

February 17, 2022

Classic Communities 6385 Corporate Dr., Suite 200 Colorado Springs, CO 80919

Re: Habitat Assessment Memo Jayne's Parcel Project El Paso County, Colorado

CORE Consultants, Inc. (CORE) presents this memo summarizing a desktop review and field habitat assessment for the proposed Jayne's Parcel Project (Project) in El Paso County, Colorado. The Project spans 141 acres (Project Area) in northern El Paso County, southwest of the intersection of Vollmer Road and Poco Road. The Project Area is situated on the U.S. Geological Survey (USGS) Falcon NW 7.5-minute quadrangle (USGS 2019), on portions of Sections 28 and 33, Township 12 South, Range 65 West (Attachment I). The Project would include the development of approximately 440 residential lots, small park spaces, commercial space, and a stormwater detention basin.

CORE completed a desktop review and subsequent site reconnaissance of the Project for the following natural resources and potential biological constraints:

- Significant topographic features;
- Potential for occurrence of federally-listed threatened and endangered (T&E) species and their associated habitats;
- Federally-designated Critical Habitat for T&E species;
- Potential for occurrence of state threatened, state endangered, state species of special concern, and their associated habitats;
- Big game migratory routes and species-specific concentration areas.

Publicly-available data sources reviewed included the U.S. Fish and Wildlife Service's (USFWS) Information Planning and Consultation (IPaC) System; USFWS Critical Habitat Portal; USFWS National Wetland Inventory; Colorado Parks and Wildlife (CPW) species profiles and spatial data; USGS National Hydrography Dataset; USGS topographic maps; and U.S. Department of Agriculture National Aerial Imagery Program imagery. The on-site, wildlife habitat assessment was conducted on January 26 and 27, 2022 to field-verify results of the initial desktop review and conduct an aquatic resources delineation.

#### **DESKTOP REVIEW**

Vegetation and Significant Topographic Features

The Project encompasses 141 acres in the Level IV Foothill Grasslands Ecoregion within the Level III Southwestern Tablelands Ecoregion. Elevations of the Project range between approximately 7,090 and 7,230 feet above mean sea level. Typical plant species within the Foothill Grasslands include ponderosa pine (*Pinus ponderosa*), mountain mahogany (*Cercocarpus montanus*),



Gambel oak (Quercus gambelii), chokecherry (Prunus virginiana), western serviceberry (Amelanchier alnifolia), little bluestem (Schizachyrium scoparium), big bluestem (Andropogon gerardii), bluebunch wheatgrass (Pseudoroegneria spicata), needle-and-thread (Hesperostipa comata), slender wheatgrass (Elymus trachycaulus), and galleta grass (Pleuraphis jamesii), among others (Chapman et al. 2006).

Two unnamed tributaries of Sand Creek drain through the Project in a southerly direction. Existing and under-construction residential development surround the Project. The Project Area has a short, east-west ridgeline with two highpoints. Aerial imagery indicated that this area supports ponderosa pines, providing a contrast in habitat to the grassland across much of the remainder of the Project Area. The man-made ponds also provide conditions to support a vegetation community that is unique within the Project Area.

#### Federal Threatened and Endangered Species

The USFWS IPaC database was used to determine the potential for occurrence of federally-listed T&E species within the Project (USFWS 2022a). The IPaC query identified five species, including one bird, one fish, one flowering plant, one insect, and one mammal, as having the potential to occur within the Project. An additional four species were listed to be considered under a conditional effects analysis (Table 1). No designated Critical Habitat is mapped for any species within the Project Area (USFWS 2022b).

#### Ute Ladies'-tresses Orchid

Ute ladies'-tresses orchid (*Spiranthes diluvialis*; ULTO) is a perennial orchid listed as federally threatened. This forb has ivory flower clusters arranged in a spike growing approximately 8 to 20 inches tall. ULTO is known to occur in parts of Colorado, Wyoming, Idaho, Montana, Nebraska, Utah, and Washington. The plant typically occurs within features associated with major river floodplains, including riparian edges, gravel bars, old oxbows, high flow channels, and moist to wet meadows associated with perennial streams; it is found under 6,500 feet AMSL in Colorado (USFWS 2021d). Surveys have indicated that this species may also inhabit groundwater-fed springs or sub-irrigated meadows, seeps, and human-influenced riparian habitats that receive reliable and stable spring inundation (Fertig et al. 2005; USDA 2009). Soils in areas of suitable habitat have a high micronutrient and organic matter content and display gley features when sampled (USDA 2009).

