphia, PA: The Academy of Natural Sciences; Washington, DC: The American Ornithologists' Union.
- Hoogland, J. L. 1995. *The black-tailed prairie dog: Social life of a burrowing mammal*. University of Chicago Press, Chicago, IL.
- Kellnor, J. 2009 (Update). *Birds of Chatfield State Park and Waterton, Colorado*. Compiled by H. Kingery, F. Justice, and J. Justice. Colorado State Parks and Colorado Division of Wildlife. Available at: <http://www.denveraudubon.org/wp-content/uploads/2012/05/Chatfield-Bird-List.pdf>. Last accessed June 2015.
- Knight, J.E. 1986. A humane method for removing snakes from dwellings. *Wildlife Society Bulletin* 14:301-303.
- Knopf, F.L. and F.B. Samson. 1994. Conservation of avian diversity in riparian corridors. *Conservation Biology* 8:669-676.
- Natural Diversity Information Source (NDIS). 2010. Colorado Division of Wildlife database. Available at: <http://ndis.nrel.colostate.edu/wildlifespx.asp?SpCode=040231>. Last updated April 2010.
- National Park Service (NPS). 2007. Black-tailed prairie dog management plan Environmental Assessment. Badlands National Park, North Unit Pennington and Jackson Counties, South Dakota. Available at: [http://www.nps.gov/badl/learn/management/upload/Black-Tailed%20Prairie%20Dog%20Management%20Plan\\_EA%20August%202007.pdf](http://www.nps.gov/badl/learn/management/upload/Black-Tailed%20Prairie%20Dog%20Management%20Plan_EA%20August%202007.pdf). Last accessed August 2015.
- Zier, C.J. and S.M. Kalasz. 1999. *Colorado Prehistory: A Context for the Arkansas River Basin*. Colorado Council of Professional Archaeologists.

# **APPENDICES**

**APPENDIX A**  
**PLANT SPECIES LIKELY TO OCCUR ON STERLING RANCH**  
**BASED ON CURRENT AND PROJECTED VEGETATION**  
**COMMUNITIES**



**PLANT SPECIES LIKELY TO OCCUR ON STERLING RANCH BASED ON  
CURRENT AND PROJECTED VEGETATION COMMUNITIES.**

<i>Scientific Name</i>	<b>Common Name</b>	<b>Habitat</b>
<b>PLANTS</b>		
<i>Artemisia frigida</i>	Prairie sagewort	Mixed Grassland
<i>Bouteloua gracilis</i>	Blue grama	Mixed Grassland
<i>Castilleja chromosa</i>	Indian paintbrush	Mixed Grassland
<i>Cercocarpus montanus argenteus</i>	Silver mountain mahogany	Mixed Grassland
<i>Ericameria nauseosa</i>	Rubber rabbitbrush	Mixed Grassland
<i>Eriogonum deserticola</i>	Colorado desert buckwheat	Mixed Grassland
<i>Eriogonum umbellatum</i>	Sulphur flower	Mixed Grassland
<i>Geum triflorum</i>	Prairie smoke	Mixed Grassland
<i>Gutierrezia sarothrae</i>	Broom snakeweed	Mixed Grassland
<i>Juncus arcticus</i>	Baltic rush	Riparian/Wetland
<i>Opuntia macrorhiza</i>	Twist-spine pricklypear	Mixed Grassland
<i>Prunus americana</i>	American plum	Riparian
<i>Prunus virginiana</i>	Black chokecherry	Riparian
<i>Rhus trilobata</i>	Skunkbrush sumac	Mixed Grassland
<i>Rosa woodsii</i>	Wood's rose	Mixed Grassland/Riparian
<i>Salix exigua</i>	Sandbar willow	Wetland/Riparian
<i>Schoenoplectus americanus</i>	Three-square bulrush	Wetland
<i>Sphaeralcea coccinea</i>	Scarlet globemallow	Mixed Grassland
<i>Sporobolus cryptandrus</i>	Sand dropseed	Mixed Grassland
<i>Symphoricarpos rotundifolius</i>	Roundleaf snowberry	Riparian
<i>Typha latifolia</i>	Broadleaf cattail	Wetland
<i>Yucca glauca</i>	Yucca	Mixed Grassland

## **APPENDIX B**

### **STERLING RANCH PRAIRIE DOG MANAGEMENT POLICY**

## **STERLING RANCH PRAIRIE DOG MANAGEMENT POLICY**

### **A. Introduction**

Prairie dogs in urban settings have the potential to negatively impact native plant communities by overgrazing small confined areas. Overgrazing can lead to severe noxious weed infestations. In confined suburban locations, prairie dogs can move onto adjacent private residences, damaging lawns, gardens, and property with grazing and digging activities. Prairie dogs are known carriers of plague and other diseases transmittable to humans and/or their pets that raise human health and safety concerns.

Open Space managers will monitor populations and habitat conditions to make informed decisions about management options and potential habitat restoration opportunities and strategies. Management decisions should be made based on professional analysis of habitat conditions, ecological sustainability, and safety concerns of residents and adjacent property owners. Emphasis should be placed on maintaining a healthy sustainable prairie ecosystem. The purpose of this Prairie Dog Management Policy (“Policy”) is to establish a framework for the conservation and humane management of prairie dogs. One goal of the Policy is to maintain prairie dogs as a sustainable component of the prairie ecosystem on Sterling Ranch Community in appropriate areas without risking the health and safety of residents or causing significant negative impacts on the native prairie habitat, the habitat of other wildlife species (e.g., tall and mid-grass bird species), or other higher priority conservation values or land uses of Sterling Ranch.

### **B. Regulatory Background**

In Colorado, the prairie dog is classified both as a “destructive rodent pest” by the Colorado Department of Agriculture (“CDOA”) under C.R.S. § 35-7-2013 and small game and a species of concern by Colorado Parks and Wildlife (“CPW”) under C.R.S. § 33-1-102. CPW generally limits regulation of the prairie dog to issues pertaining to hunting and relocation from one site to another. Relocations are authorized only through a permit process. CPW allows the shooting of prairie dogs on private land year-round. In addition, the CPW allows (except as prohibited by federal, state, and local statutes or regulations) the use of toxicants or other legal extermination where necessary to control damage on private land. CDOA and the U.S. Environmental Protection Agency direct the types and manner in which fumigants and toxicants can be used.

In Colorado, it is lawful to capture, transport, and relocate prairie dogs from one site to another suitable site only with a CPW permit. It is also lawful to capture, transport, and deliver prairie dogs to facilities that support the U.S. Fish and Wildlife Service’s (“FWS”) national Black-Footed Ferret Recovery Program or a licensed raptor rehabilitation program to be used as food. The capture, transport, and delivery of prairie dogs to these facilities requires a specific and separate permit from CPW unless the contractor performing such services can euthanize prairie dogs on-site and place them in a sealed container/cooler before transport. Local government and landowner approval also is required. Douglas County has no formal prairie dog policy. However, Douglas County Open Space and Parks Division does have a Prairie Dog Conservation Policy for addressing prairie dog issues on undeveloped areas of the county. Many of the conservation principles of the Open Space policy have been incorporated into this Policy.



### **C. Adaptive Management**

Sterling Ranch, LLC (“the Owner”) will manage prairie dogs using an adaptive management approach and decision process described in the PCMP. There is no standard definition for ecologically sustainable densities, and a sustainable density is dependent on several environmental factors such as soils, vegetation, and precipitation. CPW typically requires relocation densities of less than ten prairie dogs per acre when issuing relocation permits. This is intentionally a low number to allow for natural population expansion of the colony at the receiving site. High densities of prairie dogs can have adverse effects on vegetation communities, promote the spread of noxious weeds, increase soil erosion, and result in behavioral and ecological responses to overcrowding. Cully and Williams (2001) found that high densities of prairie dogs facilitate the spread of plague epizootics. In long-term studies of black-tailed prairie dogs, Hoogland (1995) found a wide variability in density, but more colonies were in the 15 to 25 prairie dogs per acre range than higher densities. These smaller colonies did not show evidence of infanticide, low reproductive rates, or other responses to overcrowding. Based on this information, an ecologically sustainable population of prairie dogs on Sterling Ranch is considered to be less than 20 to 25 adults and yearlings per acre. Climatic conditions, such as extreme drought, or ecological indicators, such as poor vegetative conditions or noxious weed infestations, could warrant site-specific reductions in this density threshold.

### **D. Management Activities**

#### **1. Avoidance**

The Owner strives to avoid adverse impacts on prairie dog towns to the extent reasonable in planning for maintenance or use of Prairie Conservation Areas (“PCAs”) and other undeveloped areas. If impacts on prairie dogs cannot reasonably be avoided, one (or a combination) of the alternatives described in the following sections shall be implemented. Examples of impacts that cannot reasonably be avoided include: (1) where an overriding public need or benefit is incompatible with conservation of a prairie dog colony; (2) where prairie dogs have dispersed from PCAs onto private property or areas of future development where their presence is undesirable; (3) where prairie dogs can damage or conflict with other higher priority management objectives or resources; (4) where the prairie dogs have met or exceeded the sustainable capacity of the available habitat; and (5) where there is evidence of disease in the area. The Owner will consider long-term solutions on a case-by-case basis in determining which management alternative(s) to implement. The alternatives are presented in decreasing order of preference by section.

#### **2. Nonlethal Management and Passive Dispersal**

Several practices discourage prairie dogs from occupying a site or expanding onto adjacent private land, sensitive resource areas, or construction sites. These may include irrigating, tilling the soil, planting tall crops that limit visibility, installing barriers, or implementing innovative management techniques. The Owner will strive to (1) preclude prairie dogs from sensitive areas or exclude prairie dogs from adjacent lands where prairie dogs are not desired, and (2) if reasonable and feasible, attempt a dispersal protocol or a nonlethal land management strategy (e.g., barrier construction) to encourage prairie dogs to self-relocate to areas away from lands where prairie dogs are not desired. The passive dispersal technique is a multistep approach that is designed to begin with low-level earth-disturbing or burrow-blocking

activities within an established zone to encourage prairie dogs to relocate on their own volition. Passive dispersal can only be implemented if (1) the adjacent dispersal area has the space and capacity to accept more animals, and (2) prairie dog dispersal onto these areas does not infringe upon adjacent private property or other resource values (e.g., cultural sites). Passive dispersal will be discouraged during the birthing, nursing, and early rearing period generally from March 1 through May 31. Exclusion practices may be implemented at any time.

**Step 1**—Install a highly visible construction fence delineating the construction/dispersal zone; active prairie dog burrows outside this zone will be avoided. The construction fence should be opaque and a minimum of 24 inches above ground to create a visual barrier for prairie dogs. This fence/barrier should be buried at a minimum of 6 inches into native soils to preclude prairie dogs from going under the fence. Prairie dogs seem to respond to holes in fabric fences where light can pass through the visual barrier by clawing and chewing at the fabric. Therefore, no light passage can be allowed along the bottom edge, along the seams, or as a result of holes in the fabric. Proper installation and subsequent maintenance should prevent light passage. Holes in the fabric may be patched with duct tape and seams may be reworked or sealed with tape. A short-term option is to securely stake or pin the bottom of the fence/barrier every 2 feet such that there is no light passage and precludes animals from digging under the barrier. This step applies to all of the options listed below.

**Step 2**— This step involves passive dispersal of prairie dogs within the path of the proposed construction footprint and can only be attempted if adjacent areas have the space and capacity to accept more animals. Passive dispersal should not be conducted from March 1 through May 31 to avoid birthing, nursing, and early rearing period. The method involves three potential options for encouraging prairie dogs to move from construction areas by mimicking agricultural activities that have been shown to discourage prairie dog occupancy.

- **Option A:** The construction/dispersal footprint will be initially disturbed by a light ground-disturbing activity, such as disking, which will disturb burrow entrances but not bury any animals within the burrows. The footprint will then be gradually and incrementally disturbed at a greater frequency and soil depth to encourage prairie dogs to relocate to available habitat outside of the disturbance/dispersal footprint or to switch use to undisturbed alternate burrow entrances. Individuals will likely vacate the disturbed areas and relocate to existing available burrows or will create new burrows in suitable areas. If the magnitude of surface disturbance initiates a storm water management plan or other regulatory compliance issue, then this option can be implemented by disturbing/disking only the active burrows.
- **Option B:** Systematically preclude prairie dogs from occupying burrows within the construction/dispersal footprint by installing chicken wire closures over active prairie dog burrows. Modifying techniques developed by Pam Wanek (2010), the chicken wire closures are set to act as a one-way exit. The chicken wire is contoured to the burrow and a lawn staple is used to secure the chicken wire closure in a manner that allows prairie dogs to exit the burrow around the closure,

but preclude reentry into the burrow. Daily monitoring is conducted until burrows have been inactive for 48 hours. A more permanent barrier is then placed over the prairie dog burrow and the burrow collapsed to ground surface with several inches of soil placed within the burrow opening. The prairie dog colony should be monitored daily until all burrows have the permanent closures installed.

- **Option C:** Individual active burrows will be filled with enough soil to close the burrow opening, yet still allow any prairie dogs within the burrow to dig their way out. Placing a wad of newspaper in the burrow entrance acts as a temporary plug and holds the fill dirt in place. Active burrows will be determined by a visual inspection of all burrows. Fresh scat, diggings, or burrow repairs indicate active burrows. Inactive burrows are in disrepair and frequently are filled with windblown debris, soil, or spider webs. Any burrows not clearly inactive will be treated as active. Approximately 2 gallons of dirt are typically sufficient to close the opening. Dirt in the holes will remain loose and shall not be tamped or compacted. Repeating this activity for several days, gradually increasing the amount of fill should encourage the prairie dogs to relocate or to use alternate burrow entrances outside of disturbance limits. This option is most effective when just a few holes are within the disturbance zone. Burrows can also be closed with chicken wire securely attached to the ground to discourage reoccupancy.

**Step 3** — Prairie dogs within and adjacent to the construction/dispersal area should be monitored throughout this protocol to determine activity within the site and evaluate the success of the program. Monitoring should be continued at least once per week to locate and manage any prairie dogs reoccupying the site.

**3. Lethal Control, Including Use in Black-Footed Ferret and Other Recovery Wildlife Rehabilitation Programs**

The Owner may retain the services of a professional exterminator/agent or use trained staff to eradicate all or part of a prairie dog colony using standard and legally permitted methods. The Owner shall use a commercial exterminator/agent with a valid state permit/license or trained staff to exterminate prairie dogs. Use of any lethal management tool shall be monitored to ensure compliance with label instructions. The Owner may elect to remove the prairie dogs using live-trapping or water flushing for (a) transport to a site designated by FWS for use in the Black-Footed Ferret Recovery Program or (b) use in other suitable wildlife recovery programs. Prairie dogs transported to FWS for use in the Black-Footed Ferret Recovery Program are generally euthanized and used as food for captive-reared ferrets. FWS currently accepts prairie dogs only from late April through mid-October. Prairie dogs transported to other suitable wildlife recovery programs (e.g., raptor rehabilitation) are also generally euthanized, frozen, and used as food for injured animals. The Owner shall require proof of receipt from the wildlife recovery programs.

**4. Relocation to Alternative Sites**

This is not considered a viable management option for Sterling Ranch. State law prohibits relocation to other counties without the approval of the commissioners of that county



and all relocations require CPW permits. Suitable relocation sites in Douglas County are extremely limited by elevation, topography, and vegetation communities. Viable prairie dog colonies are likely unsustainable above 7,000 feet in elevation, eliminating much of the southern and eastern portions of the county. Suitable open grassland habitats in northern and central Douglas County are also highly suitable for residential and commercial development and contain the population centers of Castle Rock, Parker, and Highlands Ranch. The remaining suitable grassland habitats in northern and central Douglas County are already occupied by prairie dogs or are in various stages of residential planning and development.

The Owner, under no circumstances, shall receive prairie dogs from off-site locations.

#### **5. Long-Term Management and Conservation**

As described in the broader Prairie Conservation Management Plan, the Owner will designate future Open Space properties as part of the Planned Development and will develop recommendations on the long-term management of the Open Space. Management of prairie dogs on Open Space will incorporate one of three prairie management/conservation categories. These three categories are generally defined below.

- **Focused Resource Prairie Conservation Area** – The Focused Resource PCA includes areas capable of providing a sustainable prairie community, but the presence of potentially destructive or harmful species directly conflict with other higher priority resources or management priorities. In areas with higher priority resources such as archaeological, paleontological, and rare and sensitive biological communities, destructive species such as prairie dogs will be precluded to protect the ecological and community values of those resources.
- **Multiple-Objective Prairie Conservation Areas** – The Multiple-Objective PCA includes areas capable of supporting a sustainable prairie community and that does not conflict with other ecological, societal, and community values. These areas allow for all suitable native wildlife, including prairie dogs, to coexist on the landscape at ecologically sustainable densities as long as the objectives and functions of the overall prairie community are not compromised. Prairie dogs are an important component of the Multiple-Objective PCA, but they may not be the highest management priority of the particular PCA. However in areas where burrowing owl management is a higher priority, prairie dogs will be managed to accommodate breeding owls.
- **No Prairie Dog Areas (NPD)** – NPD areas are unsuitable for prairie dogs because of ecological conditions or incompatible land uses. The Owner will evaluate its Open Space properties, or portions thereof, and designate each as a Focused Resource PCA, Multiple-Objective PCA, or NPD. Designations will be based on habitat characteristics (e.g., soils, vegetation, slope, elevation, connectivity, and barriers); human health and safety; and current and future land use characteristics (e.g., ranching, history of use, current use, anticipated use, and adjacent ownership and uses). To provide for the safety of residents, a 500-foot NPD buffer will be established separating prairie dogs from residence, parks and other areas of high human activity.

## **6. Response to Outbreaks of Sylvatic Plague**

In the event of any prairie dog die-off potentially associated with sylvatic plague, the Owner shall notify the Tri-County Health Department (“TCHD”), which in turn, shall notify the Colorado Department of Public Health and Environment (“CDPHE”). The Owner shall cooperate with these agencies in obtaining samples for epidemiological evaluation. If plague is confirmed in a prairie dog colony on Sterling Ranch or in the surrounding area, the Owner, in cooperation with TCHD and CDPHE, shall implement a program to treat the affected area for fleas to eliminate or control the outbreak, and shall ensure that the area is posted by TCHD. If plague is in (or is suspected of being in) a prairie dog colony on Sterling Ranch or in the surrounding area based upon sudden die-offs in prairie dog populations, the Owner may immediately implement prairie dog population reduction or control activities to protect the health and safety of residents.

## **E. Costs**

The Owner will consider the cost burden when selecting appropriate prairie dog management activities. The Owner recognizes that implementation of this Policy will result in an increase in operation and maintenance costs; allocation of funds for implementation of this Policy is subject to annual appropriation; and management options may be constrained by budgets. Provisions for costs should be made whenever possible as part of, or concurrently with, the donation of cash funds or in-kind services. To maximize the benefits of conservation efforts, specific management strategies, and education and outreach, the Owner may use volunteer organizations or seek opportunities including, but not limited to, in-kind project assistance or cash contributions by private entities.

Donations or in-kind services may be conditioned or otherwise restricted by the donor, provided the conditions do not unduly restrict the ability of the Owner to use the donation to meet its goals within the framework of this Policy.

The costs for the management alternatives described above vary widely depending on the size of the prairie dog colony; number of prairie dogs; methods used; personnel (staff, contractor, or volunteers); and permitting requirements. The estimated range of typical costs is provided below:

### **1. Nonlethal Management and Passive Dispersal**

Barrier fence materials and labor	\$4 - \$10 per linear foot
One-way gate installation and monitoring	\$8 - \$14 per burrow

### **2. Relocation Off-Site**

Live trap and transport to receiving site	\$15 – \$100 per burrow
Receiving site preparation	\$50 - \$100 per burrow (2 – 6 prairie dogs/burrow)
Permits	\$2,000 - \$4,000
Land costs (title, easement, or fee)	\$10,000 - \$??? per acre (10 PD)
Post-relocation monitoring	\$5,000 - \$10,000

### **3. Black-Footed Ferrets and Other Recovery Wildlife Rehabilitation Programs**

Pre-trapping preparation (dusting)	\$20 - \$40 per acre
------------------------------------	----------------------

Live trap and transport to receiving site                      \$15 – \$100 per burrow

**4. Lethal Control**

Depending on bait    \$2.50 - \$6 per burrow

**F. Coordinated Implementation**

The Owner recognizes that coordinated implementation of this Policy with adjacent landowners may result in more efficient execution of the above policies and greater overall success. Accordingly, this Policy is recommended for adoption by the Community Authority Board (“CAB”), Sterling Ranch Districts 1 – 7 (the “Districts”), and Dominion Water & Sanitation District (“Dominion”).

**Reference**

Wanek, P. 2010. Reverse Dispersal Translocation™, a Passive Prairie Dog Relocation Technique.



## **APPENDIX C**

### **WESTERN BURROWING OWL PROTECTION PLAN**

## WESTERN BURROWING OWL PROTECTION PLAN

### ***Introduction***

The objective of the Western Burrowing Owl Protection Plan is to minimize impacts on burrowing owls and the resources that support viable owl populations. The best situation for the long-term survival and benefit to burrowing owls nesting at Sterling Ranch is to encourage owls to nest within secure habitats, including both interim and permanent Prairie Conservation Areas (PCAs). Equally important to encouraging burrowing owls to nest in secure areas is discouraging owls from nesting in “harm’s way,” including within utility corridors, access roads, and areas with pending development. To accomplish these goals, Sterling Ranch will discourage or prevent owls from nesting within inappropriate areas and provide suitable and attractive nesting habitat elsewhere on the property. Based on Trulio (1995), secure areas require available burrows for nesting and a minimum of 6.5 acres of foraging habitat, calculated on a 100-meter (approximately 300-foot) foraging radius around the nest burrow per pair (or unpaired resident single bird).

### ***Regulatory Background***

The burrowing owl, which nests in abandoned prairie dog burrows, is listed by Colorado Parks and Wildlife (CPW) as a threatened species in Colorado and is protected under the federal Migratory Bird Treaty Act (MBTA). It is unlawful to kill, injure, chase, or harass burrowing owls or destroy their eggs or active nests. Active nests are those that contain eggs or young or are being tended by adults in preparation for breeding. Nest failure resulting from abandonment by one or both adults is also considered destruction of a nest. CPW suggests conducting a burrowing owl survey prior to relocation or extermination of prairie dogs. Failure to conduct a survey creates the risk of violating the MBTA if the activity results in burrowing owl mortality, injury, or nest failure.

### ***Management***

*Owl Exclusion:* To discourage owls from nesting within the project area, all inactive prairie dog burrows within the project area will be identified and disked, lightly graded or otherwise filled with dirt or one-way gates. If the owl exclusion activity is conducted prior to the nesting season from March 15 through October 31, activities can be completed without the pre-activity survey described below.

*Pre-activity Survey:* During the nesting season (March 15 through October 31), all prairie dog towns should be surveyed by a qualified biologist for the presence of burrowing owls. Surveys should be conducted following CPW guidelines. If no burrowing owls are present, owl exclusion, prairie dog management (passive dispersal, relocation, or extermination), or other habitat-disturbing activities can proceed.

*Detection of Active Nest Burrow:* If burrowing owls are found to be nesting within a prairie dog town, Owner shall postpone any construction, prairie dog management or control measures, or other habitat-disturbing activities within 150 feet of active nest burrows, per CPW guidelines, until after the nesting season or until young are able to leave the nest and are no longer dependent on the nest burrow. If postponing construction, prairie dog management or control measures, or other habitat-disturbing activities would represent an undue hardship for Owner,

Owner will coordinate a plan with CPW to implement the proposed action during the nesting season. Such a plan would be required to (a) demonstrate the necessity of undertaking the action during the nesting season and (b) describe how the proposed action would be conducted without destroying or causing abandonment of the nest or eggs and without injuring or killing the adults or young.

### ***Conservation***

Owner will actively work to conserve and protect burrowing owls. Owner will work with the Bird Conservancy of the Rockies (BCOR) to identify suitable locations to conserve existing burrowing owl nest sites and locations for passive dispersal of prairie dogs. Owner will also consult with BCOR, in an advisory capacity, to develop habitat enhancement measures to attract burrowing owls to more suitable habitat. Passive dispersal of prairie dogs and habitat enhancement activities will be dynamic and flexible and may be implemented under three general development scenarios:

- Infrastructure construction within or near existing nest sites: Habitat enhancement activities may be initiated outside of proposed construction limits in areas with current or past occupancy by nesting burrowing owls. The objective of habitat enhancement would be to avoid inadvertent injury or killing of burrowing owls by providing alternate nest habitat and encourage nesting by owls in areas outside of heavy construction.
- Multiple-Objective PCAs, or other appropriate Open Space, where active prairie dog towns do not exist. Passive dispersal of prairie dogs to these areas could provide nesting habitat that supports burrowing owls over the long term.
- Multiple-Objective PCAs, or other appropriate Open Space, with existing prairie dog towns where habitat enhancement could improve existing habitat to attract burrowing owls.

### **Reference**

Trulio, L.A. 1995. Passive relocation: A method to preserve burrowing owls on disturbed sites. *Journal of Field Ornithology* 66:99-106.



## **COLORADO PARKS AND WILDLIFE RECOMMENDED SURVEY PROTOCOL AND ACTIONS TO PROTECT NESTING BURROWING OWLS**

Western Burrowing Owls (*Athene cunicularia hypugaea*) are commonly found in prairie dog towns throughout Colorado. Burrowing Owls require prairie dog or other suitable burrows (e.g., badger) for nesting and roosting. Burrowing Owls are migratory, breeding throughout the western United States, southern Canada, and northern Mexico and wintering in the southern United States and throughout Mexico.

Federal and state laws prohibit the harming or killing of Burrowing Owls and the destruction of active nests. It is quite possible to inadvertently kill Burrowing Owls during prairie dog poisoning projects, removal of prairie dogs, or during earth moving for construction. Because Burrowing Owls often hide in burrows when alarmed, it is not practical to haze the birds away from prairie dog towns prior to prairie dog poisoning/removal or construction activity. Because of this, the Colorado Division of Wildlife recommends surveying prairie dog towns for Burrowing Owl presence before potentially harmful activities are initiated.

The following guidelines are intended as advice on how determine if Burrowing Owls are present in a prairie dog town, and what to do if Burrowing Owls are detected. These guidelines do not guarantee that Burrowing Owls will be detected if they are present. However, adherence to these guidelines will greatly increase the likelihood of detecting Burrowing Owls.

### **Seasonal Timing**

Burrowing Owls typically arrive on breeding grounds in Colorado in late March or early April, with nesting beginning a few weeks later. Active nesting and fledging has been recorded and may be expected from late March through early August. Adults and young may remain at prairie dog towns until migrating to wintering grounds in late summer or early autumn.

Surveys should be conducted during times when Burrowing Owls may be present on prairie dog towns. Surveys should be conducted for any activities occurring between 15 March and 31 October. No Burrowing Owls are expected to be present between 1 November and 14 March.

### **Daily Timing**

Burrowing Owls are active throughout the day; however, peaks in activity in the morning and evening make these the best times for conducting surveys (Conway and Simon 2003). Surveys should be conducted in the early morning (0.5 hour before sunrise until 2 hours after sunrise) and early evening (2 hours before sunset until 0.5 hour after sunset).

