



Environmental Desktop Review

FOR

Bijou-Invicta Line

Prepared For:



City of Aurora
15151 E. Alameda Parkway
Aurora, CO 80012

Prepared By:



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Date Prepared: November 2024

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Wildlife Impact Management Plan Applicability Statement:

This project is located within the CPW-recommended 1/8-mile buffer around suitable burrowing owl habitat but was determined to not be located in any Colorado Parks and Wildlife (CPW) High Priority Habitat and, therefore, the City of Aurora Wildlife Impact Management Plan (WIMP) regulation is not applicable. This report provides the results of the desktop environmental site assessment for this location and outlines any applicable recommendations to ensure the protection of natural resources.

1. INTRODUCTION

RPG Resources (RPG), on behalf of Crestone Peak Resources Midstream, LLC (CPRM), conducted an environmental desktop review for the proposed Bijou-Invicta Line construction project to identify any wildlife or other natural resource constraint(s) present within or surrounding the proposed project area. This assessment was conducted in order to ensure CPRM's compliance with the City of Aurora Energy & Environment Division requirements Chapter 135 of Aurora City Code, Endangered Species Act (ESA), Colorado Nongame, Endangered, or Threatened Species Conservation Act, Bald and Golden Eagle Protection Act (BGEPA), Migratory Bird Treaty Act (MBTA), Clean Water Act (CWA), and other applicable requirements and recommendations. This report summarizes the project location, methods, assessment results, and recommendations to avoid or minimize impacts to wildlife and other natural resources.

2. PROJECT LOCATION

CPRM's Bijou-Invicta Line (Site) is in Sections 21, 27, and 28 of Township 3 South, Range 65 West in the City of Aurora, Adams County, CO. Boundaries of the Site are defined as the limits of disturbance, including the temporary and permanent easements. The Site is in the Central High Plains, Southern Part Major Land Resource Area (MLRA) of the Western Great Plains Range and Irrigated Region Land Resource Region (LRR) of the Central High Plains, Southern Part Major Land Resource Region (MLRA; NRCS 2006), and the surrounding land types are cropland and oil and gas. The proposed project is approximately 8,660 feet and is proposed on a fifty-foot-wide easement that will ultimately contain a steel natural gas pipeline, six inches in diameter, a steel crude oil pipeline, six inches in diameter, a steel gas lift pipeline, six inches in diameter, and a two-inch fiber optic/telecom line. There are no proposed above ground appurtenances for this lateral, not including the surface appurtenances located on the well pads.

3. METHODS

RPG's desktop environmental site assessment included a desktop review of aerial imagery, agency-mapped sensitive natural resources, proprietary data collected by RPG from previous field surveys at the Site, and a site-specific U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consulting (IPaC) report. RPG's considerations included, but were not limited to, resources protected under the Bald and Golden Eagle Protection Act (BGEPA), Migratory Bird Treaty Act (MBTA), Endangered Species Act, Colorado Nongame, Endangered, or Threatened Species Conservation Act, and the Clean Water Act (CWA). Recommendations to avoid and minimize impacts to wildlife and other sensitive natural resources were provided based on the results of the assessment and the proposed start date. Detailed results of the ESA are provided in Appendix A and an Environmental Site Map is provided in Appendix B.

4. RESULTS & RECOMMENDATIONS

4.1. Eagles

No bald eagle (*Haliaeetus leucocephalus*) or golden eagle (*Aquila chrysaetos*) nests are mapped within ½-mile of the Site. There are trees suitable for eagle nesting approximately 0.14-mile east of the northern-central portion of the Site. Due to close proximity to residential activity, no nearby perennial water source, and no immediate foraging area, this is considered poor quality habitat for eagle nesting. There are no CPW-mapped bald eagle winter night roost areas or CPW-mapped bald eagle nests within ½ mile of the Site.

If construction begins between December 1 and July 31, eagle nesting surveys will be conducted by qualified biologists.

4.2. Burrowing Owls

There is suitable burrowing owl (*Athene cunicularia*) habitat (i.e., black-tailed prairie dog colony) approximately 628-feet east of the northern terminus of the Site, within the CPW-recommended 1/8-mile (660-foot) buffer for burrowing owls. This habitat consisted of 4 prairie dogs and 6 burrows at the time of the most recent field survey, and only a small portion of this habitat is present within the recommended buffer. This habitat was surveyed during the 2024 burrowing owl season and no burrowing owls or signs of burrowing owl presence were observed.