A review of spatial data and topographic maps indicates that the Project is situated at elevations between 7,090 and 7,230 feet above mean sea level, above the suitable elevations to sustain ULTO within Colorado.

#### Monarch Butterfly

Monarch butterfly (Danaus plexippus) is a candidate species for federal listing (USFWS 2022a). There are no Endangered Species Act Section 7 requirements for candidate species, though the U.S. Fish and Wildlife Service recommends that agencies and other parties take any opportunity to conserve a candidate species and limit further impacts. Monarchs are present in the Project region during the summer breeding season and during fall migration, using various milkweeds (Asclepias spp.) as host plants for egg-laying (USFWS 2021c). Limiting impacts to areas where milkweeds have potential to grow within the Project Area would limit the likelihood of impacts to monarchs from Project development.



Table 1. T&E Species Likelihood of Occurrence within the Project Area

Common Name Scientific Name	Status <sup>1</sup>	Likelihood of Occurrence
Complete Effects Analysis		
Eastern black rail Laterallus jamaicensis jamaicensis	FT	None. This species occupies tidal marshes and freshwater wetlands. It annually breeds along the Arkansas River in southeastern Colorado, but rarely occurs as far north as southern El Paso County. No suitable habitat is present and the Project Area is outside of this species' typical range.
Greenback cutthroat trout Oncorhynchus clarkii stomias	FT	None. No perennial water on site. Historically occupied steep, cold, high mountain streams and rivers in the South Platte and Arkansas River watersheds (Young 2009). A single, genetically pure population remains in Bear Creek in southwestern El Paso County (Martin et al. 2015).
Monarch butterfly Danaus plexippus	FC	Moderate. This species breeds across much of Colorado, laying eggs on milkweeds (Asclepias spp.). This species also migrates through eastern Colorado, especially in the fall (USFWS 2021c). See discussion above.
Preble's meadow jumping mouse Zapus hudsonius preblei	FT	None. Potential existing habitat is low quality. Project Area is within the Colorado Springs Block Clearance Area for this species, meaning it does not occur (USFWS 2012).
Ute ladies'-tresses Spiranthes diluvialis	FT	Low. See discussion above.
Conditional Effects Analysis		
Pallid sturgeon Scaphirhynchus albus	FE	Project is located outside of species' range; Project would not affect water within the S. Platte River watershed. Therefore, impacts to this species would not occur.
Piping plover Charadrius melodus	FT	Project is located outside of species' range; Project would not affect water within the S. Platte River watershed. Therefore, impacts to this species would not occur.
Western prairie fringed orchid Platanthera praeclara	FT	Project is located outside of species' range; Project would not affect water within the S. Platte River watershed. Therefore, impacts to this species would not occur.
Whooping crane Grus americana	FE	Project is located outside of species' range; Project would not affect water within the S. Platte River watershed. Therefore, impacts to this species would not occur.

<sup>1</sup>FE = Federally Endangered; FT = Federally Threatened; FC = Federal Candidate for Listing Source: USFWS 2022a

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#### **USFWS Migratory Birds of Conservation Concern**

The USFWS IPaC database was used to determine the potential for occurrence of USFWS Birds of Conservation Concern (USFWS 2022a). The IPaC query results identified two sensitive, migratory bird species: bald eagle (Haliaeetus leucocephalus) and ferruginous hawk (Buteo regalis). Bald eagles are not designated as a USFWS Bird of Conservation Concern but were included in the IPaC results due to their protection under the Bald and Golden Eagle Protection Act (16 USC §§ 668-668d). Breeding migratory birds, and the parts, nests, or eggs of such a bird receive statutory protection under the MBTA, and disturbing such species (defined at 16 U.S.C. §§ 703–712), including incidentally, is prohibited.