## **Number and Locations of Survey Points**

Burrowing Owls are most frequently located visually; thus, obtaining a clear view of the entire prairie dog town is necessary. For small prairie dog towns that can be adequately viewed in their entirety from a single location, only one survey point is necessary. The survey point should be selected to provide unobstructed views (with binoculars if necessary) of the entire prairie dog town (burrow mounds and open areas between) and all nearby structures that may provide perches (e.g., fences, utility poles, etc.)

For prairie dog towns that cannot be entirely viewed from a single location because of terrain or size, enough survey points should be established to provide unobstructed views of the entire prairie dog town and nearby structures that may provide perches. Survey locations should be separated by approximately 800 m (0.5 mi), or as necessary to provide adequate visual coverage of the entire prairie dog town.

## **Number of surveys to conduct**

Detection of Burrowing Owls can be highly variable and multiple visits to each site should be conducted to maximize the likelihood of detecting owls if they are present. At least three surveys should be conducted at each survey point. Surveys should be separated by approximately one week.

## **Conducting the survey**

### ***Weather Considerations***

Because poor weather conditions may impact the ability to detect Burrowing Owls, surveys should only be conducted on days with little or no wind and no precipitation.

### ***Passive surveys***

Most Burrowing Owls are detected visually. At each survey location, the observer should visually scan the area to detect any owls that are present. Some Burrowing Owls may be detected by their call, so observers should also listen for Burrowing Owl while conducting the survey.

Burrowing Owls are frequently detected soon after initiating a survey (Conway and Simon 2003). However, some Burrowing Owls may not be detected immediately because they are inconspicuous, are inside of burrows, or are not present on the site when the survey is initiated. We recommend that surveys be conducted for 10 minutes at each survey location.

### ***Call-broadcast surveys***

To increase the likelihood of detecting Burrowing Owls, if present, we recommend incorporating call-broadcast methods into Burrowing Owl surveys. Conway and Simon (2003) detected 22% more Burrowing Owls at point-count locations by broadcasting the primary male (*coo-coo*) and alarm (*quick-quick-quick*) calls during surveys. Although call-broadcast may increase the probability of detecting Burrowing Owls, most owls will still be detected visually.

We recommend the following 10-minute timeline for incorporating call-broadcast methods (Conway and Simon 2003, C. Conway pers. commun.). The observer should scan the area for Burrowing Owls during the entire survey period.

- 3 minutes of silence
- 30 seconds call-broadcast of primary call (*coo-coo*)
- 30 seconds silence
- 30 seconds call-broadcast of primary call (*coo-coo*)
- 30 seconds silence
- 30 seconds call-broadcast of alarm call (*quick-quick-quick*)
- 30 seconds silence
- 4 minutes of silence

Calls can be broadcast from a “boom box” or a portable CD or cassette player attached to amplified speakers. Calls should be broadcast loudly but without distortion.

Compact discs recordings of this survey sequence are available free of charge by contacting:

David Klute  
All-bird Conservation Coordinator  
Colorado Division of Wildlife  
6060 Broadway  
Denver, CO 80216  
Phone: 303-291-7320  
Email: David.Klute@state.co.us

### ***Identification***

Adult Burrowing Owls are small, approximately 9-11 inches. They are brown with white spotting and white barring on the chest. They have long legs in comparison to other owls and are frequently seen perching on prairie dog mounds or other suitable perches (e.g., fence posts, utility poles) near prairie dog towns. Juvenile Burrowing Owls are similar to adults but smaller, with a white/buff colored chest that lacks barring.

General information about Burrowing Owls is available from the Colorado Division of Wildlife website:

[http://wildlife.state.co.us/species\\_profiles/burrowingowl.asp](http://wildlife.state.co.us/species_profiles/burrowingowl.asp)

Additional identification tips and information are available from the U.S. Geological Survey Patuxent Wildlife Research Center website:

<http://www.mbr-pwrc.usgs.gov/id/framlst/i3780id.html>

### **What to do if Burrowing Owls are Present**

If Burrowing Owls are confirmed to be present in a prairie dog town, there are two options before proceeding with planned activities:



1. Wait to initiate activities until after November 1 or until it can be confirmed that the owls have left the prairie dog town.
2. Carefully monitor the activities of the owls, noting and marking which burrows they are using. The owls may use several burrows in a prairie dog town. This is not easy to accomplish and will require considerable time. When all active Burrowing Owl burrows have been located and marked, activity can proceed in areas greater than 150 feet from Burrowing Owl burrows with little danger to the owls. Activity closer than 150 feet may endanger the owls.

## **Reference**

Conway, C.J. and J.C. Simon. 2003. Comparison of detection probability associated with Burrowing Owl survey methods. *Journal of Wildlife Management* 67:501-511.

## **APPENDIX D**

### **UNANTICIPATED DISCOVERY PROTOCOL**

## **UNANTICIPATED DISCOVERY PROTOCOL**

### **A. Purpose**

This Unanticipated Discovery Protocol (UDP) provides guidance and a procedural reference for anyone involved in ground-disturbing activities at Sterling Ranch – from land surveyors to heavy equipment operators to supervisory engineers. This document serves as the primary guidance tool to help workers identify, evaluate, and protect cultural resources, both historic and prehistoric, in order to comply with local, state, and federal laws.

### **B. Recognizing Cultural Resources**

A cultural resource can be historic or prehistoric. Examples include:

- An accumulation of shell, burned rocks, or other food related materials;
- Bones or small pieces of bone;
- An area of charcoal or very dark stained soil with artifacts;
- Stone tools or waste flakes (i.e. an arrowhead, or stone chips);
- Clusters of glass bottles or tin cans (e.g., hole-in-top cans), tableware, dishware, and trash pits that appear to be older than 50 years;
- Burials and associated funerary objects, aboriginal artifacts and structures, and paleontological specimens (e.g., plant and animal fossils);
- Concentrations of rock, rock alignments, structural foundations, architectural debris (e.g., bricks, mortar, window glass), hardware (e.g., square nails), and farm, logging, or agricultural equipment that appear to be older than 50 years;
- Buried railroad tracks, decking, or other industrial materials; and
- Trails, roads, canals, wells, cisterns, and foundations.

When in doubt, assume the material is a cultural resource.

### **C. Actions Prior to Any Excavation**

Prior to commencing initial excavation or other ground-disturbing activity, an intensive Class III inventory must be completed of the entire area to locate, from surface and exposed profile indications, all cultural resources. Prior to each subsequent excavation, the Supervising Engineer must perform a pedestrian survey of the excavation area to ensure no additional cultural resources have surfaced.

### **D. Actions When Cultural Resources Discovered**

**STEP 1: STOP WORK.** If any employee, contractor, subcontractor, or other person located on Sterling Ranch, LLC's (the "Owner") property believes that he or she has uncovered any Cultural Resource at any point in the project, stop all work within a 100-foot radius of the



discovery location. Do not leave the discovery location unsecured at any time and do not allow the removal or photograph of any potential artifacts.

**STEP 2: NOTIFY SUPERVISOR.** Notify the Owner's Supervising Engineer (who will contact the Owner's Archeological Consultant):

Sterling Ranch Supervising Engineer	Patrick Chelin, PE, Matrix Design Group, Inc., 303-226-7805
-------------------------------------	--

**STEP 3: PRESERVE AREA.** Do not resume any ground-disturbing activity within 100-foot radius of the discovery location until authorized to proceed by the Supervising Engineer or the Owner's Archaeological Consultant.

## **E. Actions When Human Remains Discovered**

**GENERALLY.** If human remains are encountered, treat them with dignity and respect at all times. Any discovered human remains fall under the purview of both Colorado state law (C.R.S. §§ 24-80-1301 to 1305) and federal law (Native American Graves Protection and Repatriation regulations (43 C.F.R. Part 10)). The following protocol is necessary to satisfy Colorado state law concerning Unmarked Human Graves:

**STEP 1: STOP WORK.** Cease all ground-disturbing work within a 100-foot radius of the discovery.

**STEP 2: NOTIFY SUPERVISOR.** Notify the Owner Supervising Engineer (who will notify the Owner Archaeological Consultant):

Sterling Ranch Supervising Engineer	Patrick Chelin, PE, Matrix Design Group, Inc., 303-226-7805
-------------------------------------	--

The Owner's Supervising Engineer will then immediately notify both the county coroner and county sheriff's office of the discovery:

Douglas County Coroner's Office	303-814-7150
Douglas County Sheriff's Office	303-660-7505

**STEP 3: PRESERVE AREA.** Cover the remains with a tarp or other materials (not soil or rocks) for temporary protection in place and to shield them from being photographed. If the coroner determines that the remains are archaeological, the coroner will notify the state archaeologist to determine disinterment and further measures. The Owner's Archaeological Consultant will assume temporary custody of the remains and any associated funerary artifacts.

## **APPENDIX E**

### **MIGRATORY BIRD TREATY ACT COMPLIANCE PROCEDURE**

## **MIGRATORY BIRD TREATY ACT COMPLIANCE PROCEDURE**

The Migratory Bird Treaty Act (“MBTA”) protects migratory birds, including raptors, and active nest sites. Originally passed in 1918, the MBTA commits to the protection “of the many species of birds that traverse certain parts of the United States and Canada in their annual migration.” Unless permitted by regulations, the Act provides that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. The U.S. Fish and Wildlife Service’s (“FWS”) rules define “take” for MBTA purposes to mean to “pursue, hunt, shoot, wound, kill, trap, capture, or collect.” 50 C.F.R. § 10.12. In Colorado, most birds except for European starling, house sparrow, Eurasian collared dove, and rock pigeon are protected under the MBTA.

Of particular importance to Sterling Ranch projects and maintenance activities is the stipulation that it is unlawful to destroy an active migratory bird nest, nestling, or eggs. FWS allows vacant nests to be destroyed, but nests with active birds, young, or the presence of eggs must be left alone. For most migratory bird species, the active nesting season in Colorado is between March and August, which may also coincide with peak construction season.

Under the MBTA, FWS may issue Nest Depredation Permits, which allow a permittee to remove an active nest. FWS, however, issues very few Nest Depredation Permits, and only under very specific circumstances that are usually related to human health and safety. Obtaining a Nest Depredation Permit is unlikely, and is a process that takes from four to eight weeks.

### *Relevance to Sterling Ranch*

Because Sterling Ranch is large area of open land with a mixture of seeded pasture, native and non-native grassland, shrubland and riparian vegetation with very little existing development, the area may contain active bird nests throughout the breeding season. The nests of migratory birds may found in a variety of locations at Sterling Ranch including on the ground, in tree branches, shrubs, tree cavities, in buildings, and in cutbanks. Unintentional destruction of active bird nests could occur at Sterling Ranch with projects that involve tree and shrub removal, mowing, or grading and excavation for development.

### *Compliance Procedure*

Development at Sterling Ranch will occur year-round and complete avoidance of active bird nests during development may be difficult for several reasons:

- It can be difficult to locate nest sites, especially when foliage is at its fullest.
- Nesting periods vary by species and some species are able to move into a site, build a nest, and lay eggs within a matter of days.
- Some nests are well hidden and discernable only when active.

To help Sterling Ranch, LLC (“the Owner”) continue to meet its goal of compliance with relevant environmental regulations, a standard procedure for MBTA compliance will be implemented. Although a standard procedure will not guarantee that every nest would be found or that birds would not build new nests prior to or during construction, it will ensure the Owner



proceeds in a good-faith, deliberative manner. The Owner will implement the following procedure in order to comply with the MBTA:

1. Conduct habitat-disturbing activities (e.g., tree removal, grading, scraping, and grubbing) in the nonbreeding season (September 1 to March 31) to the extent practicable. If impractical, consider step 2.
2. If work activities are planned between April 1 and August 31, remove or alter vegetation within construction footprints and road rights-of-way prior to the nesting season (April 1 to August 31), to discourage nesting so that construction can take place on schedule. This can be as simple as mowing the vegetation, disking the area, or removal of vegetation with a grader. Removal or alteration of vegetation will also discourage nesting in areas adjacent to the construction footprints and encourage birds to nest in more suitable habitat. Vegetation-altering activities can include grazing vegetation to a height of six inches or less, mowing and/or trimming to a height of six inches or less, disking, initial surface grading, and herbicide application.
3. Once vegetation has been removed and/or trimmed, appropriate measures (i.e., repeated mowing/trimming/proper grazing) should be implemented as needed to ensure vegetation does not grow to more than six inches high.
4. If activities 1 through 3 cannot be completed, preconstruction clearance surveys should be conducted by a trained biologist during the nesting season to identify any active nests and implement avoidance measures.
5. If an active nest is identified in a project area, activities that would directly impact the nest or that would encroach close enough to cause adult birds to abandon the nest will be restricted. The Owner will work with professional biologists and construction contractors to determine if construction activities can continue away from the nest or after nesting has completed.

Note: Implementing this approach demonstrates a “Good Faith” effort to avoid incidental violation of the MBTA, but does not guarantee that migratory birds will not still nest in some areas despite these efforts.

## **APPENDIX F**

### **RAPTOR MANAGEMENT GUIDELINES AND STRATEGY**

## **RAPTOR MANAGEMENT GUIDELINES AND STRATEGY**

### **Purpose and Objective**

The purpose of this raptor monitoring and mitigation plan is to avoid and minimize take of raptors and establish site-specific guidelines and management protocol for nesting raptors potentially affected by project activities. This mitigation plan is consistent with Owner's commitment to build an environmentally responsible project and to comply with the guidelines for buffer zones and seasonal restrictions developed by Colorado Parks and Wildlife (CPW).

### **Regulations**

Three main federal regulations pertain to migratory birds and/or raptor nest sites: 1) the Migratory Bird Treaty Act (MBTA); 2) the Bald and Golden Eagle Protection Act; and 3) the Endangered Species Act (ESA). Additionally, the State of Colorado has regulations and guidelines pertaining to raptors. This section discusses regulatory backgrounds of the MBTA, the Bald and Golden Eagle Protection Act, and state regulations, and how these protections may affect existing and future activities on Sterling Ranch. Because Sterling Ranch is outside the range of any threatened or endangered raptor species and because there are no active eagle nests or winter roosts within more than 1-mile of Sterling Ranch this document will focus on the MBTA.

### **Migratory Bird Treaty Act**

Migratory birds, as well as their eggs and nests, are protected under the MBTA. Unless permitted by regulations, the MBTA provides that it is unlawful to pursue; hunt; take; capture; kill; attempt to take, capture, or kill; possess; offer for sale; sell; offer to barter; barter; offer to purchase; purchase; deliver for shipment; ship; export; import; cause to be shipped, exported, or imported; deliver for transportation; transport or cause to be transported; carry or cause to be carried; or receive for shipment; transportation; carriage; or export any migratory bird, part, nest, egg, or product; manufactured or not (16 U.S.C. §§ 703-712). The MBTA does not contain any prohibition that applies to the destruction of a bird nest alone (without birds or eggs), provided that no possession occurs during the destruction. While destruction of a nest by itself is not prohibited under the MBTA, nest destruction that results in the unpermitted take of migratory birds or their eggs is illegal and fully prosecutable under the MBTA (Migratory Bird Permit Memorandum, U.S. Fish and Wildlife April 15, 2003). In Colorado, most nongame birds are protected under the MBTA. Bird species not protected under the MBTA include grouse species and nonnative species such as, house sparrow, European starling, Eurasian collared dove, and rock pigeon (common pigeon).

### **Federal and State Recommendations**

#### ***Bald Eagles***

The U.S. Fish and Wildlife Service (Service) developed National Bald Eagle Management Guidelines in 2007. These guidelines are intended primarily as a tool for landowners and planners to avoid disturbing bald eagles. The guidelines provide specific recommendations for avoiding disturbance to nest sites. The recommendations include:



- Keeping a distance between the activity and the nest (distance buffers); the buffer areas serve to minimize visual and auditory impacts associated with human activities near nest sites;
- Maintaining forested (or natural) areas between the activity and around nest trees (landscape buffers); and
- Avoiding certain activities during the breeding season (temporal restrictions).

Although these guidelines establish specific buffer size recommendations, they caution that the distance between an activity and a nest site may need to consider several site-specific variables, including:

- Open habitats, particularly in western states, may require larger buffers;
- Physical and topographical landscape features that can screen or dampen visual impacts, noise, and artificial light (landscape buffer); and
- The historical tolerance of individual eagles or breeding pairs to human activities at particular localities.

### ***Other Raptors***

In Colorado, the Service coordinates closely with the CPW to provide guidelines and recommendations to protect individual raptor nest sites. CPW has established Recommended Buffer Zones and Seasonal Restrictions for Raptors (CDOW 2008). Should a raptor nest become established, all parties will comply with federal and state regulations and guidelines. State guidelines for raptor species potentially nesting on Sterling Ranch are provided below:

#### *Red-tailed Hawk*

- No surface occupancy (beyond that which historically occurred in the area) can occur within a 1/3-mile radius of active nests. The seasonal restriction to human encroachment within 1/3 mile of active nests is from February 15 to July 15. Note that some members of this species have adapted to urbanization and may tolerate human habitation to within 200 yards of their nest (CDOW 2008).

#### *Swainson's hawk*

- No surface occupancy (beyond that which historically occurred in the area) can occur within a 1/4-mile radius of active nests. The seasonal restriction to human encroachment within 1/4 mile of active nests is from February 15 to July 15. Note that some members of this species have adapted to urbanization and may tolerate human habitation to within 200 yards of their nest (CDOW 2008).

#### *Great horned owl*

- No specific buffer recommendations

#### *Barn owl*

- No specific buffer recommendations

#### *American kestrel*

- No specific buffer recommendations

Note: Although CPW has not identified specific buffer recommendations for great horned owl, barn owl and American kestrel, these species are still protected by the MBTA and consultation with the local CPW District Wildlife Manager is recommended prior to encroaching on active nests of these species.

## Management Strategy

**Inactive Hawk or Owl Nest** – The removal of the nest or nest tree in the inactive season is permitted under the federal MBTA, and CPW frequently recommends nest removal for nests that cannot be protected or avoided by adhering to the state buffer or approved site-specific guidelines. The Service considers a nest active only during the nesting season when a breeding pair is attending the nest through the post-fledging period while the young are still dependent on the nest site. However, CPW typically considers a raptor nest active for five years after its last known occupancy.

**Recommended Avoidance and Mitigation Procedures** – Avoidance and mitigation options for Sterling Ranch consists of 1) avoidance, 2) habitat modification for temporary impacts, and 3) removal of inactive nests. The intent of any mitigation is to encourage individual raptor pairs to nest at selected and more secure locations. Sterling Ranch will implement the following management strategy for addressing raptor issues:

- **Annual Surveys** – Conduct annual surveys during the breeding season in March and June to confirm nesting activity on any existing nest sites and locate any new nest sites.
- **Establish Reasonable Buffer** – Comply with CPW-recommended buffer zones to provide adequate protection for any raptor species that may nest on the property. If vegetation screen or topography provide natural visual buffers to active raptor nests, consult with the CPW to develop site-specific buffer distances that take these natural buffers into consideration.
- **Avoid/Minimize** – Design project activities and scheduling that avoid disturbance to nest sites and important foraging areas, either spatially using reasonable buffers or temporally using seasonal restrictions. Conduct habitat-disturbing activities (e.g., tree removal, grading, scraping, and grubbing) in the nonbreeding season for all migratory birds (September 1 to February 15) to the extent practicable.
- **Habitat Modification for Temporary Impacts** – Install temporary nest deterrents, where appropriate, prior to the nesting season in any known or suspected active nests on Owner's property that will be temporarily rendered unproductive by development activities on such property. Nest deterrents in known or suspected active nests need to be coordinated with the CPW district wildlife managers. Nest deterrents will be removed upon project completion.
- **Habitat Modification for Permanent Impacts** – Federal and state regulations allow removes of inactive hawk or owl nests. Remove the nest or nest tree in the inactive season, which is permitted under the MBTA. The CPW frequently recommends nest removal for nests that cannot be protected or avoided by adhering to the state buffer or approved site-specific guidelines. The Service considers a nest active only during

the nesting season when a breeding pair is attending the nest through the post-fledging period while the young are still dependent on the nest site. However, the CPW typically considers a raptor nest active for five years after its last known occupancy and generally recommends nest replacement with a mitigation nest.

013831\0025\14520209.14



RESOLUTION NO. 2016-05- 01

**RESOLUTION OF THE STERLING RANCH COMMUNITY AUTHORITY BOARD  
REGARDING THE PRAIRIE CONSERVATION MANAGEMENT PLAN**

WHEREAS, the Sterling Ranch Community Authority Board (the “CAB”) is an authority and separate legal entity created pursuant to Section 29-1-203.5, C.R.S. and is governed by the certain Amended and Restated Sterling Ranch Community Authority Board Establishment Agreement, made and entered into as of June 29, 2015, with an original effective date of January 6, 2014 (the “CABEA”); and

WHEREAS, the property within the CAB’s service area is known as Sterling Ranch (“**Sterling Ranch**”), and Sterling Ranch, LLC (the “**Owner**”), is the owner of the undeveloped property within and without Sterling Ranch; and

WHEREAS, the Owner has prepared guidelines for prairie conservation management, which it has compiled in a document entitled the Prairie Conservation Management Plan dated May 17, 2016 (the “**Prairie Conservation Management Plan**”); and

WHEREAS, the Owner and the CAB desire to plan and administer their respective construction projects and maintenance programs with the use of the Prairie Conservation Management Plan as a guideline for reference; and

WHEREAS, the Prairie Conservation Management Plan includes the Sterling Ranch Prairie Dog Management Policy, the Western Burrowing Owl Protection Plan, and the Unanticipated Discovery Protocol (collectively, the “**Guidelines**”), and the CAB wishes to evidence its intentions with regard to the Guidelines;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE STERLING RANCH COMMUNITY AUTHORITY BOARD OF THE COUNTY OF DOUGLAS, COLORADO:

1. Incorporation of Recitals. The foregoing Recitals are incorporated into and made a substantive part of this Resolution.

2. Expression of Intention Regarding Sterling Ranch Prairie Dog Management Plan. It is the current intent of the CAB to reference the Sterling Ranch Prairie Dog Management Plan for the planning and management of CAB property.

3. Expression of Intention Regarding Western Burrowing Owl Protection Plan. It is the current intent of the CAB to reference the Western Burrowing Owl Protection Plan for the planning and management of any ground-disturbing activity performed by the CAB, including construction. In that regard, visual surveys will be performed every two weeks for Western Burrowing Owls during the nesting season. If Western Burrowing Owls are identified within CAB property or within areas to be disturbed by the CAB for construction, such findings will be immediately reported to the CAB Manager and subsequent surveys will be performed on a weekly basis thereafter during the nesting season until such owls migrate away from the Site. If the CAB Manager is notified of the presence of nesting Western Burrowing Owls, the CAB

Manager will consult the Western Burrowing Owl Protection Plan for subsequent measures and determine whether any action or direction is required of the Board.

4. Expression of Intention Regarding Unanticipated Discovery Protocol. It is the current intent of the CAB to identify, evaluate, and protect cultural resources, both historic and prehistoric, in order to comply with local, state, and federal laws. In that regard, the CAB will reference the Unanticipated Discovery Protocol for any ground-disturbing activity occurring within CAB property and will ensure that Class III cultural resource surveys within the relevant area are performed prior to any excavation, construction, or other ground-disturbing activity. Under the Unanticipated Discovery Protocol, if cultural resources are later identified, the operator or individual discovering the materials will immediately notify the CAB Manager, who will consult the Unanticipated Discovery Protocol for subsequent measures and determine whether any action or direction is required of the Board.

5. Expression of Intention Regarding Board Discretion. It is the current intent of the CAB to reference the Guidelines as a guide in developing its policies, procedures, and protocols for property that the CAB is responsible for maintaining. When considering decisions related to the Guidelines, the Board will take into account the CAB's resources, budgets, contractual commitments, funding sources, new technologies, and scientific information available, as well as any other information the Board deems relevant to determine, in the Board's sole discretion, whether to take any actions.

6. Expression of Intention Regarding Applicability of the Prairie Conservation Management Plan to Open Spaces. From time to time, Open Spaces, as defined in the Prairie Conservation Management Plan, will be dedicated to the CAB that may or may not have been designated, in part or in whole, as a Multiple-Objective PCA or a Focused-Resource PCA. Post-dedication, the CAB, at its own initiative and in its sole discretion, may designate as a Multiple-Objective PCA or a Focused-Resource PCA, or re-designate or un-designate, any portion of any Open Space in its sole discretion. The Owner may request a designation, re-designation or an un-designation of any portion of any Open Space; however, such action will not be binding upon the CAB without the CAB's written consent. Taking into account the CAB resources, budgets, contractual commitments, funding sources, new technologies, and scientific information available, as well as any other information the CAB deems relevant, the Board shall determine, in its sole discretion, whether to take any actions to designate, re-designate or un-designate a part or all of any parcel of Open Space.

7. Expression of Intention Regarding Applicability of the Prairie Conservation Management Plan to Undedicated Open Space. The CAB may enter into contracts or memoranda of understanding from time to time pursuant to which the CAB will be responsible for maintaining Open Space that has not yet been dedicated to the CAB upon which Multiple-Objective PCAs or Focused-Resource PCAs have been designated by the Owner, and the obligations of the Owner and the CAB will be set forth in such contracts or memoranda, taking into consideration the Prairie Conservation Management Plan.

8. Expression of Intention Regarding Applicability of the Prairie Conservation Management Plan to Community Education. The CAB will be providing information to the property owners and residents in Sterling Ranch by way of its website, newsletters, and

community programs. As a part of its budgeting and programming process during the last quarter of each year beginning in 2016 for the 2017 fiscal year, the CAB will consider including within its communications and programming the information recommended to be distributed in the next fiscal year to property owners and residents contained within the Prairie Conservation Management Plan. Taking into account the CAB resources, budgets, contractual commitments, funding sources, new technologies, and scientific information available, as well as any other information the CAB deems relevant, the Board shall determine, in its sole discretion, what resources it will dedicate to the communication of the information recommended in the Prairie Conservation Management Plan and whether the information needs to be revised or updated.


