ERO

Consultants in Natural Resources and the Environment

Natural Resources Assessment
Crowsnest Due Diligence
Southwest of Stroh Road and Crowfoot Valley Road
Castle Rock, Douglas County, Colorado

Prepared for—

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ERO Project #25-293

December 8, 2025

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Ventana Capital retained ERO Resources Corporation (ERO) to provide a natural resources assessment for the Crowsnest property (project) southwest of the intersection at Stroh Road and Crowfoot Valley Road in Castle Rock, Douglas County, Colorado (project area). ERO assessed the project area for potential wetlands and other waters of the U.S.; threatened, endangered, proposed, and candidate (T&E) species habitat, and general wildlife use. Below is a summary of the resources found in the project area and recommendations or future actions necessary based on the current site conditions and federal, state, and local regulations.

The natural resources and associated regulations described in this report are valid as of the date of this report and may be relied upon for the specific use for which it was prepared by ERO under contract to Ventana Capital. Because of their dynamic natures, site conditions and regulations should be reconfirmed by a qualified consultant before relying on this report for a use other than that for which ERO was contracted.

Wetlands and Other Waters of the U.S. – Two drainages and two additional ordinary high water mark (OHWM) features occur in the project area. The two main drainages (Lemon Gulch and an unnamed drainage [Drainage 1]) function as the primary riparian corridors on-site. Drainage 1 lacks a defined bed and bank, while Lemon Gulch is a dry sandy wash with a few small wetland pockets and a more clearly defined channel. The two additional OHWMs do not function as riparian corridors; one is narrow and minimally developed, and the other is associated with a stock pond that contained water during the 2025 site visit. ***If any work is planned in any of these features, a jurisdictional determination should be requested from the U.S. Army Corps of Engineers (Corps).*** Should the Corps determine that these areas are jurisdictional, and if work is proposed in or below these features, a Section 404 Permit would be required for the placement of dredged or fill material. If the areas are considered nonjurisdictional, they may be considered state waters and regulated under the Colorado State Dredge and Fill Program. If no work is planned in these areas, no further action is necessary.

T&E Species – The project area does not contain habitat for any federally listed T&E species. The majority of the project area is in the block clearance zone for Preble's meadow jumping mouse (Preble's), and the entire project area is outside of the Douglas County Riparian Conservation Zone. Additionally, a viable population of Preble's is unlikely to exist in the project area because the project area lacks the riparian shrub habitat needed for Preble's to exist. The project area is not conducive to the establishment of Ute ladies'-tresses orchid (ULTO) because the project area does not contain a perennial tributary to the South Platte River and is in Douglas County, and the project area does not fall within U.S. Fish and Wildlife Service (Service) guidelines for ULTO surveys. If any of the drainages would be impacted by project activities, ERO recommends submitting a habitat assessment to the Service requesting confirmation the project area lacks habitat for Preble's and ULTO and that no further consultation with the Service is required.

Prairie Dogs – The project area contains remnants of black-tailed prairie dog colonies, where several inactive burrows were observed. If prairie dogs move back into the project area and removal becomes necessary, ***Colorado Parks and Wildlife (CPW) recommends removing them in a humane manner before any earthwork or construction takes place***. Currently, Douglas County does not have any regulations or policies pertaining to prairie dogs on private land.

Burrowing Owls – Burrowing owls could be impacted by the project if work would occur within the CPW-recommended 0.125-mile (660-foot) buffer, or as far out as the 0.25-mile (1,320-foot) buffer, of any prairie dog burrows (CPW 2021a). ***If work would occur within the recommended buffer of any burrow during the March 15 through October 31 breeding season, a burrowing owl survey should be conducted***. If owls are present in the project area, activities should be restricted within 660 feet of nest burrows until the owls have migrated from the site, which can be determined through monitoring.

Migratory Birds – Migratory birds, including raptors, and any active nests are protected under the Migratory Bird Treaty Act. ERO observed four inactive raptor nests in the project area during the 2025 site visit. The raptor nests could be impacted by the project if tree removal activities would occur.

The best way to avoid impacting migratory birds is to conduct ground-clearing activities and construction activities during the nonnesting season. The Eastern Colorado Field Office of the Service (Service 2022) and Colorado Department of Transportation (Colorado Department of Transportation 2011) have identified the primary nesting season for migratory birds in eastern Colorado as occurring from April 1 to August 31. However, some birds (e.g., eagles, owls, and red-tailed hawks) can nest as early as February or March. Because of variability in the breeding seasons of various bird species, additional nest surveys during the nesting season may also be warranted. ***ERO recommends that a nest survey be conducted within one week prior to construction*** to determine if any active nests are present in or near the project area so they can be avoided. If active nests are found, any work that would destroy the nests should not be conducted until the birds have vacated the nests. If possible, ground-clearing activities should occur outside of the migratory bird breeding season, generally April 1 through August 31.

Other Wildlife – The project area occurs in mule deer, white-tailed deer, mountain lion, elk, and black bear overall range (Natural Diversity Information Source 2024). Portions of the project area is also within mule deer summer and winter range. No other sensitive species occur in the project area that would be significantly adversely affected by the proposed project. Overall, surrounding and continuing development contributes to a decline in the number and diversity of wildlife species nearby and to a change in species composition.