#### CPW Species Activity Mapping and High Priority Habitats

The CPW Species Activity Mapping and High Priority Habitats spatial data were reviewed to determine the potential for the occurrence of sensitive wildlife, including big game species. CPW species profiles were also reviewed to determine the potential for the occurrence of state threatened or endangered species. The review indicated that there is potential for the occurrence of 15 mammals, 13 reptiles, and 14 birds that have CPW-mapped High Priority Habitats (Table 2).

Generally, sensitive wildlife species and Colorado Species of Special Concern (SC) do not receive statutory protection. The Project Area does not intersect with big game migratory routes, though it does intersect with mountain lion (*Puma concolor*) peripheral range, mule deer (*Odocoileus hemionus*) concentration area, and is part of a black bear (*Ursus americanus*)-human conflict area (CPW 2021). Development of residential property has the potential to attract black bear and mountain lion if trash is readily available for forage or to attract prey animals. The Project Area is within the overall range of black-tailed prairie dog (*Cynomys Iudovicianus*; Table 2), which is a Colorado SC and provides nesting and roosting habitat for the state threatened burrowing owl (*Athene cunicularia*). The Project Area is also within the breeding range of burrowing owl (Table 2; CPW 2021). Breeding ranges for many sensitive bird species, as well as overall range for sensitive bats, lizards, snakes, turtles, and other wildlife, overlap the Project Area (Table 2).



Table 2. Sensitive Wildlife Species Potential for Occurrence

COMMON NAME	SCIENTIFIC NAME	TYPE OF OCCURRENCE	STATUS <sup>1</sup>
Mammals			
Big brown bat	Eptesicus fuscus	Overall range	N/A
Black bear	Ursus americanus	Overall range, human conflict area	N/A
Black-tailed prairie dog	Cynomys Iudovicianus	Overall range	SC
Dwarf shrew	Sorex nanus	Overall range	N/A
Eastern red bat	Lasiurus borealis	Overall range	N/A
Fringed myotis	Myotis thysanodes	Overall range	N/A
Hoary bat	Aeorestes cinereus	Overall range	N/A
Little brown myotis	Myotis lucifugus	Overall range	N/A
Mountain lion	Puma concolor	Overall range, peripheral range	N/A
Mule deer	Odocoileus hemionus	Overall range, concentration area	N/A
Olive-backed pocket mouse	Perognathus fasciatus	Overall range	N/A
Pronghorn	Antilocapra americana	Overall range	N/A
Silver-haired bat	Lasionycteris noctivagans	Overall range	N/A
White-tailed deer	Odocoileus virginianus	Overall range	N/A
White-tailed jackrabbit	Lepus townsendii	Overall range	N/A
Reptiles			
Bullsnake	Pituophis catenifer sayi	Overall range	N/A
Common lesser earless lizard	Holbrookia maculata	Overall range	N/A
Hernandez's short- horned lizard	Phrynosoma hernandesi	Overall range	N/A
Many-lined skink	Plestiodon multivirgatus	Overall range	N/A
Milk snake	Lampropeltis triangulum	Overall range	N/A
Ornate box turtle	Terrapene ornata	Overall range	N/A
Painted turtle	Chrysemys picta	Overall range	N/A
Plains garter snake	Thamnophis radix	Overall range	N/A
Prairie lizard	Scleroporus undulatus	Overall range	N/A
Prairie rattlesnake	Crotalus viridis	Overall range	N/A
Six-lined racerunner	Aspidoscelis sexlineata	Overall range	N/A
Smooth green snake	Opheodrys vernalis	Overall range	N/A



COMMON NAME	SCIENTIFIC NAME	TYPE OF OCCURRENCE	STATUS <sup>1</sup>
Terrestrial garter snake	Thamnophis elegans	Overall range	N/A
Birds			
Band-tailed pigeon	Patagioenas fasciata	Breeding range	N/A
Brewer's sparrow	Spizella breweri	Breeding range	N/A
Burrowing owl	Athene cunicularia	Breeding range	ST
Cassin's sparrow	Peucaea cassinii	Breeding range	N/A
Golden eagle	Aquila chrysaetos	Breeding range	N/A
Grasshopper sparrow	Ammodramus savannarum	Breeding range	N/A
Lark bunting	Calamospiza melanocorys	Breeding range	N/A
Lazuli bunting	Calamospiza melanocorys	Breeding range	N/A
Lewis's woodpecker	Melanerpes lewis	Breeding range	N/A
Northern harrier	Circus hudsonius	Breeding range	N/A
Prairie falcon	Falco mexicanus	Breeding range	N/A
Rufous hummingbird	Selasphorus rufus	Migration range	N/A
Swainson's hawk	Buteo swainsoni	Breeding range	N/A
Virginia's warbler	Leiothlypis virginiae	Breeding range	N/A