9. Effective Date of Resolution. This Resolution shall take effect immediately upon its passage and approval.

**APPROVED AND ADOPTED** this 17<sup>th</sup> day of May, 2016.

**STERLING RANCH COMMUNITY AUTHORITY  
BOARD**

By:   
President

ATTEST:

  
Secretary



**Referral Agency Response Report****Page 1 of 8****Project Name:** Chatfield Urban Area Expansion**Project File #:** DR2025-011**Date Sent:** 11/21/2025**Date Due:** 12/26/2025

<b>Agency</b>	<b>Date Received</b>	<b>Agency Response</b>	<b>Response Resolution</b>
Addressing Analyst	11/24/2025	No Comment.	No action necessary.
Arrowhead Shores		No Response Received.	No action necessary.
Assessor	12/23/2025	Received (verbatim response): none	No action necessary.
AT&T Long Distance - ROW	11/25/2025	AT&T identified no conflicts with the proposal.  See letter for detail.	No action necessary.
Backcountry Association, Inc		No Response Received.	No action necessary.
Black Hills Energy		No Response Received.	No action necessary.
Braley Acres HOA		No Response Received.	No action necessary.
Building Services	11/24/2025	No Comment.	No action necessary.
CDPHE - All Referrals	12/03/2025	Colorado Department of Public Health and Environment, Air Pollution Control Division, had no comments.  See letter for detail.	No action necessary.
CenturyLink		No Response Received.	No action necessary.
Chatfield Community Association		No Response Received.	No action necessary.
Chatfield East HOA		No Response Received.	No action necessary.
Chatfield Farms 1-A	12/02/2025	Received (verbatim response): The Chatfield Farms 1A HOA Board has reviewed project DR2025-011 and has concerns about the build-out of the Waterton business park and Zebulon. Currently, there are significant concerns about whether our neighborhood can evacuate the Roxborough area with the build-out of Sterling Ranch given that the number and size of the evacuation routes are limited. The Chatfield Farms 1A HOA supports the County's 2050 transportation plans for the area, specifically the widening of West Waterton Rd, Titan Rd/US 85 improvements, and the Airport Rd/US 85 improvements. To ensure the safety of our residents, the County needs to ensure those transportation improvements are completed prior to any new traffic expected from both the Waterton business park and Zebulon. If either is allowed to begin operations without all those transportation projects completed, it is very likely to increase fatalities if a wildfire occurs in the Roxborough area, which is at high risk for wildfires and similar in nature to the area burned by the Marshall fire.	These comments have been provided to the applicant.

**Referral Agency Response Report****Page 2 of 8****Project Name:** Chatfield Urban Area Expansion**Project File #:** DR2025-011**Date Sent:** 11/21/2025**Date Due:** 12/26/2025

<b>Agency</b>	<b>Date Received</b>	<b>Agency Response</b>	<b>Response Resolution</b>
Chatfield Farms 1-B HOA		No Response Received.	No action necessary.
Chatfield Farms Estates HOA		No Response Received.	No action necessary.
Chatfield State Park	12/08/2025	No Comment	No action necessary.
Chatfield Watershed Authority		No Response Received.	No action necessary.
Cherokee Ridge Estates HOA		No Response Received.	No action necessary.
Colorado Department of Local Affairs – Division of Planning		No Response Received.	No action necessary.
Colorado Department of Transportation CDOT-Region # 1		No Response Received.	No action necessary.
Colorado Division of Water Resources	12/11/2025	Colorado Division of Water Resources had no objections to the proposal since no changes to the water supply plan for Sterling Ranch are identified.  See full letter for detail.	No action necessary.
Colorado Geological Survey	12/17/2025	No Comment	No action necessary.
Colorado Parks and Wildlife (Northwest DC - District 551)	12/22/2025	Colorado Parks and Wildlife (CPW) described the site's value as wildlife habitat and a wildlife migration corridor. CPW stated that "CPW strongly opposes the proposed amendment of the Douglas County CMP as written. We instead recommend that the 184 remaining acres of land intended for a conservation easement stay within the Louviers Rural Community."  See full letter for detail.	These comments have been provided to the applicant.
Comcast		No Response Received.	No action necessary.

**Referral Agency Response Report****Page 3 of 8****Project Name:** Chatfield Urban Area Expansion**Project File #:** DR2025-011**Date Sent:** 11/21/2025**Date Due:** 12/26/2025

<b>Agency</b>	<b>Date Received</b>	<b>Agency Response</b>	<b>Response Resolution</b>
CORE Electric Cooperative	12/23/2025	<p>Received (verbatim response): CORE Electric Cooperative has completed its review of the referral response packet referenced above. Our evaluation included an assessment of existing CORE facilities, utility easements, electric loading, and service requirements associated with the proposed project.</p> <p>Please be advised of the following: CORE Electric Cooperative operates as the certificated electric utility under rules and regulations established by our Board of Directors. The parcel of land located in Section 33, Township 6 South, Range 68 West of the 6th P.M., Douglas County, Colorado, is situated within CORE's service territory.</p> <p>CORE Electric Cooperative is willing to extend electric facilities to serve the proposed project in accordance with our established line-extension policies. CORE will serve as the electric service provider for both Option 1 and Option 2 of the new Douglas County Operations Facility. The remaining acreage associated with this development will be served jointly by CORE Electric Cooperative and Xcel Energy, as depicted on the attached CORE-Xcel Service Territory Boundary Map.</p> <p>Contact Information For questions, additional coordination, or to discuss project requirements, please contact: Brooks Kaufman Lands &amp; Rights-of-Way Manager CORE Electric Cooperative</p>	No action necessary.
Dominion Water and Sanitation District	12/26/2025	<p>Dominion Water and Sanitation District stated the proposal is consistent with District Rules and Regulations.</p> <p>See full letter for detail.</p>	No action necessary.
Douglas County Conservation District	12/24/2025	<p>Douglas County Conservation District discussed the site's wildlife habitat value and the limitations of the soils on the site. The District stated that it "...does not support development proposals that are located in or near drainages or development that disturbs wetlands."</p> <p>See full letter for detail.</p>	These comments have been provided to the applicant.



**Referral Agency Response Report****Page 4 of 8****Project Name:** Chatfield Urban Area Expansion**Project File #:** DR2025-011**Date Sent:** 11/21/2025**Date Due:** 12/26/2025

<b>Agency</b>	<b>Date Received</b>	<b>Agency Response</b>	<b>Response Resolution</b>
Douglas County Health Department	12/22/2025	<p>Following is an excerpt of the referral comments from the Douglas County Health Department (DCHD).</p> <p>“A will-serve letter has been provided by Dominion Water &amp; Wastewater District. Based on this letter, DCHD is providing a favorable recommendation regarding the proposed method of water service and sewage disposal.”</p> <p>See full letter for detail.</p>	No action necessary.
Douglas County Historic Preservation	12/09/2025	<p>Following are excerpts from Douglas County Historic Preservation’s comments.</p> <p>“Please note that the proposed new Open Space (O1-Open Preserve) is located next to Louviers Village. The Village has been listed on the National Register of Historic Places since 1999. At this time the Curator does not see any impact to the Village and has no recommendations.”</p> <p>“If there is future development with ground disturbance on the property a cultural survey should be performed.”</p> <p>“Should buried artifacts and features be discovered, we recommend completion of the appropriate Colorado Office of Archaeology and Historic Preservation (OAHP) Data Management and Historic and/or Prehistoric Component forms.”</p> <p>See full letter for detail.</p>	These comments have been provided to the applicant.
Douglas County Parks and Trails	12/08/2025	Received (verbatim response): Parks does not have any concerns with this project.	No action necessary.
Douglas County Water Commission		No Response Received.	No action necessary.

**Referral Agency Response Report****Page 5 of 8****Project Name:** Chatfield Urban Area Expansion**Project File #:** DR2025-011**Date Sent:** 11/21/2025**Date Due:** 12/26/2025

<b>Agency</b>	<b>Date Received</b>	<b>Agency Response</b>	<b>Response Resolution</b>
Douglas County School District RE 1	12/26/2025	<p>Following are excerpts of referral comments received from the Douglas County School District (DCSD).</p> <p>"At the outset, it is important to understand that growth does not pay its own way when it comes to building schools to accommodate growth."</p> <p>"With this in mind, the School District would like to speak to the potential need for school land driven by this proposed amendment to the CMP and Land Use Map."</p> <p>"As for this application, the School District simply asks the Commission to ensure future school needs are considered and accounted for in the approval of this application, as required by Section 10-2A(4) and (5) of the CMP."</p> <p>See full letter for detail.</p>	These comments have been provided to the applicant.
Douglas Land Conservancy		No Response Received.	No action necessary.
DRCOG		No Response Received.	No action necessary.
Engineering Services	12/26/2025	<p>Following is an excerpt of the referral comments from the Douglas County Engineering.</p> <p>"Douglas County Public Works Engineering has no specific comments on this application. We will continue to work with Sterling Ranch on the update to the Master Traffic Impact Study (MTIS) that is currently in process."</p> <p>See full letter for detail.</p>	No action necessary.
Highlands Ranch Community Association	12/10/2025	<p>Received (verbatim response):</p> <p>Thank you for the opportunity to review and provide comment on this application. HRCA has reviewed the referral and takes no exceptions to the proposal. The subject property lies outside HRCA's jurisdiction and does not implicate HRCA governing documents or policies. No further comment is offered.</p>	No action necessary.
Jefferson County Planning and Zoning		No Response Received.	No action necessary.

**Referral Agency Response Report****Page 6 of 8****Project Name:** Chatfield Urban Area Expansion**Project File #:** DR2025-011**Date Sent:** 11/21/2025**Date Due:** 12/26/2025

<b>Agency</b>	<b>Date Received</b>	<b>Agency Response</b>	<b>Response Resolution</b>
Louviers Conservation Partnership	12/22/2025	<p>Following is a summary of referral comments received from the Louviers Conservation Partnership (LCP).</p> <p>The LCP stated that Louviers residents are concerned with the request to add the conservation easement area into the Chatfield Urban Area.</p> <p>The LCP had several questions about plans for the conservation easement area.</p> <p>The LCP stated its opinion that the conservation easement area should keep its designation as part of the Louviers Rural Community.</p> <p>See full letter for detail.</p>	These comments and questions have been provided to the applicant.
Louviers Water and Sanitation District		No Response Received.	No action necessary.
Mile High Flood District		No Response Received.	No action necessary.
Office of Emergency Management	11/22/2025	Received (verbatim response): Emergency Management supports this project.	No action necessary.
Open Space and Natural Resources	12/24/2025	<p>Open Space and Natural Resources (OSNR) commented on the importance of wildlife migration and habitat in the area, described investments made to protect wildlife habitat and migration corridors in the area, and provided information on ways to reduce impacts from development on adjacent wildlife corridors and habitats. OSNR also suggested that "it would be better to remove the conservation parcel (185 acres) from the application and leave it in non-urban designation."</p> <p>See full letter for detail.</p>	These comments have been provided to the applicant.
Plum Valley Heights HOA		No Response Received.	No action necessary.
Public Works Operations	11/24/2025	No Comment.	No action necessary.
Ravenna Homeowners Master Association		No Response Received.	No action necessary.
Roxborough 16B HOA		No Response Received.	No action necessary.



**Referral Agency Response Report****Page 7 of 8****Project Name:** Chatfield Urban Area Expansion**Project File #:** DR2025-011**Date Sent:** 11/21/2025**Date Due:** 12/26/2025

<b>Agency</b>	<b>Date Received</b>	<b>Agency Response</b>	<b>Response Resolution</b>
Roxborough Park Foundation		No Response Received.	No action necessary.
Roxborough Ridge HOA		No Response Received.	No action necessary.
Roxborough Village Filing 14B HOA		No Response Received.	No action necessary.
Roxborough Village First HOA	12/22/2025	The Roxborough Village First HOA stated that it does not support the Chatfield Urban Area Expansion. The HOA stated concerns about emergency evacuations, traffic, and safety. The HOA stated concerns about the Zebulon project. The HOA had questions about wastewater treatment capacity for Sterling Ranch. The HOA requested that "the County Commissioners deny this request."  See full letter for detail.	These comments and questions have been provided to the applicant.
Roxborough Water & Sanitation District		No Response Received.	No action necessary.
RTD - Planning & Development Dept	12/23/2025	RTD indicated no exceptions to the submittal.  See full letter for detail.	No action necessary.
Rural Water Authority of Douglas County		No Response Received.	No action necessary.
Sheriff's Office		No Response Received.	No action necessary.
Sheriff's Office E911		No Response Received.	No action necessary.
South Metro Fire Rescue	12/04/2025	Received (verbatim response): South Metro Fire Rescue (SMFR) has reviewed the provided documents and has no objection to the proposed Douglas County Comprehensive Master Plan amendment.	No action necessary.
Sterling Ranch Community Authority Board		No Response Received.	No action necessary.
Sunshine Acres HOA		No Response Received.	No action necessary.
The Plum Creek/View Ridge Voice		No Response Received.	No action necessary.
Titan Road Industrial Park Water Association Inc		No Response Received.	No action necessary.
Wildfire Mitigation		No Response Received.	No action necessary.

**Referral Agency Response Report****Page 8 of 8****Project Name:** Chatfield Urban Area Expansion**Project File #:** DR2025-011**Date Sent:** 11/21/2025**Date Due:** 12/26/2025

<b>Agency</b>	<b>Date Received</b>	<b>Agency Response</b>	<b>Response Resolution</b>
Xcel Energy-Right of Way & Permits	12/16/2025	<p>Received (verbatim response): Public Service Company of Colorado's (PSCo) Right of Way &amp; Permits Referral Desk has reviewed the request for the Chatfield Urban Area Expansion.</p> <p>Please be advised that Public Service Company has intermediate high-pressure natural gas distribution facilities within the areas indicated in this proposed expansion. Public Service Company has no objection to this project, contingent upon PSCo's ability to maintain all existing rights and this amendment should not hinder our ability for future expansion, including all present and any future accommodations for natural gas transmission and electric transmission related facilities, and that our current use/enjoyment of the area would continue to be an accepted use on the property and that it be "grandfathered" into these changes.</p>	These comments have been provided to the applicant.

**From:** James Peabody  
**Sent:** Tuesday, November 25, 2025 1:39 PM  
**To:** Matt Jakubowski; Lana S.; LENNY V.; duanew cwc64.com; jt cwc64.com  
**Subject:** Re: Douglas County eReferral (DR2025-011) Is Ready For Review  
**Attachments:** CHATFIELD URBAN.jpg

**Caution:** This email originated outside the organization. Be cautious with links and attachments.

Matt,

This is in response to your eReferral with a utility map showing any buried AT&T Long Line/Core Fiber Optics near **Chatfield Urban Area Expansion, Louviers, CO 80131 (Project # DR2025-011)**. The Earth map shows the project area in red and the buried AT&T Long Line/Core Fiber Optics in yellow. Based on the address and/or map you provided, there should be NO conflicts with the AT&T Long Line facilities.

Please feel free to contact us with any questions or concerns.

**\*\*\* Map disclaimer: The attached google earth maps are intended to show approximate locations of the buried AT&T Long Line/Core Fiber Optic cable. The maps are provided for informational purposes only. In no way should the maps be used for anything other than general guidelines as to where the fiber is or is not and any other use of these maps is strictly prohibited. \*\*\***

*Thank you,*

**James Peabody**  
**Clearwater Consulting Group, Inc.**  
**120 9th Ave. South, Suite #140**  
**Nampa, ID 83651**  
**C: (951) 201-1279**  
**E: jamesp@cwc64.com**

\*\*\* This message and any attachments are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error, please notify the sender immediately and delete the message from your system. \*\*\*

---

**From:** duanew cwc64.com <duanew@cwc64.com>  
**Sent:** Tuesday, November 25, 2025 1:08 PM  
**To:** annb cwc64.com <annb@cwc64.com>; James Peabody <jamesp@cwc64.com>  
**Subject:** FW: Douglas County eReferral (DR2025-011) Is Ready For Review

Please do not hesitate to contact me with any questions or concerns!

Thank you!!

Duane Ward  
Clearwater Consulting Group Inc  
120 9th Ave South  
STE 140  
Nampa Id 83687  
Duanew@cwc64.com

Chatfield Urban Area Expansion - CMP Land Use Map Amendment  
Project File: DR2025-011  
Planning Commission Staff Report - Page 267 of 345



208-866-2956

-----Original Message-----

From: mjakubow@douglas.co.us <mjakubow@douglas.co.us>

Sent: Friday, November 21, 2025 5:21 PM

To: duanew cwc64.com <duanew@cwc64.com>

Subject: Douglas County eReferral (DR2025-011) Is Ready For Review

There is an eReferral for your review. Please use the following link to log on to your account:

<https://apps.douglas.co.us/planning/projects/Login.aspx>

Project Name: Chatfield Urban Area Expansion

Project File #: DR2025-011

Project Summary: Sterling Ranch proposes to amend the Douglas County Comprehensive Master Plan (CMP) Land Use Map to change the designation of 448 acres of land from the Louviers Rural Community to the Chatfield Urban Area. If approved by the Planning Commission, the project area would be subject to the policies of CMP Section 2 – Urban Land Use, and specifically the Chatfield Urban Area. Additional rezoning, subdivision and/or site plan processes would be required to develop the property.

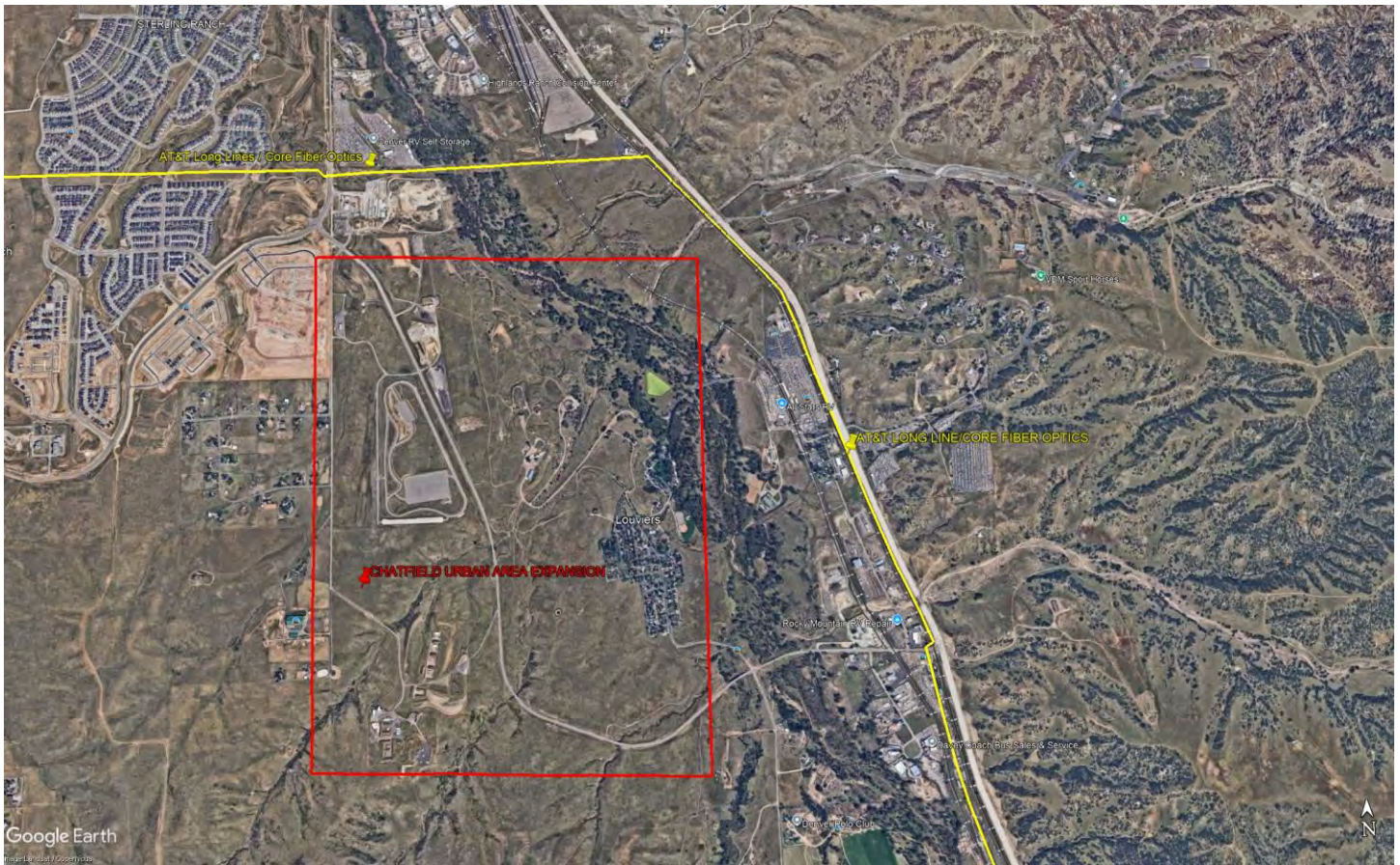
This referral will close on Friday, December 26, 2025.

If you have any questions, please contact me.

Sincerely,

Matt Jakubowski, AICP | Chief Planner

Douglas County Department of Community Development Planning Services Division Address | 100 Third St., Castle Rock, CO 80104 Phone | 303-660-7460 Email | mjakubow@douglas.co.us



**From:** Cicione - CDPHE, Brendan  
**Sent:** Wednesday, December 3, 2025 10:56 AM  
**To:** Matt Jakubowski  
**Subject:** Re: Douglas County eReferral (DR2025-011) Is Ready For Review

**Caution:** This email originated outside the organization. Be cautious with links and attachments.

Hi Matt,

Thank you for your email. There are no comments from the Air Pollution Control Division. Please do not hesitate to contact me with any questions.

Thanks,  
Brendan Cicione (*he/him*)  
Air Quality and Transportation Planner



4300 Cherry Creek Drive S. | Denver, CO 80246-1530 [brendan.cicione@state.co.us](mailto:brendan.cicione@state.co.us)  
| <https://cdphe.colorado.gov/>

On Mon, Nov 24, 2025 at 8:47 AM Localreferral - CDPHE, CDPHE <[cdphe\\_localreferral@state.co.us](mailto:cdphe_localreferral@state.co.us)> wrote:  
Hello,

Please see the email below. Please add comments by 12/24.

Thank you!

----- Forwarded message -----

From: <[mjakubow@douglas.co.us](mailto:mjakubow@douglas.co.us)>  
Date: Fri, Nov 21, 2025 at 5:22 PM  
Subject: Douglas County eReferral (DR2025-011) Is Ready For Review  
To: <[cdphe\\_localreferral@state.co.us](mailto:cdphe_localreferral@state.co.us)>

There is an eReferral for your review. Please use the following link to log on to your account:  
[https://urldefense.com/v3/https://apps.douglas.co.us/planning/projects/Login.aspx;!!PUG2raq7KiCZwBk!cd97suvuGpcP7WC0LcCtgiV\\_xjVT35dglVPIxrlh\\_2\\_k8W1wt1QIJHHKGRulI39xpA6aLXHfy0Cp5odznTG\\_A3Qk0pCEDjj5j\\$](https://urldefense.com/v3/https://apps.douglas.co.us/planning/projects/Login.aspx;!!PUG2raq7KiCZwBk!cd97suvuGpcP7WC0LcCtgiV_xjVT35dglVPIxrlh_2_k8W1wt1QIJHHKGRulI39xpA6aLXHfy0Cp5odznTG_A3Qk0pCEDjj5j$)

Project Name: Chatfield Urban Area Expansion  
Project File #: DR2025-011

Project Summary: Sterling Ranch proposes to amend the Douglas County Comprehensive Master Plan (CMP) Land Use Map to change the designation of 448 acres of land from the Louviers Rural Community to the Chatfield Urban Area. If approved by the Planning Commission, the project area would be subject to the policies of CMP Section 2 – Urban Land Use, and specifically the Chatfield Urban Area. Additional rezoning, subdivision and/or site plan processes would be required to develop the property.

This referral will close on Friday, December 26, 2025.



If you have any questions, please contact me.

Sincerely,

Matt Jakubowski, AICP | Chief Planner  
Douglas County Department of Community Development  
Planning Services Division  
Address | 100 Third St., Castle Rock, CO 80104  
Phone | 303-660-7460  
Email | [mjakubow@douglas.co.us](mailto:mjakubow@douglas.co.us)

--



[cdphe\\_localreferral@state.co.us](mailto:cdphe_localreferral@state.co.us) | [colorado.gov/cdphe](https://colorado.gov/cdphe)

**From:** Comaniciu - DNR, Ioana  
**Sent:** Thursday, December 11, 2025 3:33 PM  
**To:** Matt Jakubowski  
**Subject:** Re: Douglas County eReferral (DR2025-011) Is Ready For Review

**Caution:** This email originated outside the organization. Be cautious with links and attachments.

Good Afternoon,

We have received your November 21, 2025 referral for proposed amendments to the Sterling Ranch Douglas County Comprehensive Master Plan Land Use Map to change the designation of 448 acres of land from the Louviers Rural Community to the Chatfield Urban Area.

This referral does not appear to qualify as a "subdivision" as defined in section 30-28-101 (10)(a), C.R.S. Therefore, pursuant to the State Engineer's March 4, 2005 and March 11, 2011 memorandums to county planning directors, this office will only perform a cursory review of the referral information and provide informal comments. The comments do not address the adequacy of the water supply plan for this project or the ability of the water supply plan to satisfy any County regulations or requirements. In addition, the comments provided herein cannot be used to guarantee a viable water supply plan or infrastructure, the issuance of a well permit, or physical availability of water.

Our office has no objections to the proposed amendments, since no changes to the water supply plan for the Sterling Ranch Development were proposed.

Thank you for the opportunity to review.

Best Regards,

**Ioana Comaniciu, P. E.**

**Water Resource Engineer**

P 303-866-3581 x 8246

1313 Sherman St., Suite 821 Denver CO 80203

[ioana.comaniciu@state.co.us](mailto:ioana.comaniciu@state.co.us) | <https://dwr.colorado.gov>

On Fri, Nov 21, 2025 at 5:22 PM <[mjakubow@douglas.co.us](mailto:mjakubow@douglas.co.us)> wrote:

There is an eReferral for your review. Please use the following link to log on to your account:  
[https://urldefense.com/v3/https://apps.douglas.co.us/planning/projects/Login.aspx;!!PUG2raq7KiCZwBk!eUIE8VNk-6ZK2kUJbdTSbaP6-pnrGdnoqAu4Gy1T4ouCDDRxb4ErZeyB8HTpmeJIJaE4FfrndIufZXRgGU27NGT\\$](https://urldefense.com/v3/https://apps.douglas.co.us/planning/projects/Login.aspx;!!PUG2raq7KiCZwBk!eUIE8VNk-6ZK2kUJbdTSbaP6-pnrGdnoqAu4Gy1T4ouCDDRxb4ErZeyB8HTpmeJIJaE4FfrndIufZXRgGU27NGT$)

Project Name: Chatfield Urban Area Expansion

Project File #: DR2025-011

Project Summary: Sterling Ranch proposes to amend the Douglas County Comprehensive Master Plan (CMP) Land Use Map to change the designation of 448 acres of land from the Louviers Rural Community to the Chatfield Urban Area. If approved by the Planning Commission, the project area would be subject to the policies of CMP Section 2 – Urban Land Use, and specifically the Chatfield Urban Area. Additional rezoning, subdivision and/or site plan processes would be required to develop the property.

This referral will close on Friday, December 26, 2025.

If you have any questions, please contact me.

Sincerely,

Matt Jakubowski, AICP | Chief Planner  
Douglas County Department of Community Development  
Planning Services Division  
Address | 100 Third St., Castle Rock, CO 80104  
Phone | 303-660-7460  
Email | [mjakubow@douglas.co.us](mailto:mjakubow@douglas.co.us)





**COLORADO**  
**Parks and Wildlife**  
Department of Natural Resources

Northeast Regional Office  
6060 Broadway  
Denver, CO 80216  
P (303) 291-7227

December 21, 2025

Matt Jakubowski, AICP  
Chief Planner  
Douglas County Department of Community Development  
Planning Services Division  
100 Third Street  
Castle Rock, CO 80104

RE: CPW's Comments on Project File DR2025-011, Chatfield Urban Area Expansion

Dear Mr. Jakubowski:

Thank you for the opportunity to comment on the Chatfield Urban Area Expansion proposal (DR2025-011). The mission of Colorado Parks and Wildlife (CPW) is to perpetuate the wildlife resources of the state, to provide a quality state parks system, and to provide enjoyable and sustainable outdoor recreation opportunities that educate and inspire current and future generations to serve as active stewards of Colorado's natural resources. CPW has a statutory responsibility to manage all wildlife species in Colorado and to promote a variety of recreational opportunities throughout the state.