Natural Resources Assessment
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Castle Rock, Douglas County, Colorado

December 8, 2025

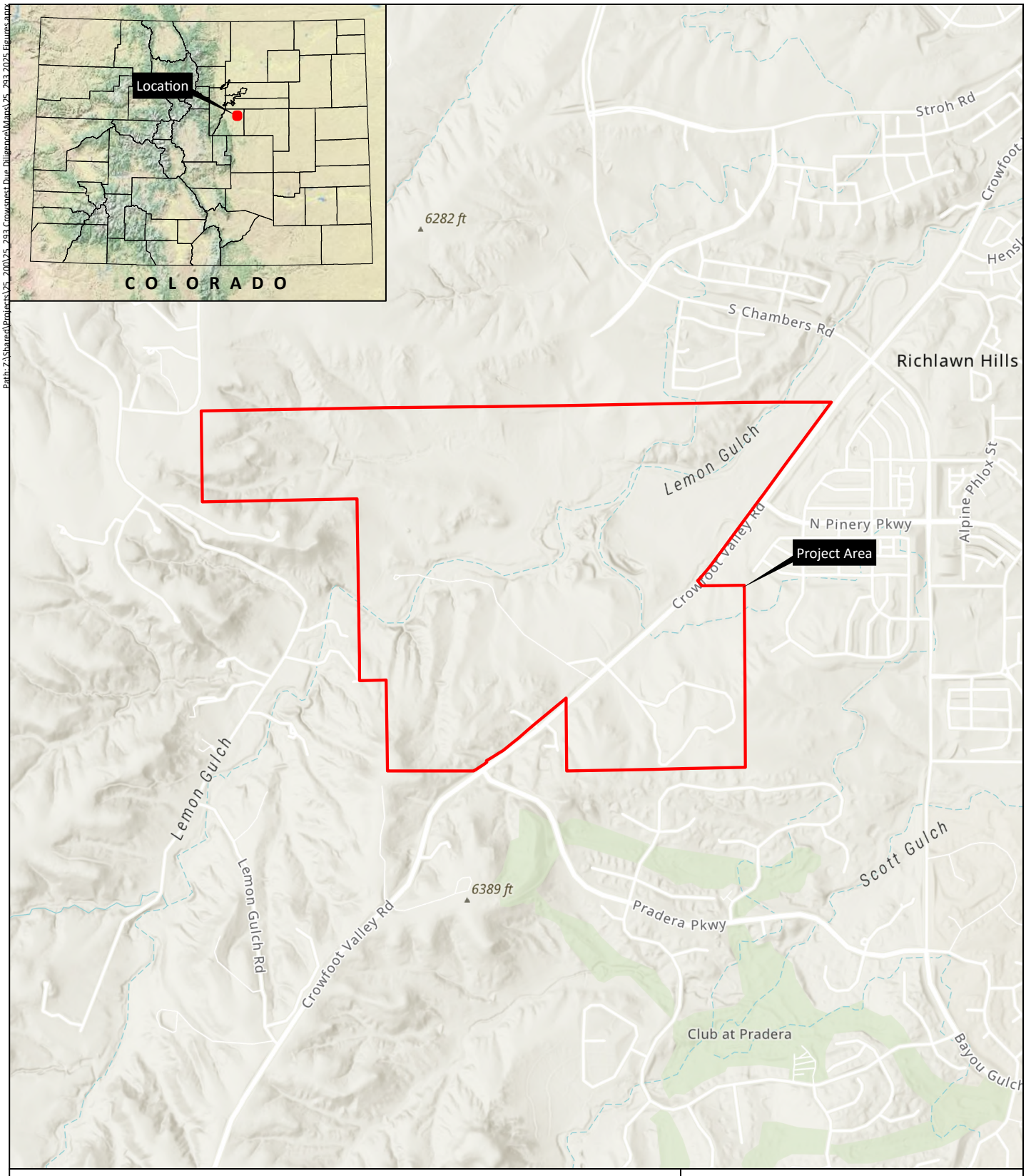
Introduction

Ventana Capital retained ERO Resources Corporation (ERO) to provide a natural resources assessment for the Crowsnest property (project) southwest of the intersection at Stroh Road and Crowfoot Valley Road in Castle Rock, Douglas County, Colorado (project area; Figure 1). On November 19, 2025, Emma Clary, a biologist with ERO, assessed the project area for natural resources (2025 site visit). During this assessment, activities included a review of potential wetlands and other waters of the U.S. (WOTUS); identification of suitable habitat for federally listed threatened, endangered, proposed, and candidate (T&E) species; and identification of other natural resources. In addition to the information gathered during the 2025 site visit, natural resource information was obtained from existing databases and sources such as aerial photography, the Colorado Natural Diversity Information Source (NDIS), Douglas County Riparian Conservation Zone mapping, Colorado Parks and Wildlife (CPW) map databases, Colorado Natural Heritage Program, and other sources. This report provides information on existing site conditions and resources, as well as current regulatory guidelines related to those resources. ERO assumes the landowner is responsible for obtaining all federal, state, and local permits for construction of the project.

The natural resources and associated regulations described in this report are valid as of the date of this report and may be relied upon for the specific use for which it was prepared by ERO under contract to Ventana Capital. Because of their dynamic nature, site conditions and regulations should be reconfirmed by a qualified consultant before relying on this report for a use other than that for which ERO was contracted.