<sup>1</sup>ST = State Threatened; SC = State Species of Special Concern; N/A = No special status

Source: CPW 2021

#### SITE RECONNAISSANCE

A site reconnaissance was conducted within the Project Area on January 26, 2022. A half-mile buffer around the Project Area was also searched and assessed for raptor nests and potential raptor nesting habitat (Study Area, inclusive of the Project Area). The on-site assessment was intended to support and expand upon the results of the desktop review. The results of the site reconnaissance are presented in the following sections.

#### Vegetation and Significant Topographic Features

A diverse array of native and non-native plants was observed during the habitat assessment. Common species associated with the east-west ridge included ponderosa pine, mountain mahogany), blue grama (Bouteloua gracilis), buffalo grass (Bouteloua dactyloides), fringed sage (Artemisia frigida), plains pricklypear (Opuntia polyacantha), soapweed yucca (Yucca glauca), and spotted gayfeather (Liatris punctata). Among the common upland plant species in the meadows were Indian ricegrass (Achnatherum hymenoides), purple threeawn (Aristida purpurea), yellow indiangrass (Sorghastrum nutans), Canada wildrye (Elymus canadensis), little bluestem (Schizachyrium scoparium), big bluestem (Andropogon gerardii), smooth brome (Bromus inermis), and cheatgrass (Bromus tectorum), while cattails (Typha sp.), prairie sunflowers (Helianthus petiolaris), curly dock (Rumex crispus), and Arctic rush (Juncus arcticus) were common along portions of the streams. A complete list of the species observed is included in Table 3.



Table 3. Plant Species Observed During the Habitat Assessment

SCIENTIFIC NAME	COMMON NAME
	Graminoids/Rushes
Achnatherum hymenoides	Indian ricegrass
Andropogon gerardii	Big bluestem
Aristida purpurea	Purple threeawn
Bouteloua gracilis	Blue grama
Bouteloua dactyloides	Buffalo grass
Bromus inermis	Smooth brome
Bromus tectorum	Cheatgrass
Elymus canadensis	Canada wildrye
Elymus elymoides	Squirrel tail
Juncus arcticus	Arctic rush
Muhlenbergia montana	Mountain muhly
Pascopyrum smithii	Western wheatgrass
Poa pratensis	Kentucky bluegrass
Schizachyrium scoparium	Little bluestem
Sorghastrum nutans	Yellow Indiangrass
Sporobolus heterolepis	Prairie dropseed
	Forbs/Vines/Cacti
Achillea millefolium	Yarrow
Artemisia frigida	Fringed sage
Asclepias speciosa	Showy milkweed
Bassia scoparia	Kochia
Centaurea diffusa	Diffuse knapweed
Cirsium vulgare	Bull thistle
Helianthus annuus	Common sunflower
Helianthus petiolaris	Prairie sunflower
Heterotheca villosa	Hairy false goldenaster
Liatris spicata	Dotted gayfeather
Oenothera biennis	Evening primrose
Opuntia polyacantha	Plains pricklypear
Pediocactus simpsonii	Mountain ball cactus
Rumex crispus	Curly dock
Sisymbrium altissimum	Tall tumblemustard
Symphoricarpos sp.	Snowberry



SCIENTIFIC NAME	COMMON NAME
Tragopogon dubius	Western salsify
Typha sp.	Cattail
Verbascum thapsus	Common mullein
Shru	bs/Trees
Cercocarpus montanus	Mountain mahogany
Cornus sericea	Red-osier dogwood
Juniperus scopulorum	Rocky Mountain juniper
Pinus ponderosa	Ponderosa pine
Populus angustifolia	Narrowleaf cottonwood
Populus deltoides	Plains cottonwood
Rosa acicularis	Prickly wild rose
Salix amygdaloides	Peachleaf willow
Yucca glauca	Soapweed yucca