This proposal requests an amendment to the Douglas County Comprehensive Master Plan (CMP) to expand the boundaries of the Chatfield Urban Area, incorporating 315 acres of Sterling Ranch and Douglas County lands. The change is intended to support improvements at the existing Emergency Vehicle Operations Center (EVOC) and expansion of the planned Zebulon Regional Sports Complex.

CPW has previously highlighted the essential role this site plays in local and regional ecology. (Refer to comment letters for DR2020-002, DR2024-002, LE2025-023, et al.) Plum



Laura Clellan, Acting Director, Colorado Parks and Wildlife

Parks and Wildlife Commission: Richard Reading, Chair · James 'Jay' Tutchton, Vice-Chair · Eden Vardy, Secretary · Jessica Beaulieu ·  
Frances Silva Blayney · John Emerick · Tai Jacober · Dallas May · Jack Murphy · Gabriel Otero

Chatfield Urban Area Expansion - CMP Land Use Map Amendment

Project File: DR2025-011

Planning Commission Staff Report - Page 274 of 345

Creek, which borders the EVOC – Zebulon project area, connects Chatfield State Park to the north with a network of tributary streams south, linking tens of thousands of acres of protected habitat. To the west, Douglas County, CPW, and their partners have spent over \$252 million to maintain an overland connection between Pike National Forest and Plum Creek. Here, Roxborough State Park, Sharptail Ridge Open Space, Plateau Ranch, Woodhouse State Wildlife Area, and Dupont Open Space together provide a large, contiguous space on which animals can move, breed, and rear young. East of Louviers, wildlife crossings under Highway 85 provide a passageway to the CMP-designated high-value habitat of Backcountry Wilderness Area and Cherokee Ranch.

Although elk, mule deer, and black bear are the more conspicuous animals to frequent this space, the riparian habitat also hosts Northern Leopard Frog and Plains Topminnow. Both these species are designated Tier 1 Species of Greatest Conservation Need per Colorado's 2025 State Wildlife Action Plan.

Of critical concern to CPW is the proposed incorporation of the 204-acre conservation easement along Plum Creek into the Chatfield Urban Area. This easement was established in the 2023 Chemours property land exchange because the signatories, SR Acquisitions and Douglas County Board of County Commissioners, mutually recognized the ecological value of this space, attesting that "If the SRA Property were fully developed, it would significantly disrupt historic elk migration patterns between the Pike National Forest and the Daniels Park/backcountry open space and would impede the views and open space buffers currently enjoyed by the residents of Louviers."

The current proposal asserts, "The purpose and intent of the conservation easement will remain the same with its inclusion into the Chatfield Urban Area, which is a preserved open space, a vital wildlife corridor and habitat linkage, and a highly valued open space buffer for Louviers.... As part of the Sterling Ranch PD, the conservation easement would also benefit by being subject to the Sterling Ranch Prairie Conservation Master Plan (PCMP)."

However, the PCMP is explicit in the surety of such assertions. "This PCMP is not regulatory. The PCMP does not create, impose, or imply binding rights or obligations on any party for the establishment or management of Open Space, PCAs, prairie conservation, wildlife corridors, or habitat or greenspace...."

Once already, Sterling Ranch has requested a reduction of its commitment to the conservation easement. The Board of County Commissioners, at its October 14, 2025,



Laura Clellan, Acting Director, Colorado Parks and Wildlife

Parks and Wildlife Commission: Richard Reading, Chair · James 'Jay' Tutchton, Vice-Chair · Eden Vardy, Secretary · Jessica Beaulieu · Frances Silva Blayney · John Emerick · Tai Jacober · Dallas May · Jack Murphy · Gabriel Otero

Chatfield Urban Area Expansion - CMP Land Use Map Amendment

Project File: DR2025-011

Planning Commission Staff Report - Page 275 of 345

business meeting, agreed to a reduction of the easement from 204.9 acres to 184 acres to allow expansion of Zebulon's footprint. CPW concedes that the incorporation of these 20.9 acres into Chatfield Urban Area understandably facilitates development. However, if the sincere intent is to establish and maintain a conservation easement, incorporation of the remaining 184 acres into Chatfield Urban Area brings no benefit. Instead, it erodes a layer of protection from future encroachment. According to Sterling Ranch's pending rezoning request (ZR2025-014), "As the sports complex project continues to evolve, the footprint and surrounding infrastructure will likely shift. Bringing the full Chemours property, including the expanded business park parcels and the conservation easement, into the Chatfield Urban Area and Sterling Ranch PD will alleviate the need for future CMP amendments and zoning adjustments that would likely be required to accommodate the ultimate footprint of the sports complex and adjacent uses."

In summary, Louviers and this conservation easement are at a literal and figurative crossroads of habitat connectivity in Douglas County. The importance of protecting this intersection of wildlife corridors cannot be understated. Therefore, CPW strongly opposes the proposed amendment of the Douglas County CMP as written. We instead recommend that the 184 remaining acres of land intended for a conservation easement stay within the Louviers Rural Community.

Thank you again for the opportunity to comment on the Chatfield Urban Area Expansion proposal. If you have any further questions, please contact District Wildlife Manager Wayne Soong at (720) 728-9637 or [wayne.soong@state.co.us](mailto:wayne.soong@state.co.us).

Sincerely,



Matt Martinez  
Area Wildlife Manager

CC: M. Leslie, S. Schaller, M. Kaknes, W. Soong



Laura Clellan, Acting Director, Colorado Parks and Wildlife

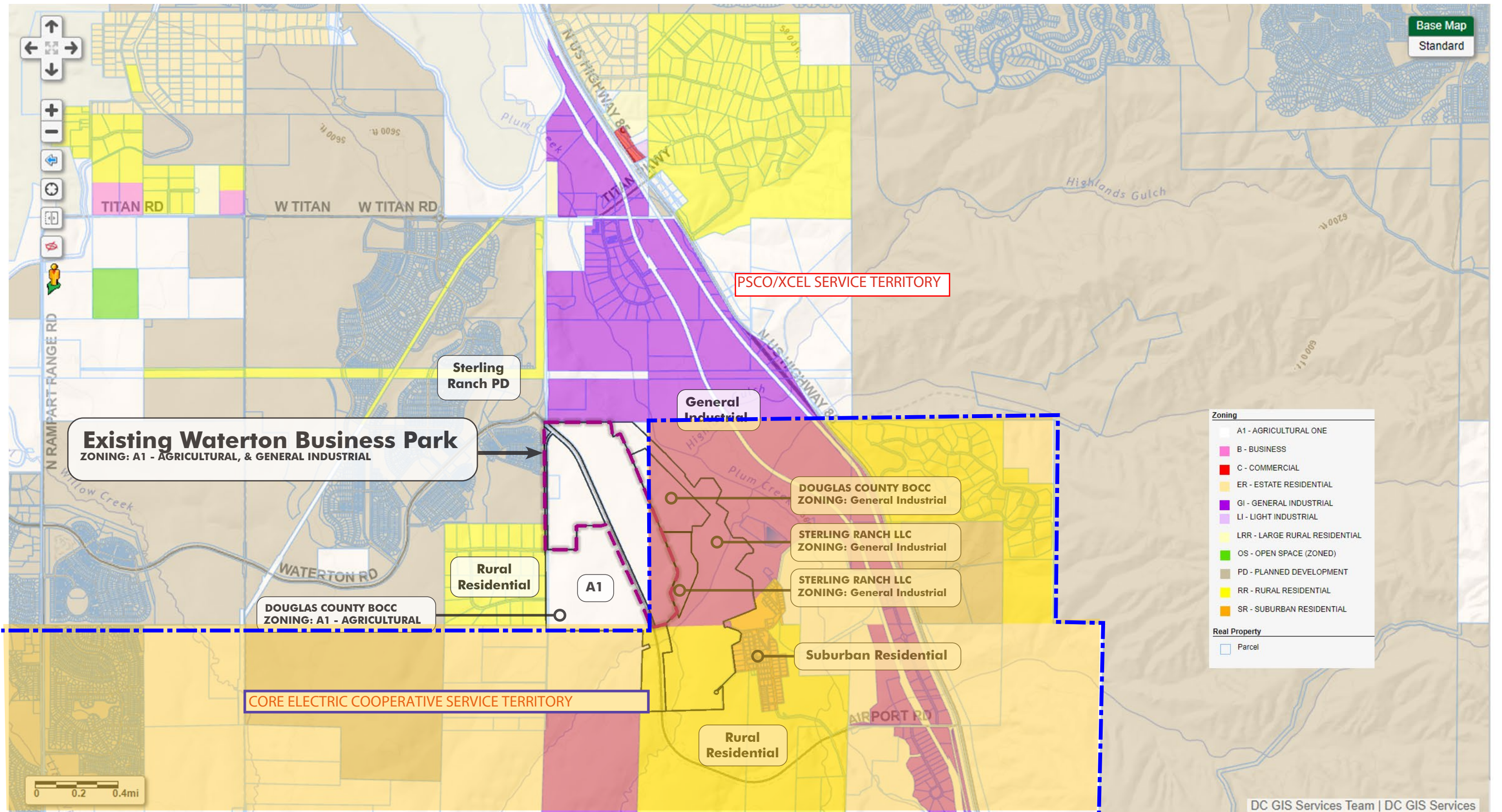
Parks and Wildlife Commission: Richard Reading, Chair · James 'Jay' Tutchton, Vice-Chair · Eden Vardy, Secretary · Jessica Beaulieu ·  
Frances Silva Blayney · John Emerick · Tai Jacober · Dallas May · Jack Murphy · Gabriel Otero

Chatfield Urban Area Expansion - CMP Land Use Map Amendment

Project File: DR2025-011

Planning Commission Staff Report - Page 276 of 345





# EXISTING ZONING ON THE WATERTON BUSINESS PARK SITE & ADJACENT PARCELS

Exhibit F



---

December 22, 2025

Matt Jakubowski  
100 Third St.  
Castle Rock, CO 80104

RE: DR2025-011

Thank you for the opportunity to review and comment on the proposed amendments for the Comprehensive Master Plan Amendment to expand the Chatfield Urban Area. Douglas County Health Department (DCHD) staff have reviewed the application for compliance with pertinent environmental and public health regulations. After reviewing the application, DCHD has the following comments.

**Water and Sewer Service**

A will-serve letter has been provided by Dominion Water & Wastewater District. Based on this letter, DCHD is providing a favorable recommendation regarding the proposed method of water service and sewage disposal.

Please contact me at 720-907-4888 or [bfreyer@douglas.co.us](mailto:bfreyer@douglas.co.us) if you have any questions about our comments.

Sincerely,



Brent Freyer  
Environmental Health Specialist II  
Douglas County Health Department



December 26, 2025

Douglas County Planning Services  
Attention: Matt Jakubowski  
100 Third Street  
Castle Rock, CO 80104

Re: eReferral DR2025-011

Dear Mr. Jakubowski:

Thank you for the opportunity to review and comment on the Sterling Ranch proposed amendment to the Douglas County Comprehensive Master Plan (CMP) Land Use Map.


Dominion Water & Sanitation District (“Dominion” or “DWSD”) is the wholesale water and wastewater provider located in Northwest Douglas County. Established in 2004 as an overlay district, Dominion was created to ensure long-term, sustainable water and wastewater services for the master-planned community of Sterling Ranch as well as existing communities reliant on non-renewable, declining groundwater supplies.

Dominion is proud to continue its partnership with Sterling Ranch in advancing forward-thinking water efficiency practices in the state. This collaboration has enabled Sterling Ranch to deliver housing and community amenities in a resilient, resource-conscious manner—an approach that directly supports regional sustainability goals.

The request to redesignate 448 acres from the Louviers Rural Community to the Chatfield Urban Area aligns with these objectives. This change will enable sustainably planned housing and regional amenities in an area of the County that has experienced long-term underutilization, helping transform a previously blighted landscape into a community asset supported by reliable, renewable water and wastewater infrastructure.

After reviewing the amendment, Dominion has determined that the applicant has met all applicable requirements and that the project is consistent with Dominion’s Rules and Regulations. We appreciate the opportunity to provide comments and remain committed to supporting this effort. Please feel free to contact us with any questions or if further discussion would be helpful. We look forward to continued collaboration.

## **Dominion Water & Sanitation District**

DocuSigned by:  
  
24537AB811BD46E...  
By: Andrea K. Cole  
General Manager





www.douglas.co.us

Department of Community Development  
Planning Services

## REFERRAL RESPONSE REQUEST—COMPREHENSIVE MASTER PLAN AMD.

Date sent: November 21, 2025Comments due by: **December 26, 2025**

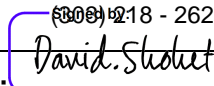
Fax: 303.660.9550

**Project Name:** Chatfield Urban Area Expansion

**Project File #:** DR2025-011

**Project Summary:** Sterling Ranch proposes to amend the Douglas County Comprehensive Master Plan (CMP) Land Use Map to change the designation of 448 acres of land from the Louviers Rural Community to the Chatfield Urban Area. If approved by the Planning Commission, the project area would be subject to the policies of CMP Section 2 – Urban Land Use, and specifically the Chatfield Urban Area. Additional rezoning, subdivision and/or site plan processes would be required to develop the property.

Information on the identified development proposal located in Douglas County is enclosed. Please review and comment in the space provided.

<input type="checkbox"/> No Comment	
<input type="checkbox"/> Please be advised of the following concerns:	
<input checked="" type="checkbox"/> See letter attached for detail.	
<b>Agency:</b> Douglas County Conservation District	<b>Phone #:</b> (303) 1218 - 2622
<b>Your Name:</b> David Shohet, President	<b>Your Signature:</b> 
(please print)	<b>Date:</b> 12/23/2025

Agencies should be advised that failure to submit written comments prior to the due date, or to obtain the applicant's written approval of an extension, will result in written comments being accepted for informational purposes only.

Sincerely,

  
 Matt Jakubowski, Chief Planner  
 Enclosure



**DOUGLAS**  
—CONSERVES—

**DOUGLAS COUNTY CONSERVATION DISTRICT**

PO Box 688 / 7519A E. Hwy 86 Franktown, CO 80116 / Phone 303-218-2622

DATE: December 26, 2025

RE: DR2025-011

The Douglas County Conservation District provides development responses for Douglas County in accordance with Senate Bill 35. District comments are made on the suitability of soils for the proposed land uses, floodwater management, and watershed protection. In addition, the District submits advisory comments regarding rural water supply issues, agricultural land use conversion, and endangered species protection if the development plan affects those issues.

The Douglas County Comprehensive Master Plan, Section 9 Wildlife designates this area as High Habitat Value as it lies within the Wildlife Habitat Conservation Area and in the Overland Connection. “Wildlife is one of the most valuable community assets.” (enclosed Section 9).

According to U.S.D.A. Natural Resources Conservation Service (NRCS) soils survey (enclosed soil report Pages 31-33), the Newlin and Newlin-Satana complex are very limited for dwellings with and without basements, and small commercial buildings due to flooding, and roads due to shrink-swell soil properties, slope, and depth to hard bedrock. Due to the limitations on the above soils on the site, alternatives to mitigate the limitations of the soil will be required in your engineering design or construction techniques in the future.

The channels of many of the major streams are not stable and undergo substantial shifts in alignment during flood events. Upstream development increases the magnitude and frequency of local flooding. Floods that exceed the computed 100-year storm do regularly occur. The District does not support development proposals that are located in or near drainages or development that disturbs wetlands. FEMA Flood Map is enclosed.

Thank you for the opportunity to review this project. Direct any questions to Heather Kelly, District Manager, at [Admin@DouglasConserves.org](mailto:Admin@DouglasConserves.org) or (303) 218 – 2622.

# WILDLIFE

## SECTION 9



### INTRODUCTION

Wildlife is one of the most valuable community assets. Preservation of wildlife habitat enriches the human experience by providing beautiful vistas and vital links to natural systems such as watersheds for Douglas County residents. The existence of wildlife is entirely dependent upon the existence of sufficient wildlife habitat.

Douglas County accommodates the long-term needs of wildlife by creating a habitat plan based on an ecosystem model. The County model relies on a system of large, core-habitat areas connected by movement corridors to various habitat types dispersed throughout the county. The CMP also acknowledges the importance of smaller habitat areas and corridors, including the open areas within residential lots. This model uses a three-tiered approach to prioritize habitat needs for wildlife:

- **TIER 1: COUNTY/REGIONAL**  
Countywide or regional (extending beyond the County) habitat areas. These areas and connections are prioritized at the highest level of importance. Countywide habitat includes large blocks of land connected by wide, multi-directional connections. Examples include the Pike National Forest; Daniels Park; Highlands Ranch Backcountry Wilderness; and the series of corridors that connect these areas such as Plum Creek and the 2,000-foot wide DuPont corridor which crosses US Highway 85.

- **TIER 2: LOCAL**  
Local- or community-level areas are moderately-sized wildlife habitat areas contained within, or shaped by, development. These habitat areas and connections are prioritized at a moderate level of importance. The wildlife habitat and corridor plan within Castle Pines Village is an example. Integral wildlife movement corridors are generally 300 feet wide.
- **TIER 3: PARCEL**  
Parcel-level habitat or connections are found within individual residential lots, small commercial sites, or small neighborhoods. These habitat areas are given the lowest priority. Land fragmentation, impacts to natural systems, changes in vegetation, and disturbance reduce the value of such habitat. However, wildlife uses these areas, so the cumulative value of parcel-level habitat must not be discounted totally.

The land use review process in Douglas County seeks to identify, minimize, and mitigate impacts to wildlife and the various tiers of wildlife habitat. Stricter review and mitigation of development and other land uses is required of applications in, or adjacent to, important wildlife resources, including moderate or high-value wildlife habitat areas, wildlife habitat conservation areas, movement corridors and overland connections as designated on the Wildlife Resources Map. Efforts to educate and assist residents about proper land management and living alongside wildlife are beneficial to sustaining healthy populations of wildlife.



## FUNDING OPEN SPACE AND HABITAT

Douglas County has thousands of acres of protected land. Much of that land was purchased or protected through open space funding that was secured through the passage of a sales tax in 1994. Douglas County Open Space acquisition dollars used in habitat protection have been leveraged almost 3 to 1 through partnerships and grants.

In 1998, Douglas County bonded its open space sales tax money primarily to facilitate acquisitions. Between 1995 and 2018, over 63,000 acres of open lands were permanently protected. Of this total, Douglas County owns approximately 17,000 acres in fee title. Over 44,000 acres are protected through conservation easements. The County contributed to the acquisition and preservation of almost 2,000 acres owned by other agencies. As acquisition money dwindles, the pace of protection also slows. Douglas County relies more on partnerships with other agencies, citizen groups, landowners, and developers to conserve additional open lands and wildlife habitat.

The County also works to conserve additional wildlife habitat through alternative means, including mitigation of land use impacts and the restoration and improvement of existing habitat. For more information on the protected lands within Douglas County, please visit [www.douglas.co.us/openspace](http://www.douglas.co.us/openspace).



## WILDLIFE RESOURCES

### GOAL 9-1

PROTECT AND ENHANCE WILDLIFE HABITAT AND MOVEMENT CORRIDORS AND FOSTER WILDLIFE CONSERVATION.

#### OBJECTIVE 9-1A

MAINTAIN HEALTHY ECOSYSTEMS WITHIN THE COUNTY BY ESTABLISHING, MAINTAINING, BUFFERING, AND IMPROVING A SET OF CORE HABITAT AREAS, SUCH AS HABITAT CONSERVATION AREAS (HCAs), CONNECTED BY MOVEMENT CORRIDORS AND OVERLAND CONNECTIONS AS SHOWN IN THE WILDLIFE RESOURCES MAP.

##### POLICY 9-1A.1

Identify important habitat and movement corridors on the Wildlife Resources Map; revise the map to reflect changes over time.

##### POLICY 9-1A.2

Develop partnerships to conserve additional habitat and manage and improve existing habitat.

##### POLICY 9-1A.3

Protect important wildlife habitat, habitat conservation areas (HCAs), movement corridors and overland connections.

#### OBJECTIVE 9-1B

MINIMIZE IMPACTS TO WILDLIFE BY ENSURING THAT DEVELOPMENT AND LAND USE ARE COMPATIBLE WITH WILDLIFE, WILDLIFE HABITAT, AND MOVEMENT CORRIDORS.

##### POLICY 9-1B.1

Identify important wildlife habitat, habitat conservation areas (HCAs), movement corridors, and overland connections, as designated on the Wildlife Resources Map in applicable land use applications. Evaluate the potential impact of the proposed change in land use on wildlife and habitat. The identified design solutions should be appropriate to the scale and intensity of the proposed land use.

## SECTION 9 WILDLIFE, WILDLIFE HABITAT, AND MOVEMENT CORRIDORS

### POLICY 9-1B.2

Consider wildlife opportunities on neighboring lands, as well as a countywide scale, when evaluating land use applications.

### POLICY 9-1B.3

Link wildlife habitat and movement corridors, wherever possible.

### POLICY 9-1B.4

Locate development outside of important wildlife habitat and movement corridors.

### POLICY 9-1B.5

Balance the location and design of transportation infrastructure with accommodation of wildlife habitat and movement values.

### POLICY 9-1B.6

Minimize fencing that is exclusionary or dangerous to wildlife, except when necessary for human safety, commercial and industrial uses, protection of at-risk crops, and domestic animal containment. All other fencing should be wildlife friendly.

### POLICY 9-1B.7

Require development to appropriately revegetate degraded and disturbed lands with native or beneficial vegetation and wildlife-friendly species in important wildlife habitat and movement corridors.

### POLICY 9-1B.8

Require noxious weed management plans and encourage Integrated Pest Management (IPM) for new development.

### POLICY 9-1B.9

Require habitat restoration, improvement, and management practices such as restoration of native or beneficial flora; stream stabilization; erosion control; maintenance of residual cover during the winter; and proper pasture management on new development and special uses, as appropriate.

## OBJECTIVE 9-1C

SUPPORT PUBLIC AND PRIVATE PROGRAMS THAT FOSTER WILDLIFE CONSERVATION.

### POLICY 9-1C.1

Support incentives and programs to foster conservation.

### POLICY 9-1C.2

Support measures to educate landowners and homeowners about the impacts of domestic animals on wildlife, impacts of feeding wildlife, as well as measures that improve wildlife habitat and species success.

## OBJECTIVE 9-1D

SUPPORT THE MANAGEMENT OF WILDLIFE POPULATIONS TO MAINTAIN VIABLE POPULATIONS, SPECIES HEALTH, AND TO MINIMIZE CONFLICTS BETWEEN PEOPLE AND WILDLIFE.

### POLICY 9-1D.1

Support efforts by Colorado Parks and Wildlife and the US Fish and Wildlife Service to manage wildlife populations.

### POLICY 9-1D.2

In designated high value wildlife habitat areas, require wildlife management and habitat conservation plans for new development, in consultation with professional agencies, as appropriate.



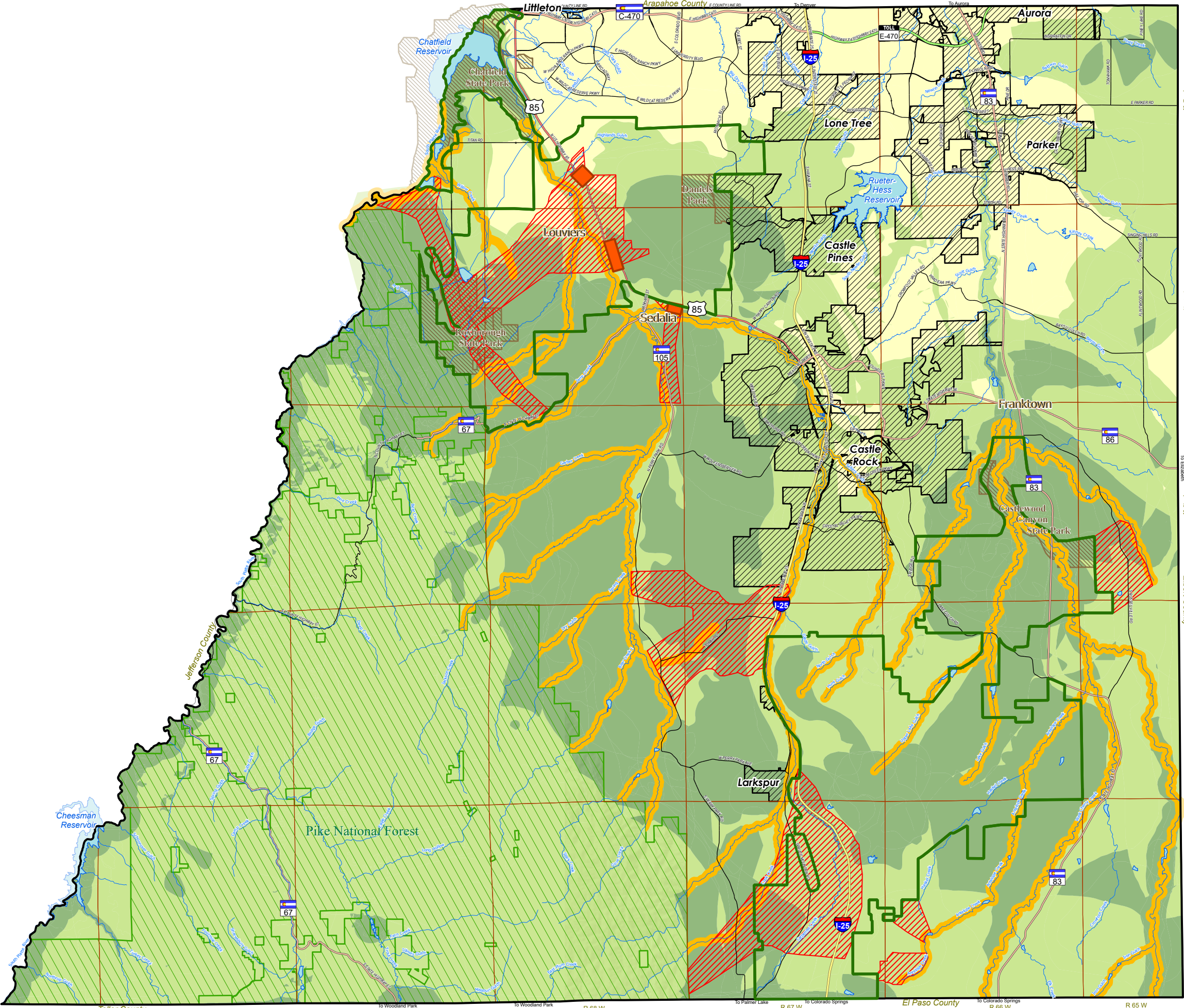


Map 9.1 Wildlife Resources  
Comprehensive Master Plan 2040

- Wildlife Habitat Conservation Area
- Overland Connection
- Wildlife Movement Corridor
- Low Habitat Value
- Moderate Habitat Value
- High habitat Value
- Wildlife Crossing Area
- Parks
- Pike National Forest
- Municipalities
- Townships
- Douglas County Boundary
- Streams
- Interstate
- US Highway
- State Highway
- Toll Highway
- Major Road

**Vicinity Map**  
State of Colorado

Note:  
For information pertaining to our Douglas County GIS data use disclaimer, see Land Use map 1.1, for more information.