Project Area Location

The project area is in Sections 7, 8, and 9, Township 7 South, Range 66 West of the 6th Principal Meridian in Douglas County, Colorado (Figure 1). The UTM coordinates for the approximate center of the project area are 516664mE, 4367471mN, Zone 13 North. The longitude/latitude of the project area is 104.806309°W/39.456645°N. The elevation of the project area is approximately 6,200 feet above sea level. Photo points of the project area are shown on Figure 2, and the photo log is in Appendix A.



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Crowsnest Development

Sections 7, 8, and 9, T7S, R66W; 6th PM

UTM NAD 83: Zone 13N; 516664mE, 4367471mN

Longitude 104.806309°W, Latitude 39.456645°N

USGS Castle Rock North, CO Quadrangle

Douglas County, Colorado

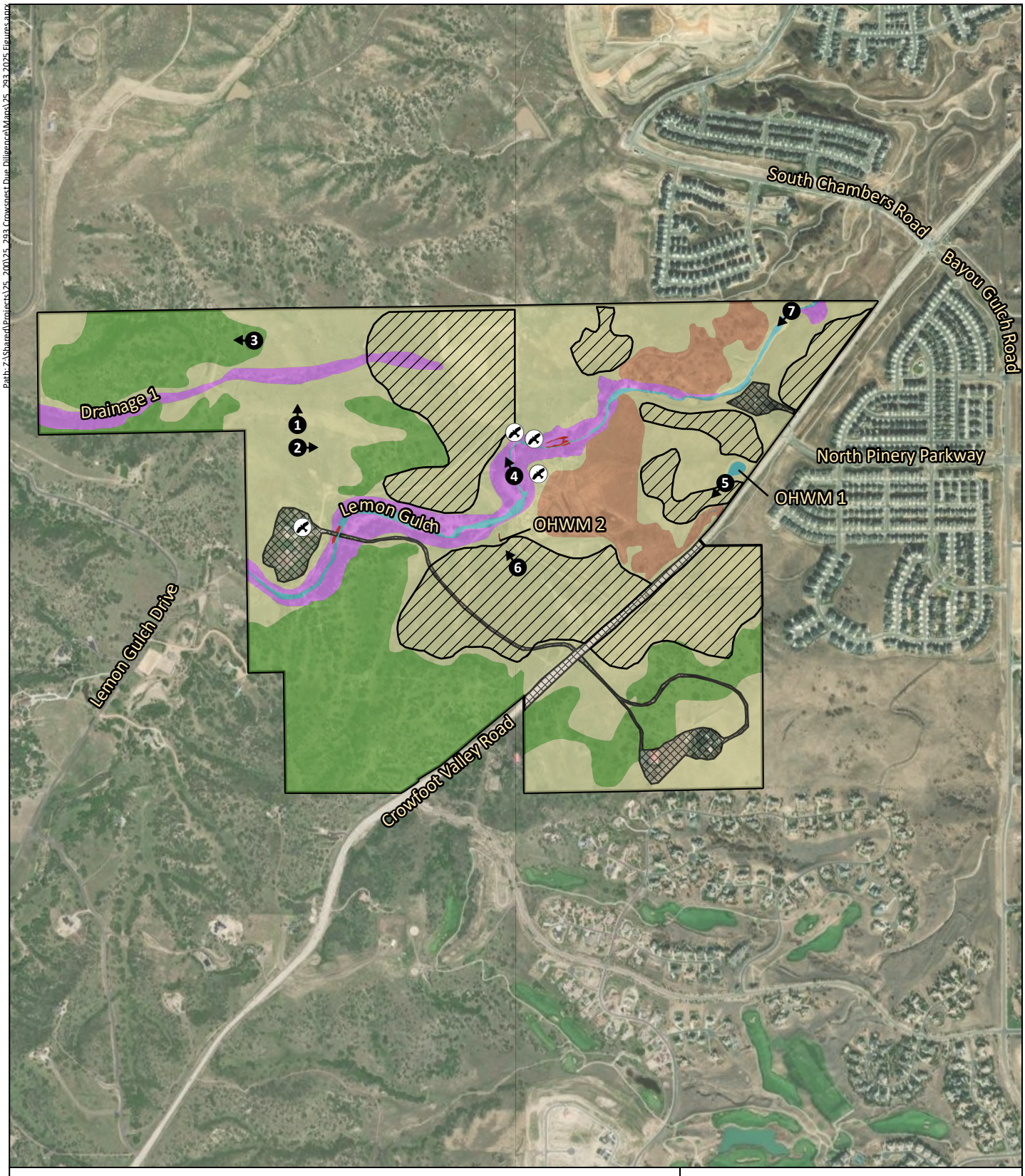
0 1,000 2,000 feet

N

Figure 1
Vicinity Map

Prepared for: Ventana Capital, LLC
File: 25_293 2025 Figures.mxd [dlH]
November 18, 2025

ERO Resources Corp.



Crowsnest Development

- Project Area
- Inactive Raptor Nest
- Inactive Prairie Dog Colony
- Ordinary High Water Mark
- Potential Wetland
- Oak Shrubland
- Riparian Corridor
- Upland Grassland
- Upland Shrubland
- Disturbed
- Photo Point

0 750 1,500 feet

N

Figure 2
Existing Conditions

Prepared for: Ventana Capital, LLC
File: 25_293 2025 Figures.mxd [dlH]
December 2, 2025

ERO Resources Corp.