The narrow, east-west ridge in the central portion of the Project Area provides a microclimate that supports different vegetation than the remainder of the Project Area. Ponderosa pines are present in two distinct groves at the east and west ends of the ridge. Similarly, a small community of riparian vegetation is present within and around the man-made ponds in the Project Area. Among the plant species observed near the ponds were plains cottonwood (Populus deltoides), narrowleaf cottonwood (Populus angustifolia), peachleaf willow (Salix amygdaloides), red-osier dogwood (Cornus sericea), and cattails.

#### Eastern Black Rail

The habitat assessment confirmed that suitable marsh or other wetland habitat to support eastern black rail does not exist in the Project Area.

#### Greenback Cutthroat Trout

The habitat assessment confirmed that no perennial water sources are present in the Project Area, eliminating the possibility of greenback cutthroat trout occurrence. Furthermore, no areas downstream from the Project Area are known to support this species, and thus, no indirect impacts to greenback cutthroat trout would occur from Project development.

#### Monarch Butterfly

Showy milkweed (Asclepias speciosa) stalks and seed pods were observed in a small area (less than 20 square feet) along the western side of the Project Area, indicating that at least some egglaying habitat and forage for monarch caterpillars exists in the Project Area (Attachments II and III). Based on the Project Area's location within the monarch breeding range and along the fall migratory route for more northerly-breeding monarchs, individuals may be present in the Project Area occasionally. A targeted search for milkweed plants was not conducted during the habitat assessment; however, the low number of milkweed individuals encountered while surveying the Project Area suggests that monarch egg-laying habitat is limited.



#### Preble's Meadow Jumping Mouse

Although the Project Area is within the northeastern boundary of the USFWS PMJM Block Clearance for Colorado Springs and vicinity (USFWS 2012), CORE nonetheless assessed whether the habitat on-site could support PMJM. Plant species identified in the Project Area that are commonly-associated with PMJM included mountain mahogany, narrowleaf cottonwood, peachleaf willow, plains cottonwood, red-osier dogwood, and snowberry. However, the stream channels lack the preferred, multilayered vegetative structure and few shrubs are present along the channels or elsewhere within the Project Area. Areas of diverse, native grasses are present in the uplands, but shrubs that could provide habitat for PMJM hibernation are lacking. Based on low quality to lack of suitable habitat and the overlap of the mapped block clearance with the Project Area, it is unlikely that PMJM would occur on site, and PMJM and its habitats would not be impacted by Project development.

#### Ute Ladies'-tresses Orchid

No perennial water sources are present in the Project Area. Small wetland areas associated with the two stream channels and ponds have the highest probability of retaining water to support ULTO. However, suitable habitat features, such as river floodplains, gravel bars, oxbows, and high flow channels, which could support ULTO, were not observed. Further, the elevation of the Project Area is 500 to 700 feet higher than the maximum elevation at which ULTO is known to occur in Colorado. A rare plant survey for ULTO and a formal assessment of soil types on site was not conducted as part of the habitat assessment. Project development is not anticipated to impact ULTO or its associated habitat.

#### **USFWS** Migratory Birds of Conservation Concern

The desktop review identified ferruginous hawk as the only USFWS Bird of Conservation Concern with potential to use the Project Area. Site reconnaissance revealed that suitable substrates for nesting raptors were present. Four inactive nests were observed in ponderosa pines within the Project Area during the assessment (Attachment IV). Each of the inactive nests was sufficiently large to potentially support nesting raptors, however, the nests cannot be reliably attributed to certain species while inactive. Another large nest was found on the ground near the north side of the eastern grove of pines (Attachments II and III). No raptor nests were found in the half-mile buffer. A nesting raptor survey during the breeding season (February 1 through July 15) would confirm the presence or absence of active raptor nests within the Project Area. If raptor nests are found, appropriate raptor nest buffers would be coordinated with CPW and should be adhered to during construction activities (CPW 2020).