United States  
Department of  
Agriculture

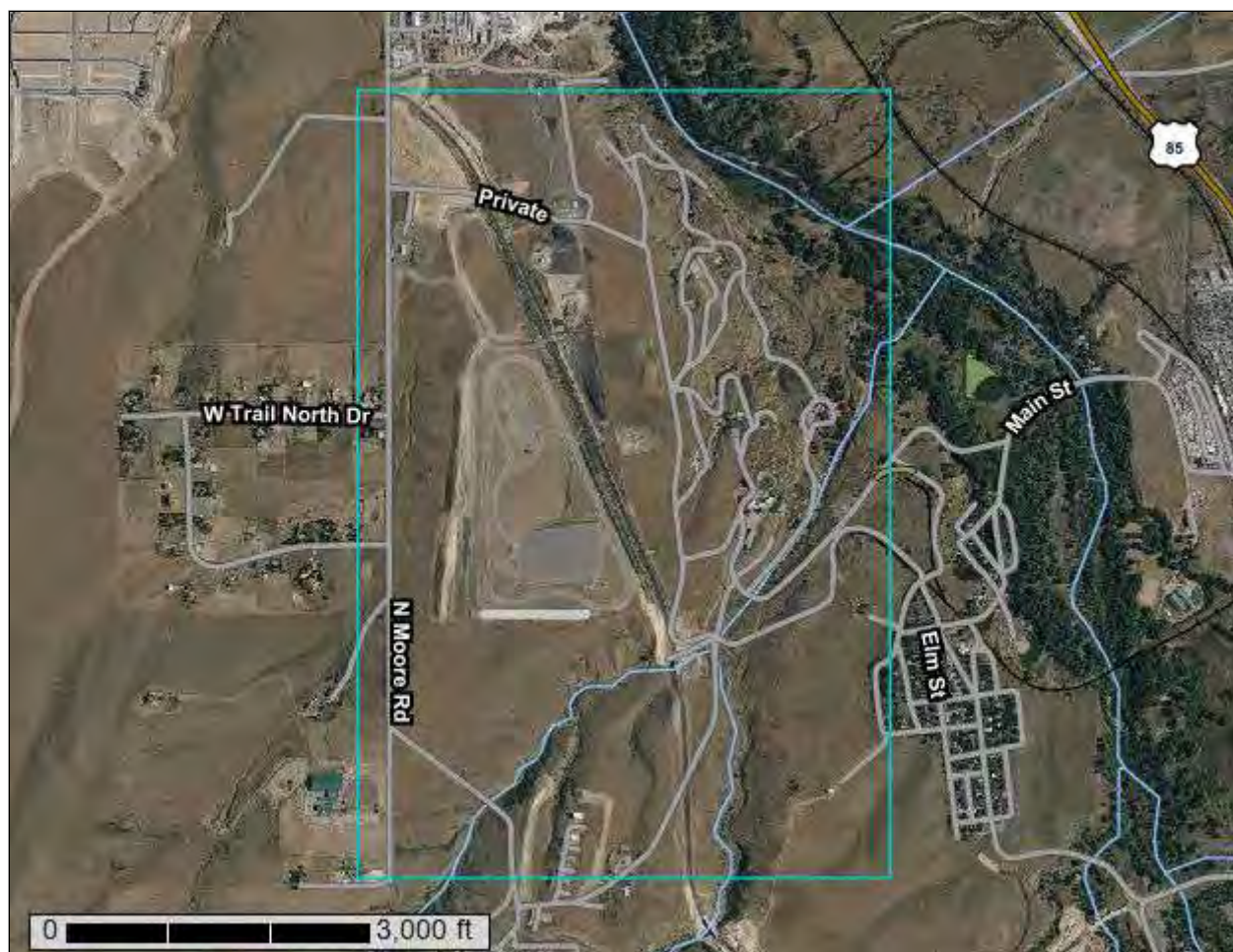
**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for **Castle Rock Area, Colorado**

**DR2025-011**



# Preface

---

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.



# Contents

---

<b>Preface</b> .....	2
<b>How Soil Surveys Are Made</b> .....	5
<b>Soil Map</b> .....	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	11
Map Unit Descriptions.....	11
Castle Rock Area, Colorado.....	13
Bo—Blakeland-Orsa association, 1 to 4 percent slopes.....	13
BrB—Bresser sandy loam, cool, 1 to 3 percent slopes.....	14
BwD—Buick-Satanta loams, 3 to 9 percent slopes.....	16
FoD—Fondis clay loam, 3 to 9 percent slopes.....	18
Fu—Fondis-Kutch association.....	19
Lo—Loamy alluvial land.....	21
M-W—Miscellaneous water.....	22
NeE—Newlin gravelly sandy loam, 8 to 30 percent slopes.....	22
NsE—Newlin-Satanta complex, 5 to 20 percent slopes.....	24
Se—Sandy wet alluvial land.....	26
Sn—Satanta loam.....	27
<b>Soil Information for All Uses</b> .....	29
Suitabilities and Limitations for Use.....	29
Building Site Development.....	29
Dwellings With Basements (DR2025-011).....	29
<b>References</b> .....	35

# How Soil Surveys Are Made

---

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

## Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and



## Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

---

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report  
Soil Map







## Custom Soil Resource Report

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Bo	Blakeland-Orsa association, 1 to 4 percent slopes	35.4	3.8%
BrB	Bresser sandy loam, cool, 1 to 3 percent slopes	1.2	0.1%
BwD	Buick-Satanta loams, 3 to 9 percent slopes	231.6	24.6%
FoD	Fondis clay loam, 3 to 9 percent slopes	129.8	13.8%
Fu	Fondis-Kutch association	16.2	1.7%
Lo	Loamy alluvial land	52.7	5.6%
M-W	Miscellaneous water	6.8	0.7%
NeE	Newlin gravelly sandy loam, 8 to 30 percent slopes	136.4	14.5%
NsE	Newlin-Satanta complex, 5 to 20 percent slopes	243.7	25.9%
Se	Sandy wet alluvial land	25.2	2.7%
Sn	Satanta loam	61.3	6.5%
<b>Totals for Area of Interest</b>		<b>940.4</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They

## Custom Soil Resource Report

generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.



## Custom Soil Resource Report

# Castle Rock Area, Colorado

## Bo—Blakeland-Orsa association, 1 to 4 percent slopes

### Map Unit Setting

*National map unit symbol:* jqy5  
*Elevation:* 5,500 to 6,600 feet  
*Mean annual precipitation:* 15 to 19 inches  
*Mean annual air temperature:* 47 to 50 degrees F  
*Frost-free period:* 120 to 135 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Blakeland and similar soils:* 50 percent  
*Orsa and similar soils:* 35 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Blakeland

#### Setting

*Landform:* Hills, alluvial fans  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Alluvium and/or eolian deposits

#### Typical profile

*H1 - 0 to 13 inches:* sandy loam  
*H2 - 13 to 24 inches:* loamy coarse sand  
*H3 - 24 to 60 inches:* loamy coarse sand

#### Properties and qualities

*Slope:* 1 to 4 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* High (2.00 to 6.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 4.9 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 4s  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* A  
*Ecological site:* R049XB210CO - Sandy Foothill  
*Hydric soil rating:* No

### Description of Orsa

#### Setting

*Landform:* Alluvial fans, hills  
*Landform position (three-dimensional):* Base slope

## Custom Soil Resource Report

*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Alluvium derived from arkosic sedimentary rock

### Typical profile

*H1 - 0 to 20 inches:* coarse sandy loam  
*H2 - 20 to 60 inches:* gravelly loamy coarse sand

### Properties and qualities

*Slope:* 1 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat excessively drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* High (2.00 to 6.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 4.4 inches)

### Interpretive groups

*Land capability classification (irrigated):* 4s  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* A  
*Ecological site:* R049XB210CO - Sandy Foothill  
*Hydric soil rating:* No

### Minor Components

#### Bresser

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

#### Kassler

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

#### Sandy alluvial land

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

## BrB—Bresser sandy loam, cool, 1 to 3 percent slopes

### Map Unit Setting

*National map unit symbol:* 2tlpj  
*Elevation:* 5,500 to 6,500 feet  
*Mean annual precipitation:* 15 to 19 inches  
*Mean annual air temperature:* 48 to 52 degrees F  
*Frost-free period:* 100 to 130 days  
*Farmland classification:* Prime farmland if irrigated

## Custom Soil Resource Report

### Map Unit Composition

*Bresser, cool, and similar soils: 90 percent*

*Minor components: 10 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Bresser, Cool

#### Setting

*Landform: Hillslopes, terraces*

*Landform position (two-dimensional): Footslope*

*Landform position (three-dimensional): Base slope, tread*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Parent material: Tertiary aged alluvium derived from arkose*

#### Typical profile

*Ap - 0 to 5 inches: sandy loam*

*Bt1 - 5 to 8 inches: sandy loam*

*Bt2 - 8 to 27 inches: sandy clay loam*

*Bt3 - 27 to 36 inches: sandy loam*

*C - 36 to 80 inches: loamy coarse sand*

#### Properties and qualities

*Slope: 1 to 3 percent*

*Depth to restrictive feature: More than 80 inches*

*Drainage class: Well drained*

*Runoff class: Low*

*Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high  
(0.60 to 6.00 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Calcium carbonate, maximum content: 5 percent*

*Maximum salinity: Nonsaline to very slightly saline (0.1 to 2.0 mmhos/cm)*

*Available water supply, 0 to 60 inches: Low (about 5.4 inches)*

#### Interpretive groups

*Land capability classification (irrigated): 2e*

*Land capability classification (nonirrigated): 4s*

*Hydrologic Soil Group: B*

*Ecological site: R049XB210CO - Sandy Foothill*

*Hydric soil rating: No*

### Minor Components

#### Truckton

*Percent of map unit: 5 percent*

*Landform: Hillslopes, terraces*

*Landform position (two-dimensional): Footslope*

*Landform position (three-dimensional): Base slope, tread*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Ecological site: R049XB210CO - Sandy Foothill*

*Hydric soil rating: No*



## Custom Soil Resource Report

### Sampson

*Percent of map unit:* 5 percent  
*Landform:* Terraces, alluvial fans  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Base slope, tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* R049XC202CO - Loamy Foothill Palmer Divide  
*Hydric soil rating:* No

## BwD—Buick-Satanta loams, 3 to 9 percent slopes

### Map Unit Setting

*National map unit symbol:* jqyf  
*Elevation:* 5,500 to 6,800 feet  
*Mean annual precipitation:* 15 to 19 inches  
*Mean annual air temperature:* 47 to 50 degrees F  
*Frost-free period:* 120 to 135 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Buick and similar soils:* 50 percent  
*Satanta and similar soils:* 40 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Buick

#### Setting

*Landform:* Interfluves, ridges  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Eolian deposits over alluvial material silty

#### Typical profile

*H1 - 0 to 4 inches:* loam  
*H2 - 4 to 15 inches:* silty clay loam  
*H3 - 15 to 22 inches:* loam  
*H4 - 22 to 60 inches:* sandy clay loam

#### Properties and qualities

*Slope:* 3 to 9 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.60 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None

## Custom Soil Resource Report

*Calcium carbonate, maximum content:* 10 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* High (about 9.9 inches)

### Interpretive groups

*Land capability classification (irrigated):* 4e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* C  
*Ecological site:* R049XC202CO - Loamy Foothill Palmer Divide  
*Hydric soil rating:* No

### Description of Satanta

#### Setting

*Landform:* Interfluves, ridges  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Eolian deposits derived from mixed

#### Typical profile

*H1 - 0 to 9 inches:* loam  
*H2 - 9 to 30 inches:* clay loam  
*H3 - 30 to 60 inches:* loam

#### Properties and qualities

*Slope:* 6 to 9 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
 (0.60 to 2.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 10 percent  
*Available water supply, 0 to 60 inches:* High (about 10.2 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* B  
*Ecological site:* R049XC202CO - Loamy Foothill Palmer Divide  
*Hydric soil rating:* No

### Minor Components

#### Bresser

*Percent of map unit:* 3 percent  
*Hydric soil rating:* No

#### Fondis

*Percent of map unit:* 3 percent  
*Hydric soil rating:* No

#### Newlin

*Percent of map unit:* 3 percent  
*Hydric soil rating:* No

## Custom Soil Resource Report

### **Aquic haplustolls**

*Percent of map unit:* 1 percent

*Landform:* Swales

*Hydric soil rating:* Yes

## **FoD—Fondis clay loam, 3 to 9 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* jqyp

*Elevation:* 5,500 to 6,800 feet

*Mean annual precipitation:* 15 to 19 inches

*Mean annual air temperature:* 47 to 50 degrees F

*Frost-free period:* 120 to 135 days

*Farmland classification:* Prime farmland if irrigated

### **Map Unit Composition**

*Fondis and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Fondis**

#### **Setting**

*Landform:* Mesas, buttes, ridges

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Eolian deposits over coarse-silty outwash derived from arkose

#### **Typical profile**

*H1 - 0 to 7 inches:* clay loam

*H2 - 7 to 24 inches:* clay

*H3 - 24 to 60 inches:* sandy clay loam

#### **Properties and qualities**

*Slope:* 3 to 9 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 15 percent

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water supply, 0 to 60 inches:* High (about 9.4 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* 4e



## Custom Soil Resource Report

*Land capability classification (nonirrigated): 4e*  
*Hydrologic Soil Group: C*  
*Ecological site: R049XB208CO - Clayey Foothill*  
*Hydric soil rating: No*

### Minor Components

#### Kutch

*Percent of map unit: 5 percent*  
*Hydric soil rating: No*

#### Englewood

*Percent of map unit: 5 percent*  
*Hydric soil rating: No*

#### Denver

*Percent of map unit: 4 percent*  
*Hydric soil rating: No*

#### Aquic haplustolls

*Percent of map unit: 1 percent*  
*Landform: Swales*  
*Hydric soil rating: Yes*

## Fu—Fondis-Kutch association

### Map Unit Setting

*National map unit symbol: jqyq*  
*Elevation: 5,500 to 6,800 feet*  
*Mean annual precipitation: 15 to 19 inches*  
*Mean annual air temperature: 47 to 50 degrees F*  
*Frost-free period: 120 to 135 days*  
*Farmland classification: Not prime farmland*

### Map Unit Composition

*Fondis and similar soils: 50 percent*  
*Kutch and similar soils: 35 percent*  
*Minor components: 15 percent*  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Fondis

#### Setting

*Landform: Valley sides, draws*  
*Down-slope shape: Linear*  
*Across-slope shape: Linear*  
*Parent material: Eolian deposits over coarse-silty outwash derived from arkose*

#### Typical profile

*H1 - 0 to 7 inches: loam*  
*H2 - 7 to 24 inches: clay*  
*H3 - 24 to 60 inches: sandy clay loam*

## Custom Soil Resource Report

### Properties and qualities

*Slope:* 5 to 15 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 15 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* High (about 9.2 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* C  
*Ecological site:* R049XB208CO - Clayey Foothill  
*Hydric soil rating:* No

### Description of Kutch

#### Setting

*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Fine-textured residuum weathered from calcareous shale

#### Typical profile

*H1 - 0 to 6 inches:* sandy loam  
*H2 - 6 to 32 inches:* clay  
*H3 - 32 to 36 inches:* weathered bedrock

### Properties and qualities

*Slope:* 5 to 40 percent  
*Depth to restrictive feature:* 20 to 40 inches to paralithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 15 percent  
*Gypsum, maximum content:* 2 percent  
*Maximum salinity:* Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Low (about 5.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* D  
*Ecological site:* R049XB208CO - Clayey Foothill  
*Hydric soil rating:* No

## Custom Soil Resource Report

### Minor Components

#### Bresser

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

#### Newlin

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

#### Hilly gravelly land

*Percent of map unit:* 4 percent  
*Hydric soil rating:* No

#### Aquic haplustolls

*Percent of map unit:* 1 percent  
*Landform:* Swales  
*Hydric soil rating:* Yes

### Lo—Loamy alluvial land

#### Map Unit Setting

*National map unit symbol:* jqzb  
*Elevation:* 7,000 to 8,000 feet  
*Mean annual precipitation:* 17 to 19 inches  
*Mean annual air temperature:* 44 to 46 degrees F  
*Frost-free period:* 115 to 120 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Loamy alluvial land:* 80 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Loamy Alluvial Land

#### Setting

*Landform:* Flood plains, swales  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear

#### Typical profile

*H1 - 0 to 20 inches:* sandy loam  
*H2 - 20 to 40 inches:* stratified loamy sand to clay loam  
*H3 - 40 to 60 inches:* sand and gravel

#### Properties and qualities

*Slope:* 1 to 5 percent  
*Drainage class:* Well drained  
*Runoff class:* Very low

## Custom Soil Resource Report

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.20 to 6.00 in/hr)

*Depth to water table:* About 48 to 72 inches

*Frequency of flooding:* Frequent

*Calcium carbonate, maximum content:* 5 percent

*Maximum salinity:* Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)

*Available water supply, 0 to 60 inches:* Moderate (about 6.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4w

*Hydrologic Soil Group:* C

*Ecological site:* R049XY036CO - Overflow

*Hydric soil rating:* No

### Minor Components

#### Sampson

*Percent of map unit:* 7 percent

*Hydric soil rating:* No

#### Bresser

*Percent of map unit:* 7 percent

*Hydric soil rating:* No

#### Sandy alluvial land

*Percent of map unit:* 5 percent

#### Fluvaquentic haplustolls

*Percent of map unit:* 1 percent

*Landform:* Terraces

*Hydric soil rating:* Yes

## M-W—Miscellaneous water

### Map Unit Composition

*Miscellaneous water:* 100 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

## NeE—Newlin gravelly sandy loam, 8 to 30 percent slopes

### Map Unit Setting

*National map unit symbol:* jqzg

*Elevation:* 5,500 to 6,600 feet

*Mean annual precipitation:* 15 to 19 inches

*Mean annual air temperature:* 49 to 51 degrees F

*Frost-free period:* 120 to 135 days

*Farmland classification:* Not prime farmland



## Custom Soil Resource Report

### Map Unit Composition

*Newlin and similar soils: 85 percent*

*Minor components: 15 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Newlin

#### Setting

*Landform: Terraces, mesas, plateaus*

*Landform position (three-dimensional): Riser*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Parent material: Unconformable sandy and gravelly and/or mixed source alluvium*

#### Typical profile

*H1 - 0 to 8 inches: gravelly sandy loam*

*H2 - 8 to 17 inches: gravelly sandy clay loam*

*H3 - 17 to 22 inches: gravelly sandy loam*

*H4 - 22 to 60 inches: very gravelly sand*

#### Properties and qualities

*Slope: 8 to 30 percent*

*Depth to restrictive feature: More than 80 inches*

*Drainage class: Well drained*

*Runoff class: Medium*

*Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high  
(0.20 to 2.00 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Available water supply, 0 to 60 inches: Low (about 3.8 inches)*

#### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 6e*

*Hydrologic Soil Group: B*

*Ecological site: R049XY214CO - Gravelly Foothill*

*Hydric soil rating: No*

### Minor Components

#### Bresser

*Percent of map unit: 5 percent*

*Hydric soil rating: No*

#### Stapleton

*Percent of map unit: 4 percent*

*Hydric soil rating: No*

#### Satanta

*Percent of map unit: 4 percent*

*Hydric soil rating: No*

#### Aquic haplustolls

*Percent of map unit: 2 percent*

*Landform: Swales*

*Hydric soil rating: Yes*

## Custom Soil Resource Report

### **NsE—Newlin-Satanta complex, 5 to 20 percent slopes**

#### **Map Unit Setting**

*National map unit symbol:* jqzh  
*Elevation:* 5,500 to 6,600 feet  
*Mean annual precipitation:* 15 to 19 inches  
*Mean annual air temperature:* 49 to 51 degrees F  
*Frost-free period:* 120 to 135 days  
*Farmland classification:* Not prime farmland

#### **Map Unit Composition**

*Newlin and similar soils:* 50 percent  
*Satanta and similar soils:* 30 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### **Description of Newlin**

##### **Setting**

*Landform:* Drainageways, knobs  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Unconformable sandy and gravelly and/or mixed source alluvium

##### **Typical profile**

*H1 - 0 to 8 inches:* gravelly sandy loam  
*H2 - 8 to 17 inches:* gravelly sandy clay loam  
*H3 - 17 to 22 inches:* gravelly sandy loam  
*H4 - 22 to 60 inches:* very gravelly sand

##### **Properties and qualities**

*Slope:* 5 to 20 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
 (0.20 to 2.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 3.8 inches)

##### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* B  
*Ecological site:* R049XC202CO - Loamy Foothill Palmer Divide  
*Hydric soil rating:* No

## Custom Soil Resource Report

### Description of Satanta

#### Setting

*Landform:* Drainageways, knobs  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Eolian deposits derived from mixed

#### Typical profile

*H1 - 0 to 9 inches:* loam  
*H2 - 9 to 30 inches:* clay loam  
*H3 - 30 to 60 inches:* loam

#### Properties and qualities

*Slope:* 5 to 10 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
 (0.60 to 2.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 10 percent  
*Available water supply, 0 to 60 inches:* High (about 10.2 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* B  
*Ecological site:* R049XY214CO - Gravelly Foothill  
*Hydric soil rating:* No

### Minor Components

#### Bresser

*Percent of map unit:* 6 percent  
*Hydric soil rating:* No

#### Buick

*Percent of map unit:* 6 percent  
*Hydric soil rating:* No

#### Truckton

*Percent of map unit:* 6 percent  
*Hydric soil rating:* No

#### Aquic haplustolls

*Percent of map unit:* 2 percent  
*Landform:* Swales  
*Hydric soil rating:* Yes

## Custom Soil Resource Report

### Se—Sandy wet alluvial land

#### Map Unit Setting

*National map unit symbol:* jr04  
*Elevation:* 5,500 to 6,600 feet  
*Mean annual precipitation:* 15 to 19 inches  
*Mean annual air temperature:* 48 to 50 degrees F  
*Frost-free period:* 120 to 135 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Sandy wet alluvial land:* 80 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Sandy Wet Alluvial Land

#### Setting

*Landform:* Drainageways, flood plains  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Weathered alluvium derived from arkose

#### Typical profile

*H1 - 0 to 6 inches:* coarse sand  
*H2 - 6 to 60 inches:* stratified coarse sand to sandy loam

#### Properties and qualities

*Slope:* 1 to 4 percent  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (6.00 to 20.00 in/hr)  
*Depth to water table:* About 0 to 24 inches  
*Frequency of flooding:* Frequent  
*Available water supply, 0 to 60 inches:* Very low (about 2.9 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 8w  
*Hydrologic Soil Group:* D  
*Hydric soil rating:* No

### Minor Components

#### Loamy wet alluvial land

*Percent of map unit:* 9 percent  
*Hydric soil rating:* No

#### Sandy alluvial land

*Percent of map unit:* 9 percent



## Custom Soil Resource Report

*Hydric soil rating:* No

### **Fluventic haplaquolls**

*Percent of map unit:* 2 percent

*Landform:* Terraces

*Hydric soil rating:* Yes

## **Sn—Satanta loam**

### **Map Unit Setting**

*National map unit symbol:* jr05

*Elevation:* 5,400 to 6,200 feet

*Mean annual precipitation:* 15 to 19 inches

*Mean annual air temperature:* 48 to 50 degrees F

*Frost-free period:* 120 to 135 days

*Farmland classification:* Prime farmland if irrigated

### **Map Unit Composition**

*Satanta and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Satanta**

#### **Setting**

*Landform:* Terraces, ridges

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Mixed source eolian deposits

#### **Typical profile**

*H1 - 0 to 9 inches:* loam

*H2 - 9 to 30 inches:* clay loam

*H3 - 30 to 60 inches:* loam

#### **Properties and qualities**

*Slope:* 1 to 4 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.60 to 2.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 10 percent

*Available water supply, 0 to 60 inches:* High (about 10.2 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* 2e

*Land capability classification (nonirrigated):* 3e

## Custom Soil Resource Report

*Hydrologic Soil Group: B*

*Ecological site: R049XC202CO - Loamy Foothill Palmer Divide*

*Hydric soil rating: No*

### Minor Components

#### **Fondis**

*Percent of map unit: 5 percent*

*Hydric soil rating: No*

#### **Sampson**

*Percent of map unit: 5 percent*

*Hydric soil rating: No*

#### **Buick**

*Percent of map unit: 2 percent*

*Hydric soil rating: No*

#### **Englewood**

*Percent of map unit: 2 percent*

*Hydric soil rating: No*

#### **Aquic haplustolls**

*Percent of map unit: 1 percent*

*Landform: Swales*

*Hydric soil rating: Yes*

# Soil Information for All Uses

---

## Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

## Building Site Development

Building site development interpretations are designed to be used as tools for evaluating soil suitability and identifying soil limitations for various construction purposes. As part of the interpretation process, the rating applies to each soil in its described condition and does not consider present land use. Example interpretations can include corrosion of concrete and steel, shallow excavations, dwellings with and without basements, small commercial buildings, local roads and streets, and lawns and landscaping.

### Dwellings With Basements (DR2025-011)

ENG - Engineering

Dwellings are single-family houses of three stories or less. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet.