If construction begins between March 15 and October 31, a burrowing owl habitat survey is recommended by qualified biologists prior to construction to confirm no new habitat has been established. Following the assessment, qualified biologists will conduct burrowing owl surveys of the current habitat and any newly observed habitat, in accordance with CPW-recommended protocol.

4.3. Other Raptors

Suitable non-eagle raptor nesting habitat, including trees and artificial structures (e.g. utility poles, farming equipment, and oil and gas structures), are present within ½ mile of the Site. No nests are mapped within ½-mile of the Site.

If construction begins between February 1 and August 15, raptor nesting surveys will be conducted by qualified biologists.

4.4. Migratory Birds

Suitable non-raptor nesting habitat, including surface topography, vegetation, and artificial structures, is present at and immediately surrounding the Site.

If construction begins between April 1 and August 31, migratory bird nesting surveys will be conducted by qualified biologists.

4.5. High Priority Habitats

The Site is not located within any CPW-mapped High Priority Habitats.

No further action is recommended.

4.6. Threatened, Endangered, and Candidate Species

The USFWS IPaC report included six (6) federally listed threatened, endangered, or candidate species that have potential to exist within or in the immediate vicinity of the Site. No suitable habitat for any of these species was identified at the Site.

Table 1. IPaC Report Results & Assessment

Species	Habitat Description	Results & Recommendations
Birds		
Piping plover <i>Charadrius melodus</i> Threatened	The piping plover breeds on bare sand or gravel beaches, sandbars, or islands along rivers, reservoirs, or alkaline wetlands. Limited numbers breed in Colorado.	No suitable habitat is present within the Site. No recommended action.
Whooping crane <i>Grus americana</i> Endangered	The whooping crane breeds, nests, migrates, winters, and forages in wetlands, coastal marshes, estuaries, inland marshes, lakes, ponds, wet meadows and rivers, and agricultural fields. There are no known populations currently present in Colorado.	No suitable habitat is present within the Site. No recommended action.
Fish		
Pallid sturgeon <i>Scaphirhynchus albus</i> Endangered	The pallid sturgeon is a bottom-oriented, large river obligate fish that is found in the Missouri and Mississippi rivers and some tributaries. There are no known populations currently present in Colorado.	No suitable habitat is present within the Site. No recommended action.
Insects		
Monarch butterfly <i>Danaus plexippus</i> Candidate	Although Critical Habitat Documents are not currently available for the monarch butterfly, this species almost exclusively utilizes milkweed (<i>Asclepias</i> spp.) for breeding and reproduction. During spring migration, this species will commonly nectar on <i>Coreopsis</i> spp., <i>Viburnum</i> spp. and <i>Phlox</i> spp. Additionally, western populations rely on various native and non-native evergreen and deciduous trees as roost sites during nighttime migration periods. Note: The monarch butterfly is a candidate species and not yet listed or proposed for listing.	No suitable habitat is present within the Site. No recommended action.
Flowering Plants		
Ute ladies'-tresses <i>Spiranthes diluvialis</i> Threatened	The Ute ladies'-tresses is primarily found in moist meadows and may also be found in seasonally flooded river terraces, sub-irrigated or spring-fed abandoned stream channels, lakeshores, irrigation canals, berms, levees, irrigated meadows, reservoirs, and other similar habitat.	No suitable habitat is present within the Site. No river depletions or other impacts to potential downstream habitats expected to occur. No recommended action.
Western prairie fringed orchid <i>Platanthera praeclara</i> Threatened	The western prairie fringed orchid is a perennial species most often found in unplowed, calcareous prairies and sedge meadows and dependent on moist soils. There are no known populations currently present in Colorado.	No suitable habitat is present within the Site. No river depletions or other impacts to potential downstream habitats expected to occur. No recommended action.

The Colorado state-listed T&E species that have potential to occur in the same area as the Site are the burrowing owl and the Preble's meadow jumping mouse (PMJM). The burrowing owl is discussed above in Section 4.2. The majority of the Site lies within the USFWS PMJM Block Clearance Zone, except for approximately 500 feet at the eastern terminus. The Site shows no suitable PMJM habitat in the most recent aerial imagery.