#### CPW Species Activity Mapping and High Priority Habitats

Two of the sensitive species for which CPW has mapped ranges and High Priority Habitats were observed within the Study Area. Pronghorn (Antilocapra americana) were observed throughout the habitat assessment at various locations in the Project Area and half-mile buffer; as many as 75 were seen simultaneously. A group of seven mule deer were observed in the ponderosa pine forest at the northwestern edge of the Study Area, which is mapped as part of a Mule Deer Concentration Area. Wild turkeys (Meleagris gallopavo) were also observed in the Project Area, though their CPW-mapped overall range only extends to the southern edge of Black Forest, immediately outside of the Study Area.

No prairie dog (Cynomys spp.) colonies were present within the Project Area, and no other burrows or dens were observed that would suggest nesting or roosting habitat for burrowing owls exists. The Project Area is within the burrowing owl breeding range, and thus, burrowing owls could



migrate through the area. However, the lack of nesting and roosting resources suggest burrowing owls would use the Project Area only temporarily, if at all. Additionally, areas throughout the site comprised of tall, dense grasslands would have low suitability for burrowing owls, since the species tends to prefer low, sparse vegetation (Poulin et al. 2020)

The Project Area hosts various potential resources for the sensitive bat species which could occur, including tree stands and abandoned, man-made structures for roosting and streams and ponds over which bats may forage for insects when water is present (Attachments II and III). The sensitive bat species which could be present in the Project Area, especially from May to October, include big brown bat (Eptesicus fuscus), eastern red bat (Lasiurus borealis), fringed myotis (Myotis thysanodes), hoary bat (Lasiurus cinereus), little brown myotis (Myotis lucifugus), and silver-haired bat (Lasionycteris noctivagans; CPW 2021).

Development of the Project has the potential to attract black bears, mountain lions, and prey animals, if trash from the development is not maintained in wildlife-proof storage containers. Mule deer (Odocoileus hemionus) are expected to occur regularly, even after Project development. A few small areas of rodent burrowing activity were documented, but no rodents were observed (Attachments II and III). The Project Area provides potentially suitable habitat for the sensitive reptiles with overlapping overall ranges, including along the streams and around the ponds, near rodent burrows, and among the abandoned, man-made structures. CPW Species Activity Mapping data do not include non-status amphibians (CPW 2021). Most sensitive bird species with CPW-mapped breeding ranges within the Study Area are likely to occur to varying extents, though band-tailed pigeons (Patagioenas fasciata) and Lewis's woodpeckers (Melanerpes lewis) are rarely documented in the Project vicinity (Table 2; eBird 2022). Coordination with CPW would determine if additional wildlife surveys are necessary prior to and/or during Project construction.

#### **CONCLUSIONS**

The site reconnaissance identified a few biological constraints within the Project Area. Four inactive raptor nests were documented. A nesting raptor survey prior to construction would confirm the presence or absence of active raptor nests within the Study Area. Should the existing nests or new nests become active during the breeding season and when construction is anticipated to occur, Classic Communities should coordinate with CORE and CPW to employ appropriate restriction buffers to minimize potential impacts to nesting raptors (CPW 2020). The Project is not anticipated to result in any impacts to federally- or state-listed threatened and endangered species or their habitats. However, Classic Communities could preemptively minimize potential impacts through habitat loss for monarch butterfly, a candidate species for federal listing, by avoiding removal of milkweed plants where possible.

The occurrence of various bat, bird, reptiles, and large game species is expected to varying degrees. Potential for conflicts between humans and black bears and mountain lions are also possible. Garbage should be properly disposed of and secured during and after construction to minimize potential for these encounters. Coordination with the Colorado Parks and Wildlife would determine whether any additional wildlife surveys or permits are required.

If you have any questions, concerns or require additional information, please feel free to contact us at (303) 703-4444, or by email at tstuart@liveyourcore.com or ngraves@liveyourcore.com.