The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification of the soil. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

## Custom Soil Resource Report

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

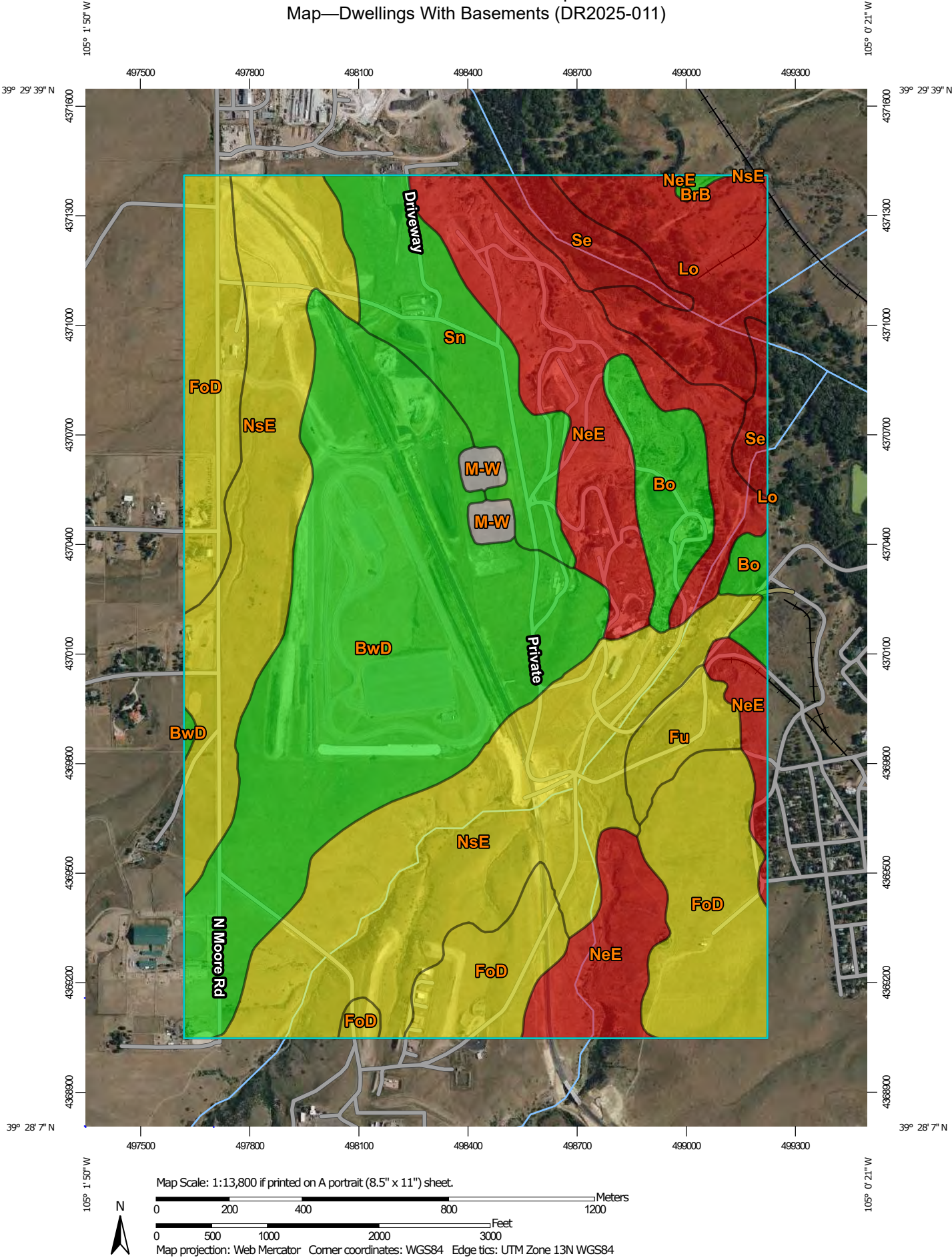
Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

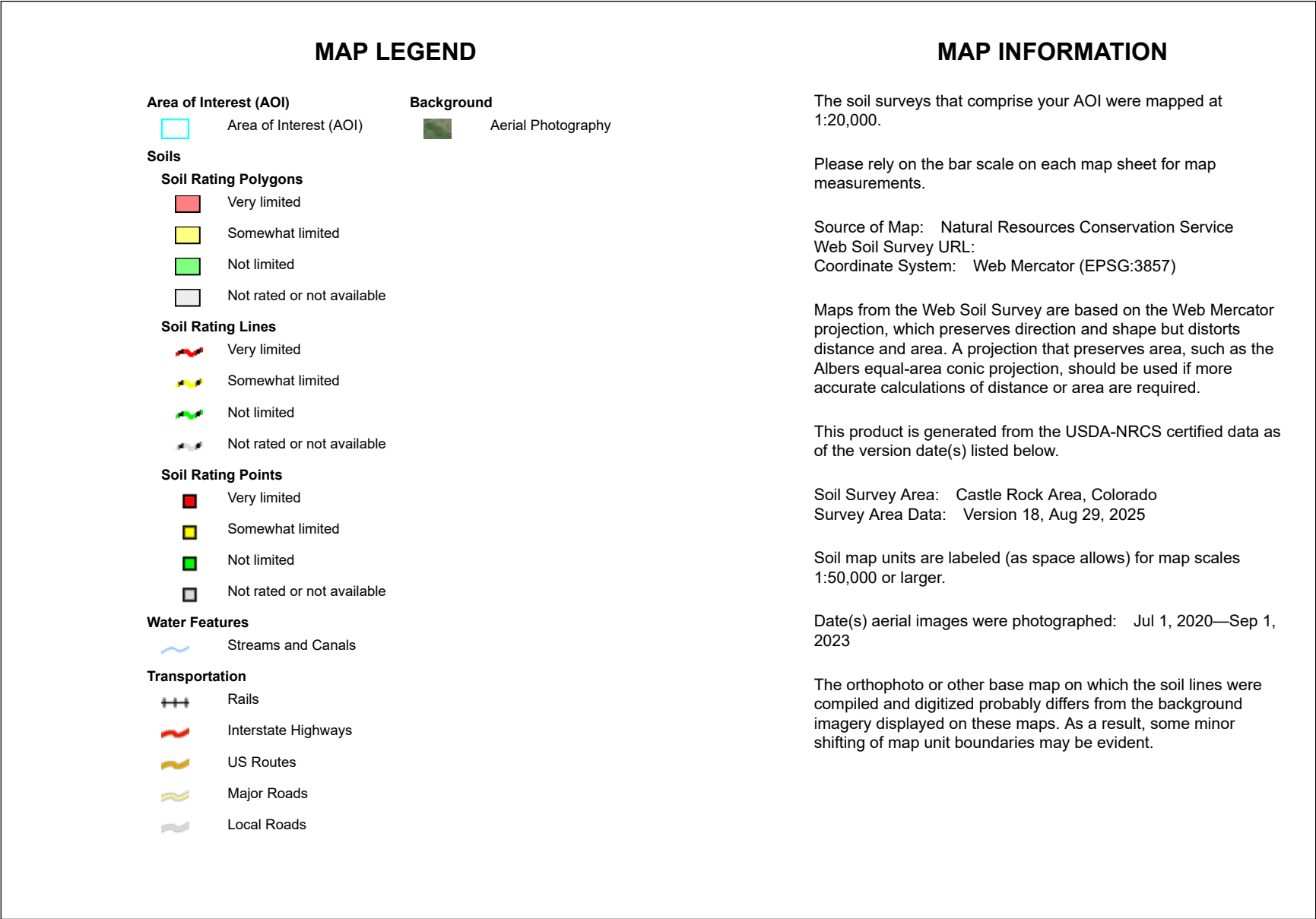
Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.



Custom Soil Resource Report  
Map—Dwellings With Basements (DR2025-011)



Custom Soil Resource Report



# Custom Soil Resource Report

## Tables—Dwellings With Basements (DR2025-011)

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
Bo	Blakeland-Orsa association, 1 to 4 percent slopes	Not limited	Blakeland (50%)		35.4	3.8%
			Orsa (35%)			
BrB	Bresser sandy loam, cool, 1 to 3 percent slopes	Not limited	Bresser, cool (90%)		1.2	0.1%
			Truckton (5%)			
BwD	Buick-Satanta loams, 3 to 9 percent slopes	Not limited	Buick (50%)		231.6	24.6%
			Satanta (40%)			
FoD	Fondis clay loam, 3 to 9 percent slopes	Somewhat limited	Fondis (85%)	Shrink-swell (0.01)	129.8	13.8%
Fu	Fondis-Kutch association	Somewhat limited	Fondis (50%)	Slope (0.16)	16.2	1.7%
				Shrink-swell (0.01)		
Lo	Loamy alluvial land	Very limited	Loamy alluvial land (80%)	Flooding (1.00)	52.7	5.6%
				Depth to saturated zone (0.15)		
M-W	Miscellaneous water	Not rated	Miscellaneous water (100%)		6.8	0.7%
NeE	Newlin gravelly sandy loam, 8 to 30 percent slopes	Very limited	Newlin (85%)	Slope (1.00)	136.4	14.5%
NsE	Newlin-Satanta complex, 5 to 20 percent slopes	Somewhat limited	Newlin (50%)	Slope (0.84)	243.7	25.9%
Se	Sandy wet alluvial land	Very limited	Sandy wet alluvial land (80%)	Flooding (1.00)	25.2	2.7%
				Depth to saturated zone (1.00)		
Sn	Satanta loam	Not limited	Satanta (85%)		61.3	6.5%
<b>Totals for Area of Interest</b>					<b>940.4</b>	<b>100.0%</b>

Rating	Acres in AOI	Percent of AOI
Somewhat limited	389.7	41.4%
Not limited	329.6	35.0%
Very limited	214.3	22.8%
Null or Not Rated	6.8	0.7%
<b>Totals for Area of Interest</b>	<b>940.4</b>	<b>100.0%</b>

Custom Soil Resource Report

**Rating Options—Dwellings With Basements (DR2025-011)**

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher



# References

---

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_054262](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262)
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053577](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577)
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053580](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580)
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2\\_053374](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374)
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

## Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2\\_054242](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242)

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053624](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624)

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_052290.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf)

# Docusign Envelope ID: 70BE8D24-BF3B-43CB-B2A7-320F15437811

**NOTES TO USERS**

The following information is provided for your information and is not intended to be used as a substitute for professional advice. The information is provided for your information only and is not intended to be used as a substitute for professional advice. The information is provided for your information only and is not intended to be used as a substitute for professional advice.

**Map Scale:** 1" = 1/2 Mile

**Map Date:** 10/1/2010

**Map Title:** Chatfield Urban Area Expansion - CMP Land Use Map Amendment

**Map Number:** 080300132P

**Effective Date:** September 30, 2010

**Map Legend:**

- Zone A:** Zone A
- Zone B:** Zone B
- Zone C:** Zone C
- Zone D:** Zone D
- Zone E:** Zone E
- Zone F:** Zone F
- Zone G:** Zone G
- Zone H:** Zone H
- Zone I:** Zone I
- Zone J:** Zone J
- Zone K:** Zone K
- Zone L:** Zone L
- Zone M:** Zone M
- Zone N:** Zone N
- Zone O:** Zone O
- Zone P:** Zone P
- Zone Q:** Zone Q
- Zone R:** Zone R
- Zone S:** Zone S
- Zone T:** Zone T
- Zone U:** Zone U
- Zone V:** Zone V
- Zone W:** Zone W
- Zone X:** Zone X
- Zone Y:** Zone Y
- Zone Z:** Zone Z
- Zone AA:** Zone AA
- Zone AB:** Zone AB
- Zone AC:** Zone AC
- Zone AD:** Zone AD
- Zone AE:** Zone AE
- Zone AF:** Zone AF
- Zone AG:** Zone AG
- Zone AH:** Zone AH
- Zone AI:** Zone AI
- Zone AJ:** Zone AJ
- Zone AK:** Zone AK
- Zone AL:** Zone AL
- Zone AM:** Zone AM
- Zone AN:** Zone AN
- Zone AO:** Zone AO
- Zone AP:** Zone AP
- Zone AQ:** Zone AQ
- Zone AR:** Zone AR
- Zone AS:** Zone AS
- Zone AT:** Zone AT
- Zone AU:** Zone AU
- Zone AV:** Zone AV
- Zone AW:** Zone AW
- Zone AX:** Zone AX
- Zone AY:** Zone AY
- Zone AZ:** Zone AZ
- Zone BA:** Zone BA
- Zone BB:** Zone BB
- Zone BC:** Zone BC
- Zone BD:** Zone BD
- Zone BE:** Zone BE
- Zone BF:** Zone BF
- Zone BG:** Zone BG
- Zone BH:** Zone BH
- Zone BI:** Zone BI
- Zone BJ:** Zone BJ
- Zone BK:** Zone BK
- Zone BL:** Zone BL
- Zone BM:** Zone BM
- Zone BN:** Zone BN
- Zone BO:** Zone BO
- Zone BP:** Zone BP
- Zone BQ:** Zone BQ
- Zone BR:** Zone BR
- Zone BS:** Zone BS
- Zone BT:** Zone BT
- Zone BU:** Zone BU
- Zone BV:** Zone BV
- Zone BW:** Zone BW
- Zone BX:** Zone BX
- Zone BY:** Zone BY
- Zone BZ:** Zone BZ
- Zone CA:** Zone CA
- Zone CB:** Zone CB
- Zone CC:** Zone CC
- Zone CD:** Zone CD
- Zone CE:** Zone CE
- Zone CF:** Zone CF
- Zone CG:** Zone CG
- Zone CH:** Zone CH
- Zone CI:** Zone CI
- Zone CJ:** Zone CJ
- Zone CK:** Zone CK
- Zone CL:** Zone CL
- Zone CM:** Zone CM
- Zone CN:** Zone CN
- Zone CO:** Zone CO
- Zone CP:** Zone CP
- Zone CQ:** Zone CQ
- Zone CR:** Zone CR
- Zone CS:** Zone CS
- Zone CT:** Zone CT
- Zone CU:** Zone CU
- Zone CV:** Zone CV
- Zone CW:** Zone CW
- Zone CX:** Zone CX
- Zone CY:** Zone CY
- Zone CZ:** Zone CZ
- Zone DA:** Zone DA
- Zone DB:** Zone DB
- Zone DC:** Zone DC
- Zone DD:** Zone DD
- Zone DE:** Zone DE
- Zone DF:** Zone DF
- Zone DG:** Zone DG
- Zone DH:** Zone DH
- Zone DI:** Zone DI
- Zone DJ:** Zone DJ
- Zone DK:** Zone DK
- Zone DL:** Zone DL
- Zone DM:** Zone DM
- Zone DN:** Zone DN
- Zone DO:** Zone DO
- Zone DP:** Zone DP
- Zone DQ:** Zone DQ
- Zone DR:** Zone DR
- Zone DS:** Zone DS
- Zone DT:** Zone DT
- Zone DU:** Zone DU
- Zone DV:** Zone DV
- Zone DW:** Zone DW
- Zone DX:** Zone DX
- Zone DY:** Zone DY
- Zone DZ:** Zone DZ
- Zone EA:** Zone EA
- Zone EB:** Zone EB
- Zone EC:** Zone EC
- Zone ED:** Zone ED
- Zone EE:** Zone EE
- Zone EF:** Zone EF
- Zone EG:** Zone EG
- Zone EH:** Zone EH
- Zone EI:** Zone EI
- Zone EJ:** Zone EJ
- Zone EK:** Zone EK
- Zone EL:** Zone EL
- Zone EM:** Zone EM
- Zone EN:** Zone EN
- Zone EO:** Zone EO
- Zone EP:** Zone EP
- Zone EQ:** Zone EQ
- Zone ER:** Zone ER
- Zone ES:** Zone ES
- Zone ET:** Zone ET
- Zone EU:** Zone EU
- Zone EV:** Zone EV
- Zone EW:** Zone EW
- Zone EX:** Zone EX
- Zone EY:** Zone EY
- Zone EZ:** Zone EZ
- Zone FA:** Zone FA
- Zone FB:** Zone FB
- Zone FC:** Zone FC
- Zone FD:** Zone FD
- Zone FE:** Zone FE
- Zone FF:** Zone FF
- Zone FG:** Zone FG
- Zone FH:** Zone FH
- Zone FI:** Zone FI
- Zone FJ:** Zone FJ
- Zone FK:** Zone FK
- Zone FL:** Zone FL
- Zone FM:** Zone FM
- Zone FN:** Zone FN
- Zone FO:** Zone FO
- Zone FP:** Zone FP
- Zone FQ:** Zone FQ
- Zone FR:** Zone FR
- Zone FS:** Zone FS
- Zone FT:** Zone FT
- Zone FU:** Zone FU
- Zone FV:** Zone FV
- Zone FW:** Zone FW
- Zone FX:** Zone FX
- Zone FY:** Zone FY
- Zone FZ:** Zone FZ
- Zone GA:** Zone GA
- Zone GB:** Zone GB
- Zone GC:** Zone GC
- Zone GD:** Zone GD
- Zone GE:** Zone GE
- Zone GF:** Zone GF
- Zone GH:** Zone GH
- Zone GI:** Zone GI
- Zone GJ:** Zone GJ
- Zone GK:** Zone GK
- Zone GL:** Zone GL
- Zone GM:** Zone GM
- Zone GN:** Zone GN
- Zone GO:** Zone GO
- Zone GP:** Zone GP
- Zone GQ:** Zone GQ
- Zone GR:** Zone GR
- Zone GS:** Zone GS
- Zone GT:** Zone GT
- Zone GU:** Zone GU
- Zone GV:** Zone GV
- Zone GW:** Zone GW
- Zone GX:** Zone GX
- Zone GY:** Zone GY
- Zone GZ:** Zone GZ
- Zone HA:** Zone HA
- Zone HB:** Zone HB
- Zone HC:** Zone HC
- Zone HD:** Zone HD
- Zone HE:** Zone HE
- Zone HF:** Zone HF
- Zone HG:** Zone HG
- Zone HH:** Zone HH
- Zone HI:** Zone HI
- Zone HJ:** Zone HJ
- Zone HK:** Zone HK
- Zone HL:** Zone HL
- Zone HM:** Zone HM
- Zone HN:** Zone HN
- Zone HO:** Zone HO
- Zone HP:** Zone HP
- Zone HQ:** Zone HQ
- Zone HR:** Zone HR
- Zone HS:** Zone HS
- Zone HT:** Zone HT
- Zone HU:** Zone HU
- Zone HV:** Zone HV
- Zone HW:** Zone HW
- Zone HX:** Zone HX
- Zone HY:** Zone HY
- Zone HZ:** Zone HZ
- Zone IA:** Zone IA
- Zone IB:** Zone IB
- Zone IC:** Zone IC
- Zone ID:** Zone ID
- Zone IE:** Zone IE
- Zone IF:** Zone IF
- Zone IG:** Zone IG
- Zone IH:** Zone IH
- Zone II:** Zone II
- Zone IJ:** Zone IJ
- Zone IK:** Zone IK
- Zone IL:** Zone IL
- Zone IM:** Zone IM
- Zone IN:** Zone IN
- Zone IO:** Zone IO
- Zone IP:** Zone IP
- Zone IQ:** Zone IQ
- Zone IR:** Zone IR
- Zone IS:** Zone IS
- Zone IT:** Zone IT
- Zone IU:** Zone IU
- Zone IV:** Zone IV
- Zone IW:** Zone IW
- Zone IX:** Zone IX
- Zone IY:** Zone IY
- Zone IZ:** Zone IZ
- Zone JA:** Zone JA
- Zone JB:** Zone JB
- Zone JC:** Zone JC
- Zone JD:** Zone JD
- Zone JE:** Zone JE
- Zone JF:** Zone JF
- Zone JG:** Zone JG
- Zone JH:** Zone JH
- Zone JI:** Zone JI
- Zone JJ:** Zone JJ
- Zone JK:** Zone JK
- Zone JL:** Zone JL
- Zone JM:** Zone JM
- Zone JN:** Zone JN
- Zone JO:** Zone JO
- Zone JP:** Zone JP
- Zone JQ:** Zone JQ
- Zone JR:** Zone JR
- Zone JS:** Zone JS
- Zone JT:** Zone JT
- Zone JU:** Zone JU
- Zone JV:** Zone JV
- Zone JW:** Zone JW
- Zone JX:** Zone JX
- Zone JY:** Zone JY
- Zone JZ:** Zone JZ
- Zone KA:** Zone KA
- Zone KB:** Zone KB
- Zone KC:** Zone KC
- Zone KD:** Zone KD
- Zone KE:** Zone KE
- Zone KF:** Zone KF
- Zone KG:** Zone KG
- Zone KH:** Zone KH
- Zone KI:** Zone KI
- Zone KJ:** Zone KJ
- Zone KK:** Zone KK
- Zone KL:** Zone KL
- Zone KM:** Zone KM
- Zone KN:** Zone KN
- Zone KO:** Zone KO
- Zone KP:** Zone KP
- Zone KQ:** Zone KQ
- Zone KR:** Zone KR
- Zone KS:** Zone KS
- Zone KT:** Zone KT
- Zone KU:** Zone KU
- Zone KV:** Zone KV
- Zone KW:** Zone KW
- Zone KX:** Zone KX
- Zone KY:** Zone KY
- Zone KZ:** Zone KZ
- Zone LA:** Zone LA
- Zone LB:** Zone LB
- Zone LC:** Zone LC
- Zone LD:** Zone LD
- Zone LE:** Zone LE
- Zone LF:** Zone LF
- Zone LG:** Zone LG
- Zone LH:** Zone LH
- Zone LI:** Zone LI
- Zone LJ:** Zone LJ
- Zone LK:** Zone LK
- Zone LL:** Zone LL
- Zone LM:** Zone LM
- Zone LN:** Zone LN
- Zone LO:** Zone LO
- Zone LP:** Zone LP
- Zone LQ:** Zone LQ
- Zone LR:** Zone LR
- Zone LS:** Zone LS
- Zone LT:** Zone LT
- Zone LU:** Zone LU
- Zone LV:** Zone LV
- Zone LW:** Zone LW
- Zone LX:** Zone LX
- Zone LY:** Zone LY
- Zone LZ:** Zone LZ
- Zone MA:** Zone MA
- Zone MB:** Zone MB
- Zone MC:** Zone MC
- Zone MD:** Zone MD
- Zone ME:** Zone ME
- Zone MF:** Zone MF
- Zone MG:** Zone MG
- Zone MH:** Zone MH
- Zone MI:** Zone MI
- Zone MJ:** Zone MJ
- Zone MK:** Zone MK
- Zone ML:** Zone ML
- Zone MM:** Zone MM
- Zone MN:** Zone MN
- Zone MO:** Zone MO
- Zone MP:** Zone MP
- Zone MQ:** Zone MQ
- Zone MR:** Zone MR
- Zone MS:** Zone MS
- Zone MT:** Zone MT
- Zone MU:** Zone MU
- Zone MV:** Zone MV
- Zone MW:** Zone MW
- Zone MX:** Zone MX
- Zone MY:** Zone MY
- Zone MZ:** Zone MZ
- Zone NA:** Zone NA
- Zone NB:** Zone NB
- Zone NC:** Zone NC
- Zone ND:** Zone ND
- Zone NE:** Zone NE
- Zone NF:** Zone NF
- Zone NG:** Zone NG
- Zone NH:** Zone NH
- Zone NI:** Zone NI
- Zone NJ:** Zone NJ
- Zone NK:** Zone NK
- Zone NL:** Zone NL
- Zone NM:** Zone NM
- Zone NN:** Zone NN
- Zone NO:** Zone NO
- Zone NP:** Zone NP
- Zone NQ:** Zone NQ
- Zone NR:** Zone NR
- Zone NS:** Zone NS
- Zone NT:** Zone NT
- Zone NU:** Zone NU
- Zone NV:** Zone NV
- Zone NW:** Zone NW
- Zone NX:** Zone NX
- Zone NY:** Zone NY
- Zone NZ:** Zone NZ
- Zone OA:** Zone OA
- Zone OB:** Zone OB
- Zone OC:** Zone OC
- Zone OD:** Zone OD
- Zone OE:** Zone OE
- Zone OF:** Zone OF
- Zone OG:** Zone OG
- Zone OH:** Zone OH
- Zone OI:** Zone OI
- Zone OJ:** Zone OJ
- Zone OK:** Zone OK
- Zone OL:** Zone OL
- Zone OM:** Zone OM
- Zone ON:** Zone ON
- Zone OO:** Zone OO
- Zone OP:** Zone OP
- Zone OQ:** Zone OQ
- Zone OR:** Zone OR
- Zone OS:** Zone OS
- Zone OT:** Zone OT
- Zone OU:** Zone OU
- Zone OV:** Zone OV
- Zone OW:** Zone OW
- Zone OX:** Zone OX
- Zone OY:** Zone OY
- Zone OZ:** Zone OZ
- Zone PA:** Zone PA
- Zone PB:** Zone PB
- Zone PC:** Zone PC
- Zone PD:** Zone PD
- Zone PE:** Zone PE
- Zone PF:** Zone PF
- Zone PG:** Zone PG
- Zone PH:** Zone PH
- Zone PI:** Zone PI
- Zone PJ:** Zone PJ
- Zone PK:** Zone PK
- Zone PL:** Zone PL
- Zone PM:** Zone PM
- Zone PN:** Zone PN
- Zone PO:** Zone PO
- Zone PP:** Zone PP
- Zone PQ:** Zone PQ
- Zone PR:** Zone PR
- Zone PS:** Zone PS
- Zone PT:** Zone PT
- Zone PU:** Zone PU
- Zone PV:** Zone PV
- Zone PW:** Zone PW
- Zone PX:** Zone PX
- Zone PY:** Zone PY
- Zone PZ:** Zone PZ
- Zone QA:** Zone QA
- Zone QB:** Zone QB
- Zone QC:** Zone QC
- Zone QD:** Zone QD
- Zone QE:** Zone QE
- Zone QF:** Zone QF
- Zone QG:** Zone QG
- Zone QH:** Zone QH
- Zone QI:** Zone QI
- Zone QJ:** Zone QJ
- Zone QK:** Zone QK
- Zone QL:** Zone QL
- Zone QM:** Zone QM
- Zone QN:** Zone QN
- Zone QO:** Zone QO
- Zone QP:** Zone QP
- Zone QQ:** Zone QQ
- Zone QR:** Zone QR
- Zone QS:** Zone QS
- Zone QT:** Zone QT
- Zone QU:** Zone QU
- Zone QV:** Zone QV
- Zone QW:** Zone QW
- Zone QX:** Zone QX
- Zone QY:** Zone QY
- Zone QZ:** Zone QZ
- Zone RA:** Zone RA
- Zone RB:** Zone RB
- Zone RC:** Zone RC
- Zone RD:** Zone RD
- Zone RE:** Zone RE
- Zone RF:** Zone RF
- Zone RG:** Zone RG
- Zone RH:** Zone RH
- Zone RI:** Zone RI
- Zone RJ:** Zone RJ
- Zone RK:** Zone RK
- Zone RL:** Zone RL
- Zone RM:** Zone RM
- Zone RN:** Zone RN
- Zone RO:** Zone RO
- Zone RP:** Zone RP
- Zone RQ:** Zone RQ
- Zone RR:** Zone RR
- Zone RS:** Zone RS
- Zone RT:** Zone RT
- Zone RU:** Zone RU
- Zone RV:** Zone RV
- Zone RW:** Zone RW
- Zone RX:** Zone RX
- Zone RY:** Zone RY
- Zone RZ:** Zone RZ
- Zone SA:** Zone SA
- Zone SB:** Zone SB
- Zone SC:** Zone SC
- Zone SD:** Zone SD
- Zone SE:** Zone SE
- Zone SF:** Zone SF
- Zone SG:** Zone SG
- Zone SH:** Zone SH
- Zone SI:** Zone SI
- Zone SJ:** Zone SJ
- Zone SK:** Zone SK
- Zone SL:** Zone SL
- Zone SM:** Zone SM
- Zone SN:** Zone SN
- Zone SO:** Zone SO
- Zone SP:** Zone SP
- Zone SQ:** Zone SQ
- Zone SR:** Zone SR
- Zone SS:** Zone SS
- Zone ST:** Zone ST
- Zone SU:** Zone SU
- Zone SV:** Zone SV
- Zone SW:** Zone SW
- Zone SX:** Zone SX
- Zone SY:** Zone SY
- Zone SZ:** Zone SZ
- Zone TA:** Zone TA
- Zone TB:** Zone TB
- Zone TC:** Zone TC
- Zone TD:** Zone TD
- Zone TE:** Zone TE
- Zone TF:** Zone TF
- Zone TG:** Zone TG
- Zone TH:** Zone TH
- Zone TI:** Zone TI
- Zone TJ:** Zone TJ
- Zone TK:** Zone TK
- Zone TL:** Zone TL
- Zone TM:** Zone TM
- Zone TN:** Zone TN
- Zone TO:** Zone TO
- Zone TP:** Zone TP
- Zone TQ:** Zone TQ
- Zone TR:** Zone TR
- Zone TS:** Zone TS
- Zone TT:** Zone TT
- Zone TU:** Zone TU
- Zone TV:** Zone TV
- Zone TW:** Zone TW
- Zone TX:** Zone TX
- Zone TY:** Zone TY
- Zone TZ:** Zone TZ
- Zone UA:** Zone UA
- Zone UB:** Zone UB
- Zone UC:** Zone UC
- Zone UD:** Zone UD
- Zone UE:** Zone UE
- Zone UF:** Zone UF
- Zone UG:** Zone UG
- Zone UH:** Zone UH
- Zone UI:** Zone UI
- Zone UJ:** Zone UJ
- Zone UK:** Zone UK
- Zone UL:** Zone UL
- Zone UM:** Zone UM
- Zone UN:** Zone UN
- Zone UO:** Zone UO
- Zone UP:** Zone UP
- Zone UQ:** Zone UQ
- Zone UR:** Zone UR
- Zone US:** Zone US
- Zone UT:** Zone UT
- Zone UV:** Zone UV
- Zone UW:** Zone UW
- Zone UX:** Zone UX
- Zone UY:** Zone UY
- Zone UZ:** Zone UZ
- Zone VA:** Zone VA
- Zone VB:** Zone VB
- Zone VC:** Zone VC
- Zone VD:** Zone VD
- Zone VE:** Zone VE
- Zone VF:** Zone VF
- Zone VG:** Zone VG
- Zone VH:** Zone VH
- Zone VI:** Zone VI
- Zone VJ:** Zone VJ
- Zone VK:** Zone VK
- Zone VL:** Zone VL
- Zone VM:** Zone VM
- Zone VN:** Zone VN
- Zone VO:** Zone VO
- Zone VP:** Zone VP
- Zone VQ:** Zone VQ
- Zone VR:** Zone VR
- Zone VS:** Zone VS
- Zone VT:** Zone VT
- Zone VU:** Zone VU
- Zone VV:** Zone VV
- Zone VW:** Zone VW
- Zone VX:** Zone VX
- Zone VY:** Zone VY
- Zone VZ:** Zone VZ
- Zone WA:** Zone WA
- Zone WB:** Zone WB
- Zone WC:** Zone WC
- Zone WD:** Zone WD
- Zone WE:** Zone WE
- Zone WF:** Zone WF
- Zone WG:** Zone WG
- Zone WH:** Zone WH
- Zone WI:** Zone WI
- Zone WJ:** Zone WJ
- Zone WK:** Zone WK
- Zone WL:** Zone WL
- Zone WM:** Zone WM
- Zone WN:** Zone WN
- Zone WO:** Zone WO
- Zone WP:** Zone WP
- Zone WQ:** Zone WQ
- Zone WR:** Zone WR
- Zone WS:** Zone WS
- Zone WT:** Zone WT
- Zone WU:** Zone WU
- Zone WV:** Zone WV
- Zone WW:** Zone WW
- Zone WX:** Zone WX
- Zone WY:** Zone WY
- Zone WZ:** Zone WZ
- Zone XA:** Zone XA
- Zone XB:** Zone XB
- Zone XC:** Zone XC
- Zone XD:** Zone XD
- Zone XE:** Zone XE
- Zone XF:** Zone XF
- Zone XG:** Zone XG
- Zone XH:** Zone XH
- Zone XI:** Zone XI
- Zone XJ:** Zone XJ
- Zone XK:** Zone XK
- Zone XL:** Zone XL
- Zone XM:** Zone XM
- Zone XN:** Zone XN
- Zone XO:** Zone XO
- Zone XP:** Zone XP
- Zone XQ:** Zone XQ
- Zone XR:** Zone XR
- Zone XS:** Zone XS
- Zone XT:** Zone XT
- Zone XU:** Zone XU
- Zone XV:** Zone XV
- Zone XW:** Zone XW
- Zone XX:** Zone XX
- Zone XY:** Zone XY
- Zone XZ:** Zone XZ
- Zone YA:** Zone YA
- Zone YB:** Zone YB
- Zone YC:** Zone YC
- Zone YD:** Zone YD
- Zone YE:** Zone YE
- Zone YF:** Zone YF
- Zone YG:** Zone YG
- Zone YH:** Zone YH
- Zone YI:** Zone YI
- Zone YJ:** Zone YJ
- Zone YK:** Zone YK
- Zone YL:** Zone YL
- Zone YM:** Zone YM
- Zone YN:** Zone YN
- Zone YO:** Zone YO
- Zone YP:** Zone YP
- Zone YQ:** Zone YQ
- Zone YR:** Zone YR
- Zone YS:** Zone YS
- Zone YT:** Zone YT
- Zone YU:** Zone YU
- Zone YV:** Zone YV
- Zone YW:** Zone YW
- Zone YX:** Zone YX
- Zone YY:** Zone YY
- Zone YZ:** Zone YZ
- Zone ZA:** Zone ZA
- Zone ZB:** Zone ZB
- Zone ZC:** Zone ZC
- Zone ZD:** Zone ZD
- Zone ZE:** Zone ZE
- Zone ZF:** Zone ZF
- Zone ZG:** Zone ZG
- Zone ZH:** Zone ZH
- Zone ZI:** Zone ZI
- Zone ZJ:** Zone ZJ
- Zone ZK:** Zone ZK
- Zone ZL:** Zone ZL
- Zone ZM:** Zone ZM
- Zone ZN:** Zone ZN
- Zone ZO:** Zone ZO
- Zone ZP:** Zone ZP
- Zone ZQ:** Zone ZQ
- Zone ZR:** Zone ZR
- Zone ZS:** Zone ZS
- Zone ZT:** Zone ZT
- Zone ZU:** Zone ZU
- Zone ZV:** Zone ZV
- Zone ZW:** Zone ZW
- Zone ZX:** Zone ZX
- Zone ZY:** Zone ZY
- Zone ZZ:** Zone ZZ