Project Area Description

The U.S. Department of Agriculture (USDA) has mapped the project area within the Southern Rocky Mountain Foothills Major Land Resource Area, which is mainly characterized by rugged mountains with some broad valleys and remnants of high plateaus (United States Department of Agriculture, Natural Resources Conservation Service 2022). The climate of the area is typical of midcontinental semiarid temperate zones, but the strong rain shadow effect of the Southern Rocky Mountains makes the area somewhat drier. The average annual precipitation is between 9 inches in certain valleys and 63 inches on some mountain peaks (USDA, NRCS 2022). The topography of the project area consists of large rolling ridges transitioning into tapered drainage basins (Photo 1).

The project area is bounded by undeveloped land to the north, Crowfoot Valley Road and residential homes to the south, undeveloped land and a recently constructed residential neighborhood to the east, and scattered residential properties to the west (Figure 2). The project area consists of land that has been previously disturbed by grazing, as well as undisturbed open land (Figure 2).

The project area contains four primary vegetation communities including upland grasslands, oak shrublands, upland shrublands, and riparian drainage corridors. The upland grasslands are dominated by upland species including blue grama (*Bouteloua gracilis*), smooth brome (*Bromus inermis*), soapweed yucca (*Yucca glauca*), slimspike threeawn (*Aristida longespica*), prickly pear cactus (*Opuntia polyacantha*), and sand dropseed (*Sporobolus cryptandrus*) (Photo 2). The oak shrublands are dominated by Gambel oak (*Quercus gambelii*) and threeleaf sumac (*Rhus trilobata*) (Photo 3). The upland shrublands are dominated by rubber rabbitbrush (*Ericameria nauseosa*). The riparian drainage corridors are dominated by plains cottonwood (*Populus deltoides*) and crack willow (*Salix fragilis*) (Photo 4).

Two drainages in the project area, Lemon Gulch and an unnamed drainage (Drainage 1), serve as riparian corridors for wildlife. Lemon Gulch contains minimal wetlands in the project area, while Drainage 1 contains no wetlands or ordinary high water mark (OHWM) and appears to be an upland vegetated swale. Two separate OHWMs are present in the project area, though they do not function as riparian corridors. OHWM 1 is associated with a stock pond; during the 2025 site visit, the pond held water, but OHWM 1 was dry, narrow, and minimally developed (Photo 5). OHWM 2 originates at a culvert and flows downslope toward Lemon Gulch. OHWM 2 contained flowing water during the 2025 site visit (Photo 6). Remnants of black-tailed prairie dog (*Cynomys ludovicianus*) colonies were observed in the project area during the 2025 site visit with all of the burrows having been abandoned.

Wetlands and Other Waters of the U.S.

Background

Clean Water Act (CWA)

The CWA protects the chemical, physical, and biological quality of WOTUS. The U.S. Army Corps of Engineers (Corps) Regulatory Program administers and enforces Section 404 of the CWA. Under Section

404, a Corps permit is required for the discharge of dredged or fill material into wetlands and other WOTUS (streams, ponds, and other waterbodies). Since the regulatory program was initiated, the definition of WOTUS has changed frequently due to United States Supreme Court (Supreme Court) decisions and new rules proposed by presidential administrations. On November 17, 2025, the U.S. Environmental Protection Agency and Corps announced a proposed rule amending the definition of "waters of the U.S." The proposed rule would change the jurisdictional status of many tributaries and wetlands due to proposed changes to definitions of "relatively permanent waters." The proposed rule introduces "wet season flowing or standing water" requirements for both tributaries and wetlands. Consistent with the 2023 Conforming Rule and March 12, 2025 EPA Memo, wetlands that do not directly abut or without a direct surface connection to tributaries or navigable waters are not jurisdictional WOTUS. The proposed rule also clarifies that features without relatively permanent flow would sever jurisdiction. Potential rulings and guidance in the future could change the results of this report regarding the jurisdictional status of waters and wetlands in the project area. While ERO may provide its opinion on the likely jurisdictional status of wetlands and waters, the Corps will make the final determination of jurisdiction based on the current rulings.

State Dredge and Fill Program

On May 6, 2025, the Colorado Legislature passed House Bill (HB) 24-1379, which created a dredge and fill permit program (program) for the State of Colorado. The program applies to all state waters, including wetlands, that are not protected under the federal CWA Section 404. If a CWA Section 404 Permit is obtained from the Corps, or the project has a valid approved jurisdictional determination from the Corps that was issued prior to May 25, 2023, then authorization from the state would not be required. The program requires authorization from the Colorado Department of Public Health and Environment (CDPHE) for the placement of dredged or fill material into state waters where the wetlands or open water have been determined to not be WOTUS. CDPHE has until December 31, 2025 to go through rulemaking, which will create general and individual permits similar to CWA Section 404 Permits.