No further action is recommended.

4.7. Wetlands, Waters of the U.S., and Floodplains

There are no wetlands or waters of the U.S. within 500 feet of the Site. Three (3) National Hydrography Dataset (NHD) and National Wetland Inventory (NWI)-features are mapped within 500 feet: Feature one, an unnamed NHD-mapped stream/river intersects the eastern portion of the Site; Feature two, a tributary of Second Creek, an NWI-mapped riverine intersects the northern terminus of the Site at the Bijou 3-65 19-24 Permanent Easement; and Feature three, another tributary of Second Creek, an NWI-mapped riverine is located approximately 432-feet west of the northern portion of the Site. However, in previous environmental surveys, the most recent being in July 2024, as well as drone footage from September 2024, no ordinary high-water mark (OHWM) or wetland vegetation was observed where these three features are mapped; therefore, these features are not a concern for this project. No impacts to any wetlands or waters of the U.S. are expected as a result of this project.

The Site is not located within any Federal Emergency Management Agency (FEMA)-mapped 100-year floodplain. No impacts to floodplains are expected as a result of this project.

No further action is recommended.

4.8. Noxious Weeds and Vegetation

The Site is surrounded by cropland.

No further action is recommended.

4.9. Safety and Other Concerns

No safety or other concerns were identified from the desktop review.

No recommended action.

5. SUMMARY

No active wildlife constraints were found at the time of the desktop review. However, suitable nesting habitat for eagles, non-eagle raptors, and burrowing owls, as well as other migratory birds was identified within applicable CPW-recommended species-specific buffers. If construction begins between December 1 and October 31, additional wildlife surveys are recommended to ensure no new active nests or other wildlife constraints are present.

No streams, wetlands, or other waterbodies were identified within or adjacent to the Site. No other natural resource constraints or safety issues were identified.

CPRM and all associated contractors agree to adhere to all relevant operating requirements outlined in this plan. In addition to the standard operating requirements, supplementary measures and protocols may be implemented in response to specific needs identified at the Site.

LITERATURE CITED

- Colorado Natural Heritage Program. 1997+. Colorado Rare Plant Guide. www.cnhp.colostate.edu. Latest update: November 2023.
- Colorado Parks and Wildlife. 2020. Colorado Parks and Wildlife's (CPW) Recommendations to Avoid and Minimize Impacts to Wildlife from Land Use Development in Colorado. Colorado Department of Natural Resources.
- Colorado Parks and Wildlife. 2020. Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors. Colorado Department of Natural Resources.
- Colorado Parks and Wildlife. Species Profiles. <https://cpw.state.co.us/learn/Pages/SpeciesProfiles.aspx>. Accessed November 2024.
- National Resources Conservation Service. 2006. National Coordinated Major Land Resource Area (MLRA) Version 4.2. U.S. Department of Agriculture, National Soil Survey Center.
- U.S. Fish and Wildlife Service. 2016. Draft Revised Recovery Plan for the Northern Great Plains Piping Plover (*Charadrius melodus*).
- U.S. Fish and Wildlife Service. 2021. Featured Pollinator Monarch butterfly (*Danaus plexippus plexippus*). https://www.fws.gov/pollinators/features/Monarch_Butterfly.html. Accessed November 2024.
- U.S. Fish and Wildlife Service. IPaC Information for Planning and Consultation. <https://ecos.fws.gov/ipac/>. Accessed November 2024.

APPENDIX A

Environmental Site Assessment

Project Name:	Bijou-Invicta Line	County, State:	Adams County, CO
Report Date:	11/7/2024	Region:	DJ Basin
Inspection Date:	N/A	Location:	S21, 27, & 28 of T3S R65W
Inspector Name:	Kelsie Johnson	Project Lat-Long:	39.769237, -104.670833
ESA Type:	Linear Easement		