**LEGEND**

**DOUGLAS COUNTY FLOOD INSURANCE RATE MAP**

**DOUGLAS COUNTY, COLORADO AND INCORPORATED AREAS**

**PANEL 122 OF 415**

**DATE: 10/1/2010**

**MAP SCALE: 1" = 1/2 MILE**

**MAP NUMBER: 080300132P**

**EFFECTIVE DATE: SEPTEMBER 30, 2010**

**Prepared by: Douglas County Planning Department**

**REFERRAL RESPONSE REQUEST-COMPREHENSIVE MASTER PLAN AMD.**

 Date sent: November 21, 2025

 Comments due by: **December 26, 2025**

Fax: 303.660.9550

**Project Name:** Chatfield Urban Area Expansion

**Project File #:** DR2025-011

**Project Summary:**

Sterling Ranch proposes to amend the Douglas County Comprehensive Master Plan (CMP) Land Use Map to change the designation of 448 acres of land from the Louviers Rural Community to the Chatfield Urban Area. If approved by the Planning Commission, the project area would be subject to the policies of CMP Section 2 – Urban Land Use, and specifically the Chatfield Urban Area. Additional rezoning, subdivision and/or site plan processes would be required to develop the property.

Information on the identified development proposal located in Douglas County is enclosed. Please review and comment in the space provided.

<input type="checkbox"/> No Comment	
<input type="checkbox"/> Please be advised of the following concerns:	
<div style="border-bottom: 1px solid black; height: 20px; width: 100%;"></div> <div style="border-bottom: 1px solid black; height: 20px; width: 100%;"></div>	
<input checked="" type="checkbox"/> See letter attached for detail.	
<b>Agency:</b> DC Public Works Eng.	<b>Phone #:</b> 303.660.7490 Ext. 3305
<b>Your Name:</b> Bradley Jackson	<b>Your Signature:</b> <i>Bradley A. Jackson</i>
(please print)	<b>Date:</b> 12/26/2025

Agencies should be advised that failure to submit written comments prior to the due date, or to obtain the applicant's written approval of an extension, will result in written comments being accepted for informational purposes only.

Sincerely,

  
 Matt Jakubowski, Chief Planner  
 Enclosure



# MEMORANDUM

To: Matt Jakubowski, Chief Planner

From: Brad Jackson, PE, Development Review Supervisor  
Brad J

CC: Zeke Lynch, P.E., CFM, Assistant Director Public Works Engineering

Date: 12/26/2025

RE: DR2025-011 Chatfield Urban Area Expansion

---

The Douglas County Department of Public Works Engineering has reviewed the DR2025-011 Chatfield Urban Area Expansion Project and has the following comments:

**General Comments:**

1. Douglas County Public Works Engineering has no specific comments on this application. We will continue to work with Sterling Ranch on the update to the Master Traffic Impact Study (MTIS) that is currently in process.

If the applicant has any questions regarding these comments they may contact me directly. Thank you for the opportunity to review this request.

December 9, 2025

Matt Jakubowski, AICP, Chief Planner  
100 Third Street  
Castle Rock, CO 80104

Re: DR2025-011 Chatfield Urban Area Expansion

Dear Mr. Jakubowski:

The letter provides comments regarding the applicants request to amend the Douglas County Comprehensive Master Plan (CMP) Land Use Map to change the designation of 448 acres of land from the Louviers Rural Community to the Chatfield Urban Area.

Please note that the proposed new Open Space (O1-Open Preserve) is located next to Louviers Village. The Village has been listed on the National Register of Historic Places since 1999. At this time the Curator does not see any impact to the Village and has no recommendations.

If there is future development with ground disturbance on the property a cultural survey should be performed. There is potential for buried archaeological resources related to prehistoric activities in the project area and potential for the discovery of subsurface cultural deposits during ground moving activities. As a result, more specific analysis to address these resources will be necessary at future phases of development, including a Class II cultural resource survey of the property.

Should buried artifacts and features be discovered, we recommend completion of the appropriate Colorado Office of Archaeology and Historic Preservation (OAHP) Data Management and Historic and/or Prehistoric Component forms, following OAHP guidelines, with accompanying sketch maps and photographs. Completed forms are submitted to OAHP to ensure that Douglas County's historic or prehistoric data is included in the Colorado OAHP state-wide database of cultural resources.

Thank you in advance for your attention to the preservation and protection of Douglas County's cultural resources for future generations.

Sincerely,

*Brittany Cassell*

Brittany Cassell, Curator

DATE: December 23, 2025

TO: Matt Jakubowski, AICP, Planner IV

FROM: Andy Hough, Environmental Resources Coordinator

Thru: Dan Dertz, Director of Open Space & Natural Resources

SUBJECT: OSNR Referral Response-DR2025-011, Chatfield Urban Area Expansion

Thank you for the opportunity to comment on the Chatfield Urban Area Expansion proposal (DR2025-011). These comments center on accommodating wildlife and habitat needs.

Douglas County Open Space and Natural Resources (OSNR) does not object to redesignating the majority of the proposed area to urban. The intensive uses in the area, including the EVOC site and proposed Zebulon Park, make it logical. Removal of any of the existing exclusionary fencing with this development, as mentioned as a possibility in the wildlife report, would be a positive outcome.

The main natural resource that may be impacted by this proposed development is wildlife. There is a great deal of protected habitat within this area of the Chatfield Basin. Keeping these protected blocks of habitat connected is essential to the viability of the County's wildlife plan. Plum Creek is a major wildlife corridor, one of the most important in the County. Intensive development and disturbance in or adjacent to this corridor can impact its functionality. Not noted in the applicant's wildlife report is the acknowledgement that there are four wildlife underpasses on Waterton Road, a \$9M County investment in our wildlife plan. Two are immediately south and west of this site on the Plum Creek tributary drainages that traverse the area designated in the plan as the 204-acre conservation easement area. The other two wildlife underpasses are on Indian and Plum Creeks, about half a mile east of the site. It is notable that the local elk herds have become accustomed to using both the tributary as well as the creek underpasses, and entire herds are passing under Waterton Rd. Maintaining the undisturbed connectivity to these underpasses is critical to wildlife sustainability within the Chatfield Basin in the face of the intensive increased development proposed for the surrounding area.

Part of the conservation parcel is adjacent to Plum Creek and is part of the creek's riparian corridor. This not only facilitates the passage of elk, deer, bear, and mountain lion, but lowland riparian habitat has been documented to be used by over 300 species of wildlife in this area. Of note also are the plains topminnow and northern leopard frog, which are designated Tier 1 Species of Greatest Conservation Need per Colorado's

2025 State Wildlife Action Plan. Of course, the Preble's meadow jumping mouse, a species listed as threatened under the Endangered Species Act, also uses this riparian and the adjacent upland habitats. Many other species of small mammals, herptiles, and birds use the Plum Creek corridor as well.

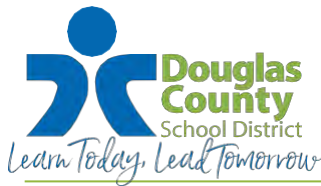
The southern portion of the conservation parcel moves away from the Plum Creek corridor. However, as noted above, the drainages that traverse it are tributary to Plum Creek and connect to two important wildlife underpasses constructed through Waterton Road. Elk, which number in the hundreds in this area, have now acclimated and have been passing through these structures in herds. It is important to maintain the connectivity between these underpasses and Plum Creek. Limiting development and minimizing disturbance within wildlife movement corridors is important to maintain this connectivity.

In light of these concerns, OSNR suggests that it would be better to remove the conservation parcel (185 acres) from the application and leave it in non-urban designation. This change would be even more important if a conservation easement is not placed on the conservation parcel.

Elements of the development of Zebulon Park could be done in such a way as to reduce impacts to wildlife using the adjacent corridors and habitat. One of the best mitigations is buffering. OSNR suggests a series of undulating berms along the edge of the development parcels to screen structures and activity from the conservation parcel/wildlife corridors. This buffer could be further enhanced by the planting of native or beneficial trees and shrubs. Feathering development near the edge of the conservation parcel reduces density and disturbance. Ensuring that down lighting is used, and that tall ballfield lighting is not immediately adjacent to the conservation parcel is also helpful. Minimizing noise, odors, fumes, and intense activity adjacent to the conservation parcel, especially at night, is also of great benefit.

With foresight in planning and dedication to maintain the habitat value and wildlife movement opportunities on the conservation parcel, Sterling Ranch has an opportunity to showcase fantastic community amenities while maintaining the wildlife flocks and herds that coexist throughout the Chatfield Basin. OSNR is willing to help with design, plant lists, or information on local wildlife patterns and adjacent protected land.





620 Wilcox Street  
Castle Rock, Colorado 80104

December 26, 2025

Matt Jakubowski, AICP | Chief Planner  
Douglas County Department of Community Development  
Planning Services Division  
Address | 100 Third St., Castle Rock, CO 80104  
Phone | 303-660-7460  
Email | [mjakubow@douglas.co.us](mailto:mjakubow@douglas.co.us)

RE: Chatfield Urban Area Expansion-Comprehensive Master Plan and Map Amendment (DR2025-011)  
(the "Application")

Mr. Jakubowski,

Thank you for the opportunity to respond to the above referenced Application. It is Douglas County School District's ("School District") understanding that the applicant, Sterling Ranch Development Company ("Applicant"), is proposing to amend the Douglas County 2040 Comprehensive Master Plan ("CMP") and Land Use Map to change the designation of 427.9 acres of land from a rural community designation, specifically the Louviers Rural Community, to an urban community designation, specifically to the Chatfield Urban Area. If approved, the project area would be subject to the policies of CMP Section 2 – Urban Land Use, and specifically the Chatfield Urban Area. It is also our understanding that this proposed amendment to the CMP and Land Use Map will assist in enabling the addition of ~595 acres and 4,000 allowed residential dwelling units to the Sterling Ranch Planned Development.

At the outset, it is important to understand that growth does not pay its own way when it comes to building schools to accommodate growth. Developers are required by law to provide land for school sites. Some developers in Douglas County also contribute a voluntary "capital fee" for every unit that they build. These fees are used to cover smaller growth-related expenses, such as mobile classrooms to increase capacity, but they fall far short of the amount necessary to fund new school construction which is currently estimated at 60 million for an elementary school and 100 million for a joint middle/high school. This means that school districts in Colorado have to pass taxpayer bond initiatives to fund new schools. The School District's tax for these bond initiatives was 15.43 mills in 2014 and is 5.2 mills today. Since 2014, taxpayers have seen a 10-mill tax decrease from the School District bond initiatives, and the School District's ability to maintain capital infrastructure and fund growth has greatly diminished. It is through this lens that the School District must review this, and all other land use applications within the County to ensure that its students and Douglas County's taxpayers are protected.

With this in mind, the School District would like to speak to the potential need for school land driven by this proposed amendment to the CMP and Land Use Map. CMP amendments initiated by the public are considered major amendments subject to several approval criteria provided in Section 10-2A of the CMP. Major amendments, like this Application, have serious implications on the public and require a thorough examination of the Applicant's ability to provide necessary facilities and resources. In fact, CMP Section 10-2A Approval Criteria 4 and 5 require all applications to demonstrate:

- (4) Adequate water supply, water and sewer treatment facilities, transportation networks, access, fire protection, school facilities, and parks and trails for the development.
- (5) How existing and planned capabilities of the affected special districts can adequately handle the service demand

Here, the addition of 4,000 units, a 33.3% increase of dwelling units in the Sterling Ranch Planned Development, may generate need for additional school facility capacity and land for school use. Even in a world of declining birth rates and declining enrollment in parts of the School District that are “aging out”, the School District’s student population is increasing in growth areas in the School District such as the Chatfield Urban Area. The total School District student population in Sterling Ranch has consistently grown every year with nearly 1,100 students from Sterling Ranch currently attending School District schools. When accounting for all growth areas within the Urban Chatfield Urban Area, the School District is currently accommodating nearly 1,400 students. Including the ~595 acres of urban level development that this amendment to the Comprehensive Plan will assist in enabling, there will be ~4,380 acres of land entitled for development that is not even close to half built out.

With this in mind, the School District will address this need in our referral response to the Sterling Ranch Planned Development 15th Amendment application. As for this application, the School District simply asks the Commission to ensure future school needs are considered and accounted for in the approval of this application, as required by Section 10-2A(4) and (5) of the CMP. Thank you for the support of our mutual constituents.

Shavon Caldwell, Planning Manager  
DCSD Planning & Construction  
[scaldwell2l@dcsdk12.org](mailto:scaldwell2l@dcsdk12.org)  
303.387.0417

**From:** Randy Johnson

**Sent:** Monday, December 22, 2025 11:26 AM

**To:** Matt Jakubowski

**Subject:** Louviers Conservation Partnership DR2025-011 Chatfield Urban Area Expansion Comments and Questions

**Caution:** This email originated outside the organization. Be cautious with links and attachments.

Matt,

Below are comments and questions from Louviers Conservation Partnership for the DR2025-011 Chatfield Urban Area Expansion Amendment:

Louviers Conservation Partnership has reviewed the documents for the Request for a Comprehensive Master Plan Amendment to expand the Chatfield Urban Area.

Below is an excerpt from the Waterton Business Park Douglas County 2040 Comprehensive Master Plan Amendment Project Narrative

While this proposed amendment seeks to bring the conservation easement into the Chatfield Urban Area, the purpose and intent of the conservation easement will remain the same: to serve as a **preserved open space, a vital wildlife corridor and habitat linkage, and a highly valued open space buffer for Louviers**. Bringing the conservation easement into the Chatfield Urban Area will allow the applicant the ability to include the parcel into the Sterling Ranch Planned Development (PD) where it will benefit from the existing and expanding water and wastewater infrastructure, water supply, and fire flows. As part of the Sterling Ranch PD, the conservation easement would also benefit by being subject to the Sterling Ranch Prairie Conservation Master Plan (PCMP).

Louviers Conservation Partnership has the following comments and questions:

Louviers residents are concerned with the request to add the conservation easement into the expansion of the Chatfield Urban Area in the 2040 Comprehensive Master Plan and thus being directly next to the Town of Louviers.

Is there any documentation defining the conservation easement?

The original conservation easement was 204 acres I think it is now 185 acres. What happened to the 19 acres?

If the conservation easement is preserved open space, a vital wildlife corridor and habitat linkage, and a highly valued open space buffer for Louviers how will it benefit from the existing and expanding water and wastewater infrastructure, water supply, and fire flows, it is open space? It seems development around the area would benefit not the conservation easement.

How will the conservation easement benefit by being subject to the Sterling Ranch Prairie Conservation Master Plan (PCMP)? The PCMP looks to address the main Sterling Ranch area but not the southern area to be added by the amendment.

The Sterling Ranch Conservation Easement portion should stay in the Louviers Rural Area conserving a boundary around Louviers separated from Sterling Ranch as has been stated by Sterling Ranch.

Randy Johnson  
Director  
Louviers Conservation Partnership




**REFERRAL RESPONSE REQUEST-COMPREHENSIVE MASTER PLAN AMD.**Date sent: November 21, 2025Comments due by: December 26, 2025

Fax: 303.660.9550

**Project Name:** Chatfield Urban Area Expansion**Project File #:** DR2025-011**Project Summary:**

Sterling Ranch proposes to amend the Douglas County Comprehensive Master Plan (CMP) Land Use Map to change the designation of 448 acres of land from the Louviers Rural Community to the Chatfield Urban Area. If approved by the Planning Commission, the project area would be subject to the policies of CMP Section 2 – Urban Land Use, and specifically the Chatfield Urban Area. Additional rezoning, subdivision and/or site plan processes would be required to develop the property.

Information on the identified development proposal located in Douglas County is enclosed. Please review and comment in the space provided.

<input type="checkbox"/> No Comment	
<input type="checkbox"/> Please be advised of the following concerns:  _____  _____	
<input checked="" type="checkbox"/> See letter attached for detail.	
<b>Agency:</b> Roxborough Village First HOA	<b>Phone #:</b> 720.854.4714
<b>Your Name:</b> Deborah McInnis  (please print)	<b>Your Signature:</b> 
	<b>Date:</b> 12.22.2025

Agencies should be advised that failure to submit written comments prior to the due date, or to obtain the applicant's written approval of an extension, will result in written comments being accepted for informational purposes only.

Sincerely,

  
Matt Jakubowski, Chief Planner  
Enclosure

December 22, 2025

Mr. Matt Jakubowski, Chief Planner

Douglas County Department of Community Development

100 Third Street

Castle Rock, Colorado 80104

mjakubow@douglas.co.us

Re: DR2025-011 Chatfield Area Expansion

Dear Mr. Jakubowski and the Douglas County Commissioners,

The Roxborough Village First HOA does not support the Sterling Ranch Chatfield Urban Area Expansion. We would like to voice the following concerns.

**Emergency Evacuation, Traffic & Safety**

As stated in our HOA's previous referral responses, **the ability to safely evacuate the residents of Roxborough in the event of a natural disaster, such as a wildfire, requires adequate roads and road capacity.** With the development change, this will further endanger our community.

Since we only have three paved roads out with grossly insufficient capacity, if a fire were to occur, our neighborhood will see dire consequences. Not only do we need to be concerned for our neighbors as they evacuate, but those who are visiting or working at Chatfield State Park, Roxborough State Park, Waterton Canyon and the employees of Lockheed Martin. Roxborough cannot absorb additional density in the area, our road capacity is incredibly insufficient to accommodate all of the current new housing in the area.

Currently, traffic is often backed up for over a mile on Highway 85 southbound and northbound as 80125 residents are exiting trying to access Sterling Ranch and Roxborough. We are sitting at a dead standstill, blocking one lane, while traffic speeds past at 65 mph+. There have been several rear-ending accidents in this area recently, and these backups are only going to get worse. Traffic is now always backed up on Waterton Road between Campfire Street and Wadsworth Boulevard. The development is not yet at 20% build out and the traffic is terrible in and out of the community. The County is just going to increase the allowable density by 4,000 units? There is absolutely no need for additional density in this community and the traffic is going to become so congested that this will detract from the community and people will not want to purchase a home in the development.

**Zebulon**

We do not support the land use map change for the property east of Plum Valley Heights for the development of the Zebulon project. The commissioners have developed this project without transparency, input from the public or true property assessment. A Sports Complex for youth sports will be built on a severely contaminated site? Since Douglas County residents are footing the bill, the Douglas County residents would appreciate this proposed development to be put on the 2026 ballot. From County

survey data, residents want passive recreation opportunities. And we do not want more traffic, more congestion and more development. Why are the commissioners meeting in executive session and not being transparent about this project? Without this, will Sterling Ranch need to declare bankruptcy? Is this a last-ditch effort to try and sustain the development? Since Sterling Ranch is constantly asking for County dollars they are not entitled to, whether it be parks, roadways, a sport complex, why can't they pay for these things on their own?

### **Wastewater Treatment Capacity**

Roxborough Water has a Wastewater Conveyance Agreement with Sterling Ranch to convey wastewater from up to 4,000 equivalent residential units until 2028. Sterling Ranch is currently at over 3,000 units. What is Sterling Ranch's plan once the 4,000 equivalent residential units are built and occupied? The County has already approved 4,000 units. Will Dominion have an operational Wastewater Treatment facility online by 2028? Why do the commissioners continue to approve the requests for this development when there is no operational wastewater treatment plant and Dominion's water supply remains unproven? Wouldn't it be prudent to build a wastewater plant prior to expanding the development?

When the Smethills first began talking about the development in the early 2000's, they told Roxborough about 5 acre lots, commercial amenities, and access to their state-of-the-art recreational facilities. We never imagined the density that this development has become. We are contending with incredible traffic, an overcrowded grocery store and gas station, and an undersized Sterling Ranch recreational facility that we are not able to access, unless we pay an atrociously high fee. Every time we come into our community off of Wadsworth, we see the shiny new Douglas County signage that states "Douglas County Where quality of life comes first!" We know this was a pet project of the commissioners to have these signs installed. These signs are a blatant lie. Douglas County is where Sterling Ranch, and no other developer, is catered to with backroom deals to destroy the northwest section of the County. This community has become overbuilt and destroyed, and our quality of life has come secondary to the desires of the Smethills family.

We appreciate the County providing us the opportunity to voice our concerns regarding Sterling Ranch's Chatfield Urban Area Expansion. We request that **the County Commissioners deny this request. The County needs to prioritize the needs of the existing residents within Roxborough, and Douglas County's taxpayer dollars over Sterling Ranch and their development negotiations.**

Sincerely,



Deborah McInnis

Roxborough Village First HOA

**From:** Steve Smith  
**Sent:** Tuesday, December 23, 2025 3:37 PM  
**To:** Matt Jakubowski  
**Subject:** RE: Douglas County eReferral (DR2025-011) Is Ready For Review

**Caution:** This email originated outside the organization. Be cautious with links and attachments.


Matt,  
RTD staff have reviewed the submittal and have the following comments:

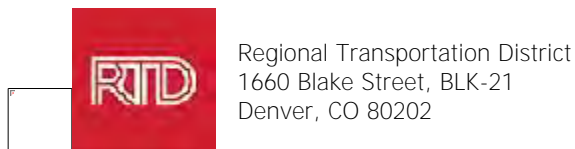
- Bus Operations - No exceptions
- Bus Stop Program - No exceptions
- Commuter Rail - No exceptions
- Construction Management - No exceptions
- Engineering - No exceptions
- Light Rail - No exceptions
- Real Property - No exceptions
- Service Development - No exceptions
- Transit Oriented Development - No exceptions
- Utilities - No exceptions

This review is for Design concepts and to identify any necessary improvements to RTD stops and property affected by the design. This review of the plans does not eliminate the need to acquire, and/or go through the acquisition process of any agreements, easements or permits that may be required by the RTD for any work on or around our facilities and property.