Until the program is in place, starting January 1, 2025, Dredge and Fill Temporary Authorizations are required for activities in state waters that would have previously required a CWA Section 404 Permit. If a project would impact state waters that are not subject to federal jurisdiction, and either require a preconstruction notification or compensatory mitigation, the Temporary Authorization policy from CDPHE applies. Temporary Authorizations recognize Nationwide Permits (NWPs) and Regional General Permits (RGPs) issued by the Corps as valid authorizations to discharge dredged or fill material into state waters (Colorado Department of Public Health and Environment 2025). CDPHE is also drafting a separate Isolated State Waters General Authorization for discharges of dredge or fill material into isolated state waters, including isolated wetlands. Temporary authorizations can be issued for projects where permanent impacts on state waters would be less than 0.10 acre on wetlands or 0.03 acre on stream beds. If impacts would exceed those thresholds, HB 24-1379 states CDPHE may issue individual authorizations for the activities if they would result in net increases in the function and services of state waters (only to stream impacts), or the applicant shows proof of purchase of mitigation bank credits

that meet or exceed the compensatory mitigation requirements that would have been applicable under federal NWPs or state RGPs. Similar to Section 404 of the CWA, certain activities are exempt and there are exclusions for certain types of waters from HB 24-1379 regulatory requirements.

Project Area Conditions and Regulations

During the 2025 site visit, ERO surveyed the project area for wetlands, streambeds, and open waters; however, a jurisdictional wetland delineation following Corps guidelines was not conducted during this assessment. Prior to the 2025 site visit, ERO reviewed U.S. Geological Survey topographic quadrangle maps and aerial photography to identify mapped streams and areas of open water that could indicate wetlands or WOTUS. ERO also reviewed the proximity and potential surface water connection of wetlands to known jurisdictional WOTUS using aerial photo interpretation, landowner information, and information from the 2025 site visit.

During the 2025 site visit, ERO identified two primary drainages in the project area, Lemon Gulch and Drainage 1, as well as two additional OHWM features (OHWM 1 and OHWM 2). Lemon Gulch and Drainage 1 were generally dry during the 2025 site visit. OHWM 1 flows out of a stock pond in the project area and measured approximately 1 to 2 feet wide. At the time of the 2025 site visit, no water was flowing in OHWM 1, though water was present in the stock pond. OHWM 2 contained flowing water at the time of the 2025 site visit and measured approximately 2 to 3 feet wide along most of its length. An emergent wetland was also present at the lower end of OHWM 2. OHWM 1 and OHWM 2 do not function as riparian corridors and lack riparian vegetation. OHWM 2 did not connect to Lemon Gulch during the 2025 site visit; however, based on topography, it appears to have the potential to convey flow to Lemon Gulch during a high-flow event.

Lemon Gulch ranges from approximately 4 to 25 feet wide in the project area and contains a defined channel with a distinguishable bed and bank, along with evidence of historic flows (Photo 7). Lemon Gulch flows out of the project area and eventually into Cherry Creek, as mapped on the National Hydrography Dataset (U.S. Geological Survey 2022). Although Lemon Gulch has a connection to a known WOTUS, it is likely Lemon Gulch would not be considered a jurisdictional WOTUS under current regulations because it does not contain relatively permanent flow. Lemon Gulch would likely be considered a state water and regulated under the State Dredge and Fill Program.

Drainage 1 lacks a distinct channel or bed and bank and functions primarily as an upland vegetated swale with no evidence of an OHWM or wetland vegetation and, therefore, would not be considered a WOTUS or state waters.

Recommendations

Based on current site conditions, Lemon Gulch, Drainage 1, OHWM 1, and OHWM 2 are likely nonjurisdictional under federal criteria; however, Lemon Gulch and OHWM 2 may still be considered state waters and regulated under the State Dredge and Fill Program. If any impacts on these features are anticipated, ERO recommends requesting a jurisdictional determination from the Corps to confirm

the status of these features. Should any feature be determined a jurisdictional WOTUS, a Section 404 Permit would be required. If the features are confirmed nonjurisdictional, a state permit would likely be necessary for any proposed impacts.

Threatened, Endangered, Proposed, and Candidate Species

ERO assessed the project area for habitat for T&E species protected under the Endangered Species Act (ESA). Federally listed T&E species are protected under the ESA of 1973, as amended (16 United States Code [U.S.C.] 1531 et seq.). Significant adverse effects on a federally listed species or its habitat require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 or 10 of the ESA. The Service lists several T&E species with habitat in Douglas County, or that would be potentially affected by projects in Douglas County (Table 1).

Table 1. Federally listed T&E species potentially found in the project area or potentially affected by the project.

Common Name	Scientific Name	Status*	Habitat	Habitat Present or Potential to be Affected by Project?
Mammals				
Preble's meadow jumping mouse (Preble's)	*Zapus hudsonius preblei*	T	Shrub riparian/wet meadows	No habitat and most of the project area is located in the block clearance zone
Birds				
Piping plover**	*Charadrius melodus*	T	Sandy lakeshore beaches and river sandbars	No habitat and no depletions anticipated
Whooping crane**	*Grus americana*	E	Mudflats around reservoirs and in agricultural areas	No habitat and no depletions anticipated
Fish				
Pallid sturgeon**	*Scaphirhynchus albus*	E	Large, turbid, free-flowing rivers with a strong current and gravel or sandy substrate	No habitat and no depletions anticipated
Invertebrates				
Monarch butterfly	*Danaus plexippus plexippus*	PT	Dependent on milkweeds (*Asclepiadoideae*) as host plants and forage on blooming flowers; a summer resident	No
Suckley's cuckoo bumble bee	*Bombus suckleyi*	PE	Various habitats including prairies, grasslands, meadows, and woodlands between 6,000 and 10,500 feet in elevation where host species are present	No
Plants				
Ute ladies'-tresses orchid (ULTO)	*Spiranthes diluvialis*	T	Moist to wet alluvial meadows, floodplains of perennial streams, and around springs and lakes below 7,800 feet in elevation	No
Western prairie fringed orchid**	*Platanthera praeclara*	T	Moist to wet prairies and meadows	No habitat and no depletions anticipated