RAPTORS

Bald and Golden Eagle Habitat:	Yes	Status:	TEMPORARILY CLEARED
Bald and Golden Eagle Active Nests:	No		
There is suitable bald eagle (<i>Haliaeetus leucocephalus</i>) nesting habitat (e.g., trees) within ½ mile of the Site. There are no mapped eagle nests within 1/2-mile of the Site.			
Bald Eagle Winter Night Roost/Communal Roost:	No	Status:	CLEARED
There are no CPW-mapped bald eagle winter night roosts / communal roosts within 1/2 mile of the Site.			
Burrowing Owl and Black-Tailed Prairie Dog Habitat:	Yes	Status:	TEMPORARILY CLEARED
Burrowing Owl Nests:	No		
There is suitable burrowing owl (<i>Athene cunicularia</i>) habitat (i.e, black-tailed prairie dog colony) approximately 628-feet east of the northern terminus of the Site, within the CPW-recommended 1/8-mile (660-foot) buffer for burrowing owls. This habitat consisted of 4 prairie dogs and 6 burrows at the time of the most recent field survey, and only a small portion of this habitat is present within the recommended buffer.This habitat was surveyed during the 2024 burrowing owl season and no burrowing owls or signs of burrowing owl presence were observed.			
Other Raptor Habitat:	Yes	Status:	TEMPORARILY CLEARED
Other Raptor Nests:	No		
Suitable non-eagle raptor nesting habitat is present within ½ mile of the Site.			

OTHER BIRDS

Grouse or Prairie Chicken High Priority Habitats:	No	Status:	CLEARED
The Site is not within any grouse or prairie chicken HPHs.			
Non-Raptor Migratory Bird Habitat:	Yes	Status:	TEMPORARILY CLEARED
Non-Raptor Migratory Bird Nests:	No		
Suitable non-raptor nesting habitat (e.g., surface topography and vegetation) is present at and immediately surrounding the Site.			

MAMMALS

Big Game High Priority Habitats:	No	Status:	CLEARED
The Site is not located within any CPW-mapped High Priority Habitats.			
Preble's Meadow Jumping Mouse (PMJM) Habitat:	No	Status:	CLEARED
There is no suitable PMJM habitat at the Site. The majority of the proposed pipeline lies within the USFWS PMJM Block Clearance Zone, except for approximately 500 feet at the eastern terminus.			
Swift Fox Habitat:	No	Status:	CLEARED
Swift Fox Dens:	No		
The Site is not within CPW-mapped swift fox overall range. Not a constraint.			

VEGETATION

Ute ladies'-tresses orchid (ULTO):	No	Status:	CLEARED
There is no suitable Ute ladies'-tresses orchid habitat at the Site. Not a constraint.			
Colorado State Noxious Weeds - List A,B,C:	No	Status:	CLEARED
The Site is surrounded by cropland.			
Current Land Use:	Cropland and O&G		Future Land Use: Cropland and O&G

AQUATIC HABITATS

Aquatic High Priority Habitats:	No	Status:	CLEARED
There are no Aquatic High Priority Habitats within 1000 feet of the Site.			
Wetlands/WOUS:	No	Status:	CLEARED
Three National Hydrography Dataset (NHD)/National Wetland Inventory (NWI)- features are mapped within 500 feet of the Site. However, no ordinary high water mark (OHWM) or wetland vegetation was observed where these features are mapped; therefore, these features are not a concern for this project.			

OTHER/SAFETY

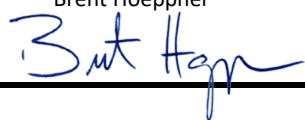
Other Issues:	No	Status:	CLEARED
None.			
Safety Issues:	No	Status:	CLEARED
None.			

FIELD DATA COLLECTED

GENERAL COMMENTS

Site Photos?	No	There is suitable eagle, burrowing owl, non-eagle raptor, and migratory bird nesting habitat present. Additional wildlife surveys are recommended if construction begins between December 1 and October 31 to ensure no sensitive wildlife resources will be impacted.
Reference Area Photos?	No	
Updated Aerial Imagery Taken?	No	
Ground Control Points?	No	
Wetland Determination Data Form?	No	

Reviewed By:
Signature:

Brent Hoepfner


Title: Wildlife Project Manager

APPENDIX B

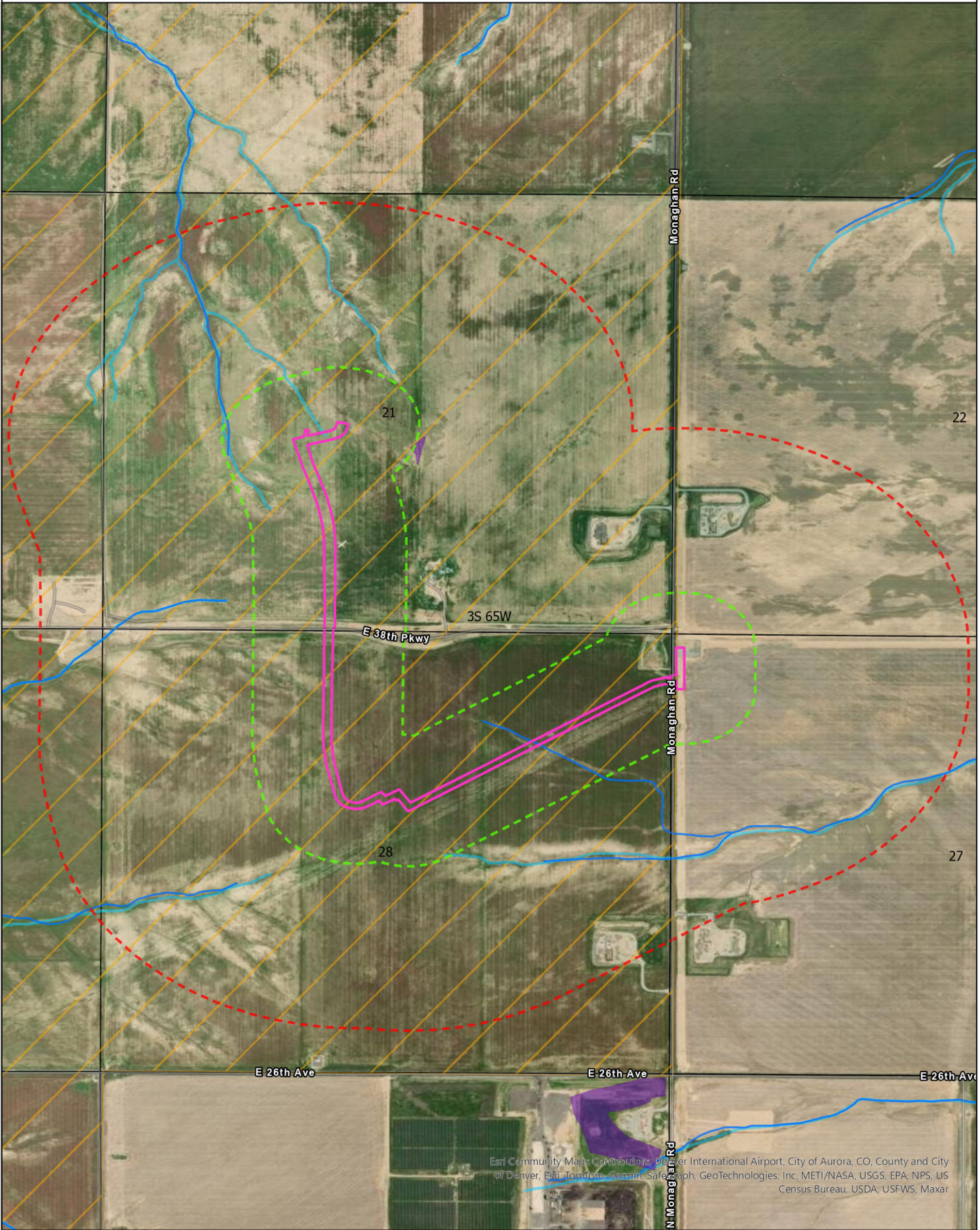
Environmental Site Map

CRESTONE PEAK RESOURCES MIDSTREAM, LLC
(CIVITAS RESOURCES)
BIJOU-INVICTA LINE
SEC 21, 27, & 28, T3S, R65W, 6th P.M.
ADAMS COUNTY, COLORADO

Produced for:



Produced by:



ENVIRONMENTAL
SITE MAP

- | | |
|-----------------------|---------------------------|
| Linear Easement | NHD-Mapped Stream/River |
| 0.125-Mile Buffer | NWI-Mapped Riverine |
| 0.5-Mile Buffer | PMJM Block Clearance Zone |
| Burrowing Owl Habitat | |

Projection: WGS 1984
Date: 11/7/2024
Drafted by: KNJ

0 500 1,000
Feet

1 inch equals 1,125 feet

A simple black arrow pointing upwards, labeled with a small "N" at the top.