Thanks,

Steve Smith  
Engineer III  
Capital Programs, Engineering Design

he | him | his   
o 303.299.6946  
[steven.smith@rtd-denver.com](mailto:steven.smith@rtd-denver.com)  
[rtd-denver.com](http://rtd-denver.com)



*We make lives better through connections.*

-----Original Message-----

From: [mjakubow@douglas.co.us](mailto:mjakubow@douglas.co.us) <[mjakubow@douglas.co.us](mailto:mjakubow@douglas.co.us)>  
Sent: Friday, November 21, 2025 5:21 PM  
To: Engineering <[engineering@RTD-Denver.com](mailto:engineering@RTD-Denver.com)>  
Subject: Douglas County eReferral (DR2025-011) Is Ready For Review

There is an eReferral for your review. Please use the following link to log on to your account:

<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fapps.douglas.co.us%2Fplanning%2Fprojects%2F>



[ogin.aspx&data=05%7C02%7Cengineering%40rtd-denver.com%7C56f8182ba14a45d4363408de295d3f72%7C051820892b8a4c82864baa265b61fa57%7C0%7C0%7C638993677645846785%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIsIlAiOiJXaW4zMilslkFOljoitWFrpbClzIldUIjoyfQ%3D%3D%7C0%7C%7C%7C&sdata=o9my03JoiJickZLBKfq%2FFxuxkM2ScZ1D7K8mfMirIhY%3D&reserved=0](http://ogin.aspx&data=05%7C02%7Cengineering%40rtd-denver.com%7C56f8182ba14a45d4363408de295d3f72%7C051820892b8a4c82864baa265b61fa57%7C0%7C0%7C638993677645846785%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIsIlAiOiJXaW4zMilslkFOljoitWFrpbClzIldUIjoyfQ%3D%3D%7C0%7C%7C%7C&sdata=o9my03JoiJickZLBKfq%2FFxuxkM2ScZ1D7K8mfMirIhY%3D&reserved=0)

Project Name: Chatfield Urban Area Expansion

Project File #: DR2025-011

Project Summary: Sterling Ranch proposes to amend the Douglas County Comprehensive Master Plan (CMP) Land Use Map to change the designation of 448 acres of land from the Louviers Rural Community to the Chatfield Urban Area. If approved by the Planning Commission, the project area would be subject to the policies of CMP Section 2 – Urban Land Use, and specifically the Chatfield Urban Area. Additional rezoning, subdivision and/or site plan processes would be required to develop the property.

This referral will close on Friday, December 26, 2025.

If you have any questions, please contact me.

Sincerely,

Matt Jakubowski, AICP | Chief Planner

Douglas County Department of Community Development Planning Services Division Address | 100 Third St., Castle Rock, CO 80104 Phone | 303-660-7460 Email | [mjakubow@douglas.co.us](mailto:mjakubow@douglas.co.us)

# **SOUTH METRO FIRE RESCUE**

## **FIRE MARSHAL'S OFFICE**

---



Matthew Jakubowski, AICP, Chief Planner  
Douglas County Department of Community Development, Planning Services  
100 Third St  
Castle Rock Co 80104  
303.660.7460  
303.660.9550 Fax

Project Name: Chatfield Urban Area Expansion  
Project File #: **DR2025-011**  
S Metro Review #: REFOTH25-00294

Review date: December 4, 2025

Plan reviewer: Aaron Miller  
720.989.2246  
[aaron.miller@southmetro.org](mailto:aaron.miller@southmetro.org)

**Project Summary:** Sterling Ranch proposes to amend the Douglas County Comprehensive Master Plan (CMP) Land Use Map to change the designation of 448 acres of land from the Louviers Rural Community to the Chatfield Urban Area. If approved by the Planning Commission, the project area would be subject to the policies of CMP Section 2 – Urban Land Use, and specifically the Chatfield Urban Area. Additional rezoning, subdivision and/or site plan processes would be required to develop the property.

**Code Reference:** Douglas County Fire Code, 2018 International Fire Code, and 2021 International Building Code with amendments as adopted by Douglas County.

South Metro Fire Rescue (SMFR) has reviewed the provided documents and has no objection to the proposed Douglas County Comprehensive Master Plan amendment.



**Right of Way & Permits**

1123 West 3<sup>rd</sup> Avenue  
Denver, Colorado 80223  
Telephone: 303.285.6612  
[violeta.ciocanu@xcelenergy.com](mailto:violeta.ciocanu@xcelenergy.com)

December 16, 2025

Douglas County Planning Services  
100 Third Street  
Castle Rock, CO 80104

Attn: Matt Jakubowski

**Re: Chatfield Urban Area Expansion, Case # DR2025-011**

Public Service Company of Colorado's (PSCo) Right of Way & Permits Referral Desk has reviewed the request for the **Chatfield Urban Area Expansion**.

Please be advised that Public Service Company has intermediate high-pressure natural gas distribution facilities within the areas indicated in this proposed expansion. Public Service Company has no objection to this project, contingent upon PSCo's ability to maintain all existing rights and this amendment should not hinder our ability for future expansion, including all present and any future accommodations for natural gas transmission and electric transmission related facilities, and that our current use/enjoyment of the area would continue to be an accepted use on the property and that it be "grandfathered" into these changes.

Violeta Ciocanu (Chokanu)  
Right of Way and Permits  
Public Service Company of Colorado dba Xcel Energy  
Office: 303-285-6612 – Email: [violeta.ciocanu@xcelenergy.com](mailto:violeta.ciocanu@xcelenergy.com)

**From:** Ephram Glass  
**Sent:** Thursday, December 18, 2025 2:14 PM  
**To:** Matt Jakubowski  
**CC:** Peggy Ripko  
**Subject:** Fwd: Douglas County eReferral (DR2025-011) Is Ready For Review

**Caution:** This email originated outside the organization. Be cautious with links and attachments.

Matt,

Below are Roxborough Village Metro District's comments on DR2025-011. Please ensure these comments are filed and submitted on behalf of the District Board.

The Roxborough Village Metro District has reviewed Sterling Ranch's project, DR2025-011, to change the designation of 448 acres of land from the Louviers Rural Community to the Chatfield Urban Area. The Roxborough Village Metro District Board is in favor of keeping the EVOC facilities within Roxborough as described in the project narrative. However, Roxborough residents are already experiencing much higher traffic with the buildout of Sterling Ranch. With the addition of Zebulon and the requested expansion of Sterling Ranch under Project ZR2025-014, it is expected that congestion will get considerably worse. The area has experienced an increase in fires and is very similar to the region burned during the Marshall Fire. Currently, there are only two functional evacuation routes: Wadsworth Boulevard and US-85. The latter route has two connections to Roxborough: Airport Road and Titan Road. Most of our residents must pass through the Waterton Road/N Rampart Range Road intersection to access any of the evacuation routes. Portions of the Roxborough Park Foundation and Sterling Ranch populations are expected to pass through that same intersection. If Wadsworth Boulevard is closed for any reason during an evacuation, all of the Lockheed Martin employees from the Waterton Campus will also funnel through that intersection. If there were a quick moving fire in Roxborough, all the additional traffic and congestion increases the likelihood of fatalities.

If the Zebulon project and/or the Sterling Ranch expansion are to proceed, official traffic and evacuation studies need to be performed to prove the additional development will not adversely affect Roxborough residents particularly in regard to a fast moving wildfire. Any road projects that are needed to avoid expected adverse effects must be built in advance of the buildout of Zebulon and the expansion request from Sterling Ranch.

Thanks,  
The Roxborough Village Metro District Board

----- Forwarded message -----

From: <[mjakubow@douglas.co.us](mailto:mjakubow@douglas.co.us)>  
Date: Fri, Nov 21, 2025 at 5:22 PM  
Subject: Douglas County eReferral (DR2025-011) Is Ready For Review

There is an eReferral for your review. Please use the following link to log on to your account:  
<https://apps.douglas.co.us/planning/projects/Login.aspx>

Project Name: Chatfield Urban Area Expansion

Project File #: DR2025-011

Project Summary: Sterling Ranch proposes to amend the Douglas County Comprehensive Master Plan (CMP) Land Use Map to change the designation of 448 acres of land from the Louviers Rural Community to the Chatfield Urban Area. If approved by the Planning Commission, the project area would be subject to the



policies of CMP Section 2 – Urban Land Use, and specifically the Chatfield Urban Area. Additional rezoning, subdivision and/or site plan processes would be required to develop the property.

This referral will close on Friday, December 26, 2025.

If you have any questions, please contact me.

Sincerely,

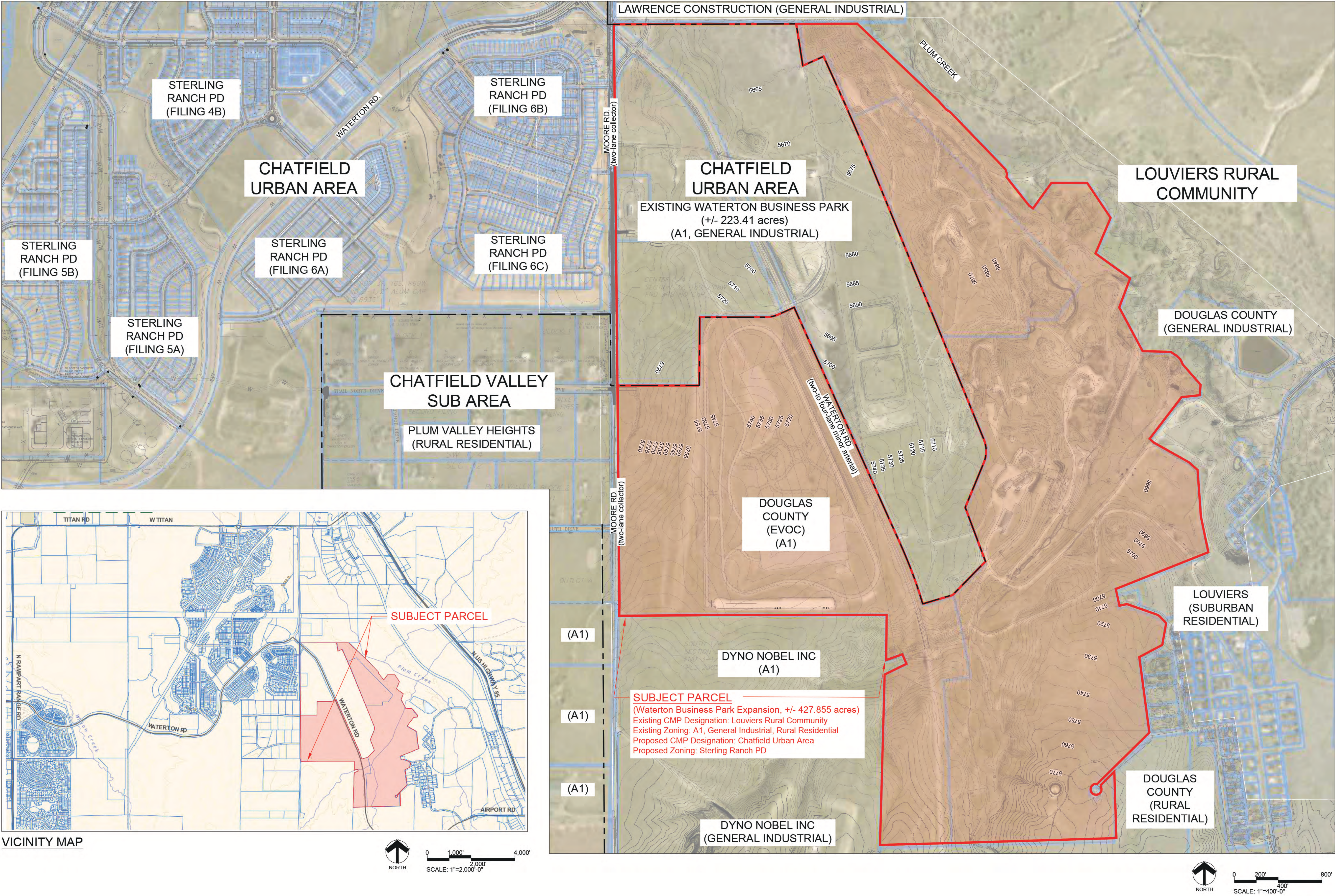
Matt Jakubowski, AICP | Chief Planner  
Douglas County Department of Community Development  
Planning Services Division  
Address | 100 Third St., Castle Rock, CO 80104  
Phone | 303-660-7460  
Email | [mjakubow@douglas.co.us](mailto:mjakubow@douglas.co.us)



WATERTON BUSINESS PARK

COMPREHENSIVE MASTER PLAN AMENDMENT

LOCATED IN SECTIONS 32 AND 33, TOWNSHIP 6 SOUTH, RANGE 68 WEST AND THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 7 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN,  
COUNTY OF DOUGLAS, STATE OF COLORADO, CONTAINING AN AREA OF 651.261 ACRES, MORE OR LESS



Contact: Curtis Davidson  
Email: [curtis@pcsgroupco.com](mailto:curtis@pcsgroupco.com)  
pcs group inc. [www.pcsgruopco.com](http://www.pcsgruopco.com)  
1007 16th Street, Denver CO 80202  
1303.531.4605 / 1303.531.4908



DRAWN	CHECKED	APPROVED	PROJECT NO.	HORIZ. SCALE	VERT. SCALE

DATE	NO	NOTES
12/16/2025	1	1ST SUBMITTAL

WATERTON BUSINESS PARK  
COMPREHENSIVE MASTER PLAN  
AMENDMENT

SHEET

Y:\Sterling Ranch\Project Administration\Documents\Comp Plan Amendment\Update for 15th PD Amendment\Comp Plan Amendment Map - Working Files\Waterton\_Business\_Park\_CMP\_Amendment\_Map\_24x36 REVISED for EVOC.dwg tab: REVISED FOR 15TH AMENDMENT Dec 16, 2025 - 10:01am Curtis



Map 1.1 Land Use  
Comprehensive Master Plan 2040

Comprehensive Master Plan Areas

- Non-Douglas County Based Municipalities
- Chatfield Urban Area
- Primary Urban Area (PUA)
- Rural Communities
- Non-Urban Area
- Separated Urban Area (SUA)

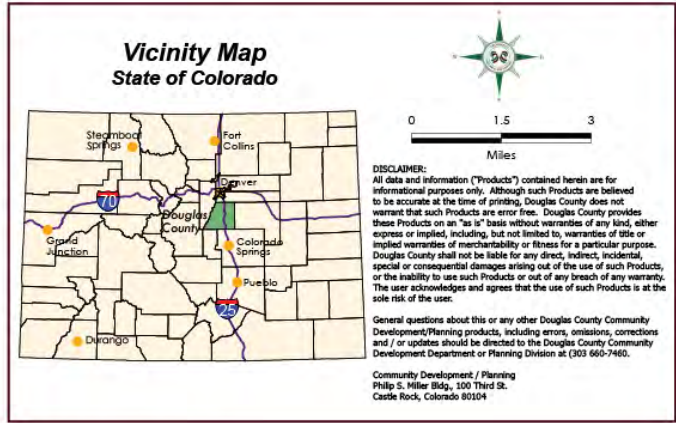
Municipal Planning Areas

- Municipal Planning Area (Incorporated)
- Municipal Planning Area (Unincorporated)
- Municipal Planning Area Inclusive of County PUA/SUA

Open Space & Parks

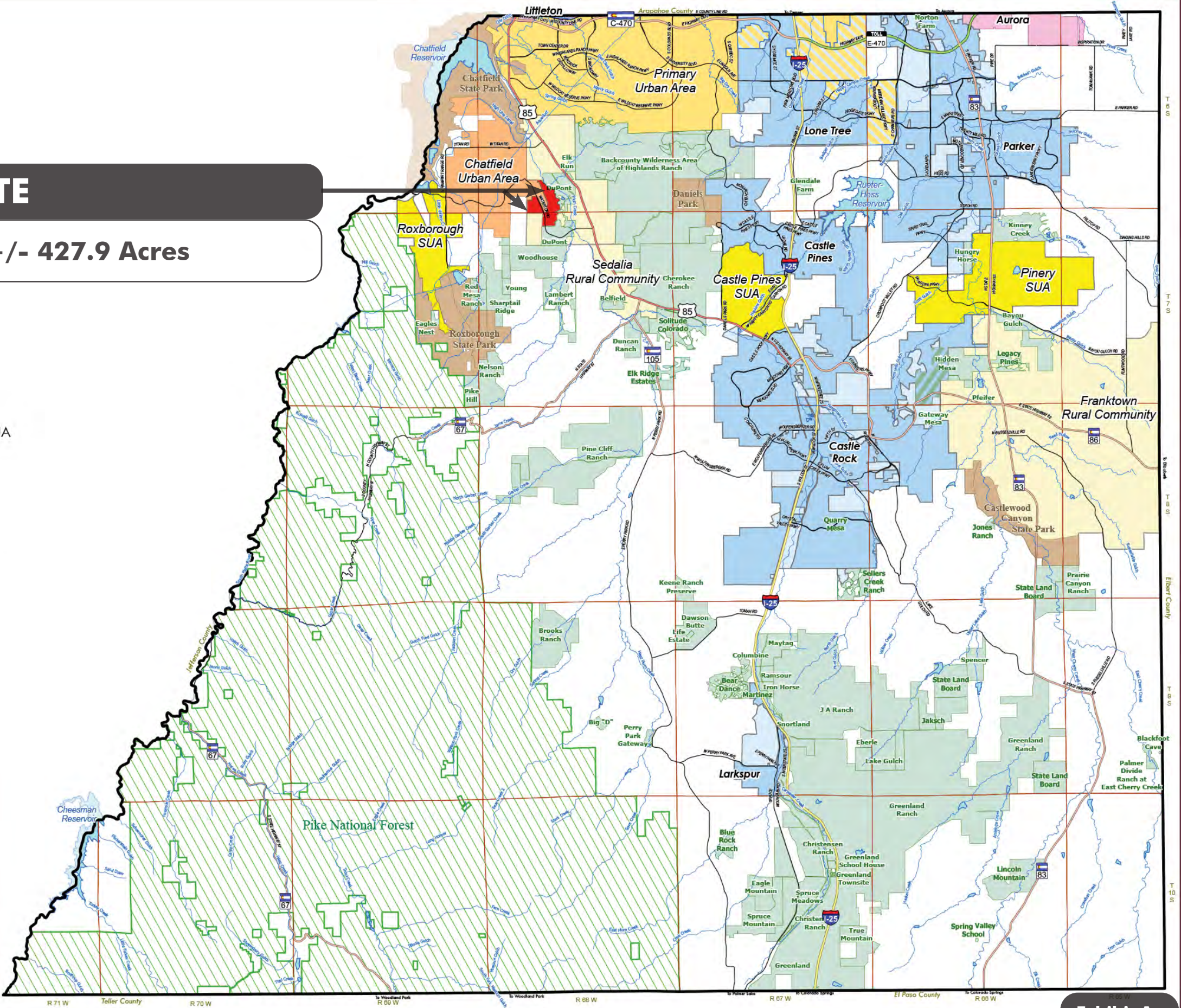
- Open Space
- County Open Space Within Incorporated Areas
- Parks
- Pike National Forest

- Townships
- Lakes
- Streams
- Interstate
- US Highway
- State Highway
- Toll Highway
- Major Road

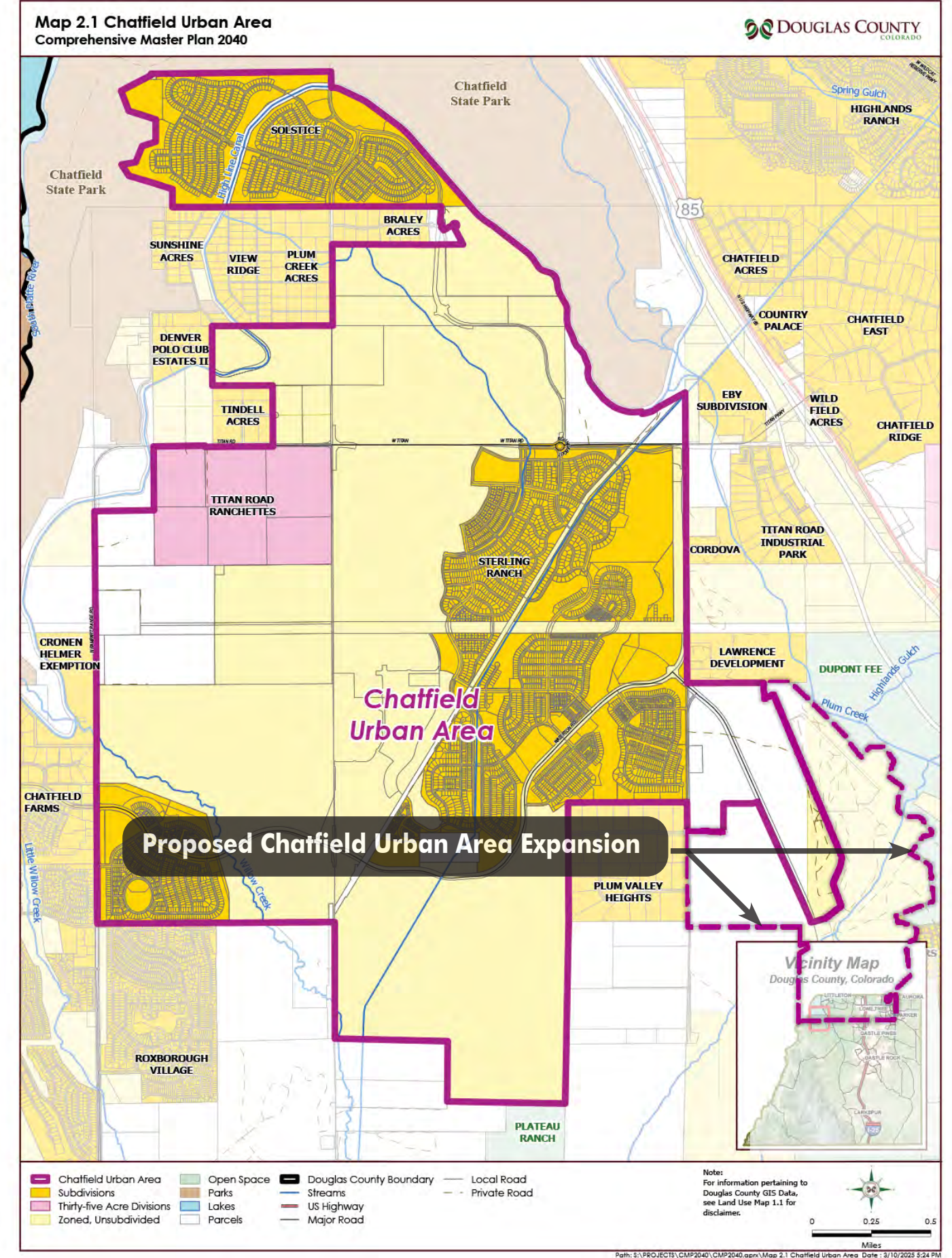
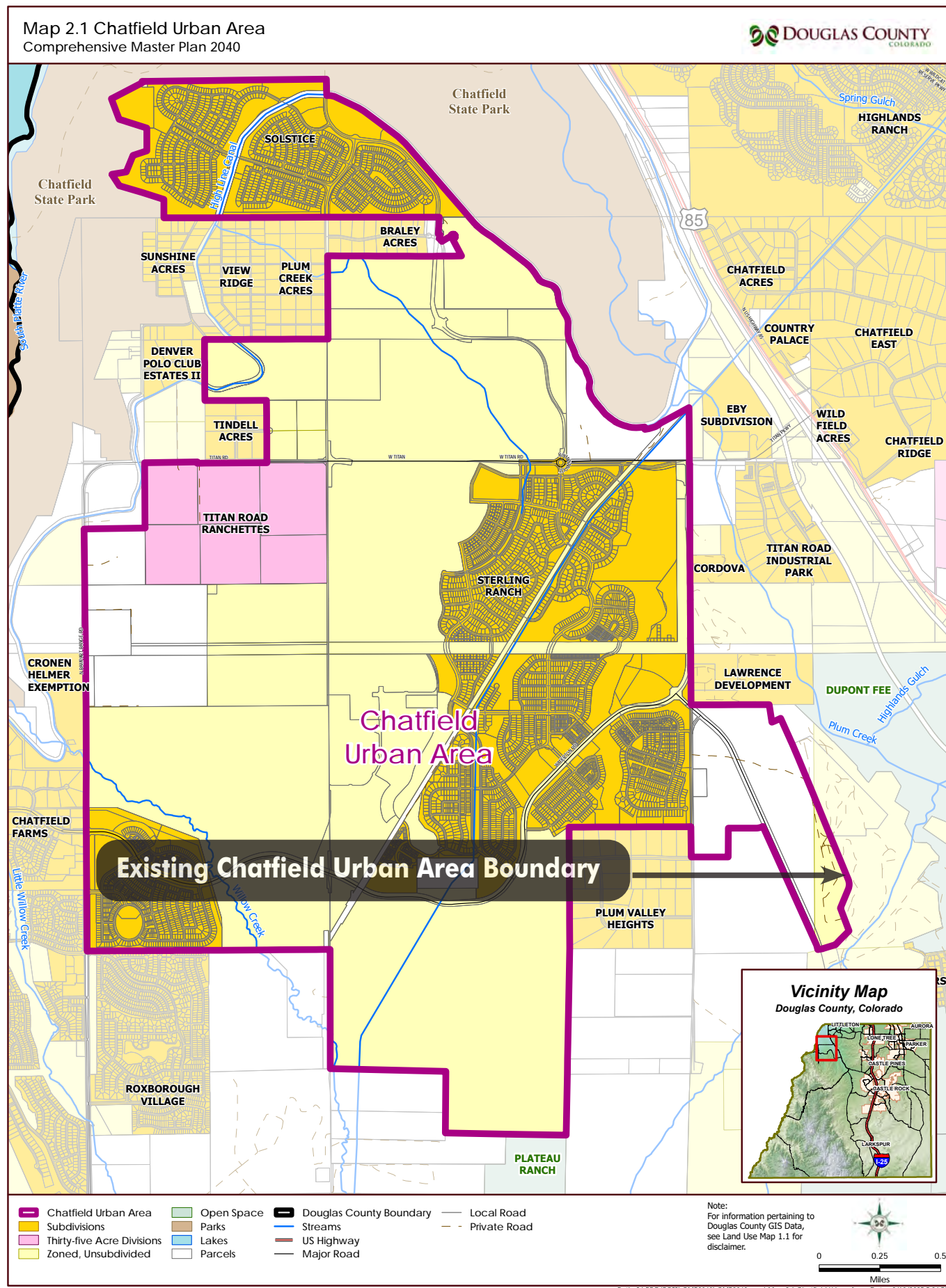


**SITE**

- +/- 427.9 Acres









# Map 4.1 Rural Communities Comprehensive Master Plan 2040

## Rural Communities

- 1. Louviers
- 2. Sedalia
- 3. Franktown

- Municipalities
- Parks
- Pike National Forest
- Townships
- Douglas County Boundary
- Lakes
- Streams
- Interstate
- US Highway
- State Highway
- Toll Highway
- Major Road

**SITE (+/- 427.9 Acres)**

**Waterton Business Park  
Expansion Areas and  
Conservation Easement**  
*(Project Site is Shown removed  
from Louviers Rural Community)*