*T = Federally Threatened Species, E = Federally Endangered Species, PT = Federally Proposed Threatened Species, PE = Federally Proposed Endangered Species.
**Water depletions in the South Platte River may affect the species and/or critical habitat in downstream reaches in other counties or states.
Source: Service 2025.

The piping plover, whooping crane, pallid sturgeon, and western prairie fringed orchid are species that are affected by depletions to the Platte River system. Based on ERO's knowledge of the types of activities likely to be implemented as part of the development of the project area, there would be no depletions to the South Platte River. If the project includes activities that deplete water in the South Platte River, such as diverting water from a stream or developing new water supplies, these species could be affected by the project and consultation with the Service may be required. The proposed project would not directly

affect the monarch butterfly or Suckley's cuckoo bumble bee because of the lack of habitat in the project area.

Suitable T&E Species Habitat

During the 2025 site visit, ERO assessed the project area for habitat for Preble's and ULTO. Habitat for Preble's and ULTO is not present in the project area. The majority of the project area is in the Denver metro block clearance zone for Preble's (Service 2023). The portion of the project area not in the Denver metro block clearance zone contains no potential wetlands. In designating a block clearance zone, the Service eliminated the need for individuals or agencies to coordinate with the Service prior to conducting activities in habitat that otherwise would be deemed to have potential to support Preble's (Carlson 2000). Although not currently available on the Service's website, the block clearance zone has been renewed until February 3, 2028. Additionally, the project area is outside of the Douglas County Riparian Conservation Zone.

The project area does not contain habitat for ULTO because the project area does not contain a perennial tributary to the South Platte River and is in Douglas County; in addition, the project area does not fall within Service guidelines for ULTO surveys (Service 1992).

Because of the reasons listed above, ERO determined that Preble's and ULTO are unlikely to be present in the project area; therefore, no action is necessary regarding Preble's and ULTO.

Other Species and Habitats of Concern

Black-Tailed Prairie Dog

Species Background

The black-tailed prairie dog is a Colorado species of special concern (CPW 2021a). Black-tailed prairie dogs are important components of the short and mesic grasslands systems. Threats to this species include habitat loss and degradation, habitat fragmentation, disease (sylvatic plague), and lethal control activities. Typically, areas occupied by prairie dogs have greater cover and abundance of perennial grasses and annual forbs compared with unoccupied sites (Whicker and Detling 1988); (Witmer et al. 2000).

Black-tailed prairie dogs are commonly considered a "keystone" species because their activities (burrowing and intense grazing) provide food and shelter for many other grassland species and have a large effect on community structure and ecosystem function (Power et al. 1996). Prairie dogs can contribute to overall landscape heterogeneity, affect nutrient cycling, and provide nest sites and shelter for wildlife (Whicker and Detling 1988). Species such as black-footed ferret, burrowing owl, prairie rattlesnake, and mountain plover are closely linked to prairie dog burrow systems for food and cover. Prairie dogs also provide an important prey resource for numerous predators including American badger, coyote, red fox, bald eagle, golden eagle, ferruginous hawk, and other raptors. Prairie dogs also

can denude the surface by clipping aboveground vegetation and contributing to exposed bare ground by digging up roots (Kuford 1958); (Smith 1967).

Potential Habitat and Effects

ERO observed remnants of black-tailed prairie dog colonies in the project area during the 2025 site visit, none of which were active (Figure 2). Although prairie dogs are not protected under the ESA, CPW recommends attempting to remove or exterminate prairie dogs prior to bulldozing an active prairie dog town for humane reasons. Currently, Douglas County does not have any regulations or policies pertaining to prairie dogs on private land. Additionally, Castle Rock allows private property owners to remove prairie dogs using a licensed contractor.

Recommendations

If prairie dogs move back into the project area and must be removed for any proposed activities, two options typically exist: relocation and extermination. Currently, relocation to other parts of Colorado is not an option due to limited resources for new populations, and CPW requires permits to move prairie dogs. Private companies can be hired to relocate prairie dogs, although relocation sites are difficult to secure. If extermination of prairie dogs is the only option, several independent companies provide treatments for prairie dog control. Prior to any work that would disturb a colony from March 15 through October 31, colonies should be surveyed for western burrowing owls. CPW recommends attempting to remove or exterminate prairie dogs prior to bulldozing an active prairie dog town for humane reasons.

Western Burrowing Owl

Species Background

The western burrowing owl (burrowing owl) is a small migrant owl listed by the state of Colorado as a threatened species and is federally protected under the Migratory Bird Treaty Act (MBTA). Primary threats to the burrowing owl include habitat loss and fragmentation, anthropogenic sources of mortality such as vehicular collisions, and loss of wintering grounds, largely in Mexico (McDonald et al. 2004).

In general, burrowing owls are found in grasslands with vegetation less than 4 inches high and a relatively large proportion of bare ground (Gillihan and Hutchings 2000). In Colorado, burrowing owls are usually associated with black-tailed prairie dog colonies (Andrews and Righter 1992). More than 70 percent of sightings reported in Colorado Breeding Bird Atlases were in prairie dog colonies (Colorado Bird Atlas Partnership 2016).

Burrowing owls usually arrive on their breeding grounds around mid-March to early April and remain until September (Haug and Oliphant 1990). Burrowing owls are typically present in Colorado from March 15 through October 31, with breeding from mid-April through early/mid-August (Andrews and Righter 1992; Colorado Bird Atlas Partnership 2016). CPW suggests conducting burrowing owl clearance surveys in prairie dog towns that are subject to poisoning or construction projects during the period from March 15 through October 31 (CPW 2021b).

Potential Habitat and Effects

The prairie dog burrows in and adjacent to the project area are potential habitat for burrowing owls. Inadvertent killing of burrowing owls could occur during prairie dog poisoning, construction, or earthmoving projects during the breeding period, as well as up to a month before egg laying and several months after young have fledged. CPW has a recommended buffer of 0.125 mile (660 feet) surrounding active burrowing owl nests during the nesting season. CPW also recommends a 0.25-mile (1,320-foot) buffer surrounding active burrowing owl nests during the March 15 through August 31 nesting season for large industrial disturbances, including residential developments (CPW 2021b). Burrowing owls could be impacted by the project if work would occur within CPW's recommended 660- to 1,320-foot buffer of any burrows.

Recommendations

A burrowing owl survey should be conducted if work would occur within the recommended buffer of any burrow from March 15 through October 31. Additionally, CPW recommends conducting burrowing owl clearance surveys in prairie dog towns that are subject to poisoning or construction projects during this March 15 through October 31 period (CPW 2021b). If owls are present within 1,320 feet of the project area, activities should be restricted until the owls have migrated from the site, which can be determined through monitoring. Construction occurring from November 1 through March 14 would not require clearance surveys.

Raptors and Migratory Birds

Migratory birds, as well as their eggs and nests, are protected under the MBTA. 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 (Service 2003). The regulatory definition of a take means to pursue, hunt, shoot, wound, kill, trap, capture, or collect; or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect (50 Code of Federal Regulations 10.12).

Under the MBTA, the Service may issue nest depredation permits, which allow a permittee to remove an active nest. The Service, however, issues few permits and only under specific circumstances, usually related to damage to agricultural crops/livestock and private property, and protection of human health and safety. Obtaining a nest depredation permit is unlikely and involves a process that takes, at a minimum, 8 to 12 weeks. The best way to avoid a violation of the MBTA is to remove vegetation outside of the active breeding season, which typically falls between March and August, depending on the species. MBTA enforcement actions are typically the result of a concerned member of the community reporting a violation.

CPW maintains a leadership role with respect to raptor management in Colorado; however, the primary authority for the regulation of take and the ultimate jurisdiction for most of these species rests with the Service under the MBTA and the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c).

Potential Habitat and Effects

A wide variety of bird species use different habitat types in the project area for shelter, breeding, wintering, and foraging at various times during the year. Riparian vegetation, wetlands, and upland grasslands in and adjacent to the project area are potential nesting habitat for migratory birds. During the 2025 site visit, ERO observed a black-capped chickadee (*Poecile atricapillus*), black-billed magpie (*Pica hudsonia*), blue jay (*Cyanocitta cristata*), horned lark (*Eremophila alpestris*), white-breasted nuthatch (*Sitta carolinensis*), northern flicker (*Colaptes auratus*), American tree sparrow (*Spizelloides arborea*), house finch (*Haemorhous mexicanus*), and American robin (*Turdus migratorius*) in or soaring over the project area.

ERO surveyed the project area for nests during the 2025 site visit. ERO observed four potential raptor nests in large cottonwood trees in the project area (Figure 2). The size and shape of the nests and the position in the trees suggests they are raptor nests. Raptors such as red-tailed and Swainson's hawks could potentially use the observed nests. Depending on the species, CPW recommends a 0.33- or 0.25-mile buffer from active raptor nests from February through July for human encroachment activities or installation of a permanent or long-standing physical object or structure (CPW 2020).

The breeding season for most birds in Colorado is March through mid-September, with the exception of a few species that begin breeding in February, such as great-horned owls. Because the 2025 site visit was conducted in November, when birds are not actively nesting, these nests were determined to be currently inactive; however, they could still be occupied by raptors in the future.

Recommendations

To avoid destruction of potential migratory bird nests, vegetation removal should be conducted outside of the April 1 through August 31 breeding season. However, a few species such as bald eagles, great horned owls, and red-tailed hawks can nest as early as December (eagles) or late February (owls and red-tailed hawks). Because of variability in the breeding seasons, ERO recommends that a nest survey be conducted within one week prior to construction to determine if the potential raptor nests or any other active nests are present in the project area so that they can be avoided. Additional nest surveys during the nesting season may also be warranted to identify active nesting species that may present additional development timing restrictions (e.g., eagles or red-tailed hawks).

If active nests are identified in or near the project area, activities that would directly affect the nests should be restricted. Habitat-disturbing activities (e.g., tree removal, grading, scraping, and grubbing) should be conducted during the nonbreeding season to avoid disturbing active nests, or to avoid a "take" of the migratory bird nests in the project area. Nests can be removed during the September 15 through March 31 nonbreeding season to preclude future nesting and avoid violations of the MBTA. There is no process for removing nests during the nonbreeding season; however, nests may not be collected under MBTA regulations. If the construction schedule does not allow vegetation removal outside of the breeding season, a nest survey should be conducted immediately prior to vegetation removal to determine if the nests are active and by which species. If active nests are found, any work

that would destroy the nests or cause the birds to abandon young in the nest should not be conducted until the birds have vacated the nests.

CPW has recommended buffer zones of 0.33 mile for active red-tailed hawk nests and 0.25 mile for active Swainson's hawk nests. Activities that would directly impact an active nest, or that would encroach close enough to cause adult birds to abandon the nest during the breeding season, should be restricted. Construction activities that could potentially be within a red-tailed hawk or other raptor buffer zone should commence outside of the February 15 to September 15 breeding season. Consultation with CPW or the Service may be required if construction is proposed within a buffer zone of an active raptor nest. Although no CPW buffer is designated for great horned owls, any active nest should be left undisturbed until the birds have left the nest. CPW recommends consultation with local CPW staff early in the planning phase of project proposals to assess and develop site-specific recommendations based on preexisting conditions (e.g., existing development, topography, vegetation, and line-of-sight to nest).

High Priority Habitat and Big Game

In 2021, CPW released a High Priority Habitat (HPH) table that identifies species and habitats, as well as recommendations to avoid and minimize impacts on wildlife from land use development (CPW 2025). ERO reviewed data from CPW map databases and determined that no HPH areas overlap the project area (CPW 2023). Although no HPH occurs in the project area, during the 2025 site visit, ERO assessed the project area for habitat for species and habitats listed in the HPH table. Because mule deer likely frequent the project area, this species is discussed in more detail below.

Mule Deer

Species Background

Mule deer are found in all ecosystems in Colorado from grasslands to alpine tundra. Spring and summer ranges are typically mosaics of meadows, aspen woodlands, alpine tundra-subalpine forest edges, or montane forest edges (Fitzgerald et al. 1994). Seasonally, mule deer are relatively sedentary, although most will spend the summer at higher elevations and migrate to lower elevations in the winter. Mule deer diets vary seasonally but generally consist of browse from trees, shrubs, forbs, and grasses.

Potential Habitat and Effects

The entire project area is within mule deer overall range, and portions of the project area are in winter range and summer range (NDIS 2024). No mule deer HPH areas, including migration corridors, severe winter range, or winter concentration areas, are located in the project area (CPW 2025). The closest mule deer concentration area is approximately 1.2 miles west of the project area along Cherry Creek. Although no mule deer were observed during the 2025 site visit, it is likely that mule deer forage and migrate through the project area.

Recommendations

Because no HPH for mule deer occurs in the project area, no action is necessary.

Other Wildlife

The project area provides habitat for a variety of small mammals such as cottontail rabbits (*Sylvilagus* sp.), deer mice (*Peromyscus maniculatus*), voles (*Microtus arvalis*), and pocket gophers (*Geomys bursarius*). Grassland habitat likely provides breeding habitat for numerous ground-nesting prairie bird species, and riparian ecosystems typically support many more species of native birds than surrounding grassland or shrubland communities (Knopf and Samson 1994). Additionally, the drainages and their riparian corridors extend through the project area and the nearby development areas to the northeast and likely provide foraging, sheltering, and dispersal habitat components for numerous species.

Carnivores such as coyote (*Canis latrans*), raccoon (*Procyon lotor*), red fox *(Vulpes vulpes*), grey fox *(Urocyon cinereoargenteus*), and striped skunk (*Mephitis mephitis*) are also likely to occur in the project area. These species are typically observed in open grasslands and close to riparian corridors. Additionally, the project area is within the overall range of mountain lion (*Puma concolor*), elk (*Cervus canadensis*), white-tailed deer (*Odocoileus virginianus*), and black bear (*Ursa americanus*) (NDIS 2024). None of these species were observed during the 2025 site visit. It is likely that white-tailed deer forage or migrate through the project area; however, no designated wildlife corridors were mapped in the project area (NDIS 2024).

As with any human development, wildlife species sensitive to human disturbance are likely to decline in abundance or abandon the area, while other wildlife species adapted to development are likely to increase in abundance. Species likely to increase include red fox, raccoon, and great horned owl (*Bubo virginianus*). Overall, surrounding and continuing development contributes to a decline in the number and diversity of wildlife species nearby and to a change in species composition to favor species that adapt better to human disturbance.

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Appendix A Photo Log

Photo 1 - Overview of the topography in the project area. View is north.

Photo 2 - Upland grassland vegetation community. View is east.

Photo 3 - Oak shrubland vegetation community. View is west.

Photo 4 - Riparian corridor surrounding Lemon Gulch. View is northwest.

Photo 5 - OHWM 1 associated with a stock pond. View is southwest.

Photo 6 - OHWM 2 flowing between a culvert and Lemon Gulch. View is northwest.

Photo 7 - A portion of Lemon Gulch that is a sandy wash. View is southwest.