Sincerely,

**CORE** Consultants, Inc.

**Tyler Stuart**Biologist

**Natalie Graves**Project Manager

## **LIST OF ATTACHMENTS**

ATTACHMENT I: PROJECT LOCATION MAP
ATTACHMENT II: PHOTO LOCATION MAP
ATTACHMENT IV: PHOTOGRAPHIC LOG
RAPTOR NESTS MAP



#### **REFERENCES**

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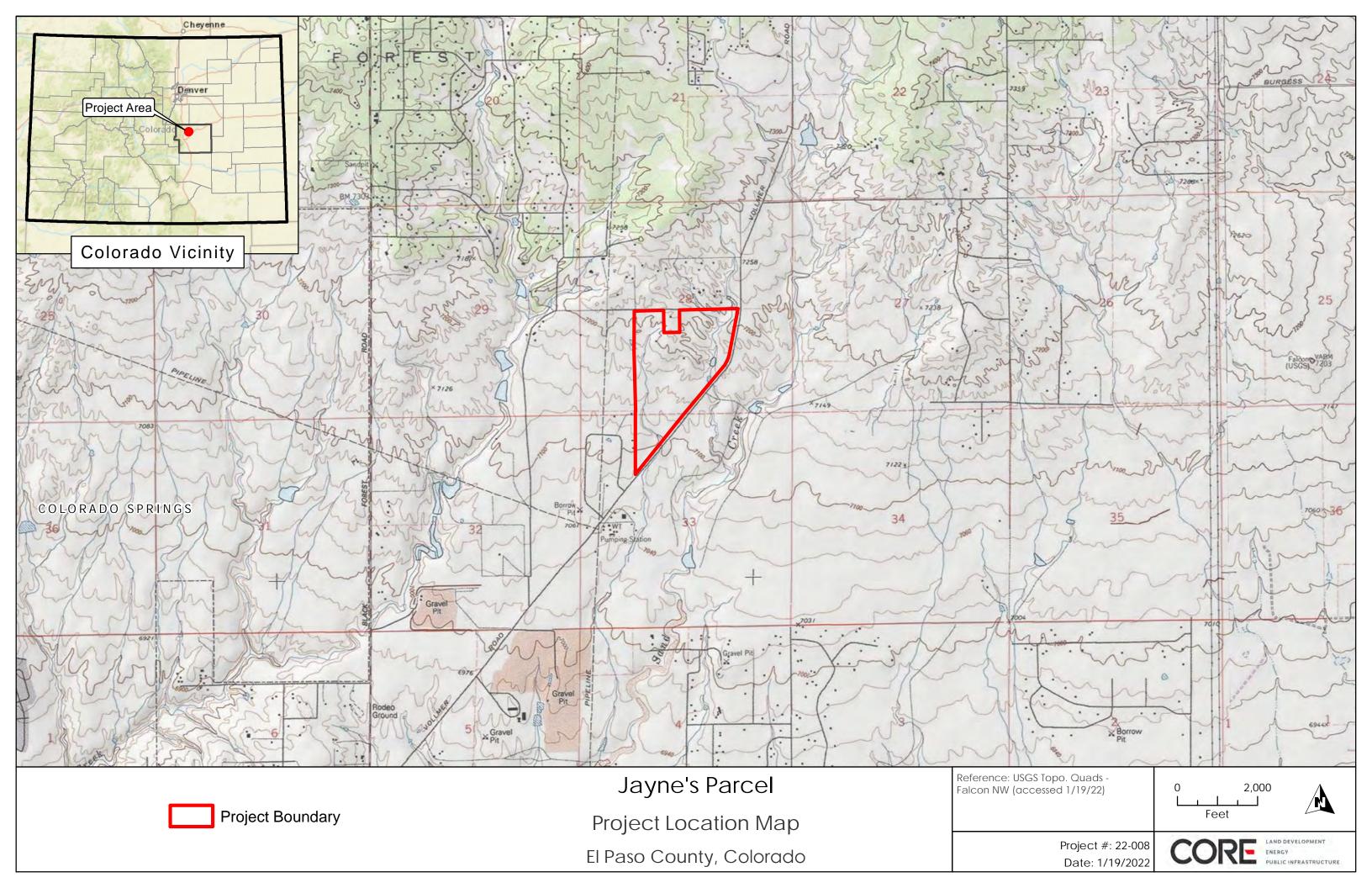


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## **ATTACHMENT I**

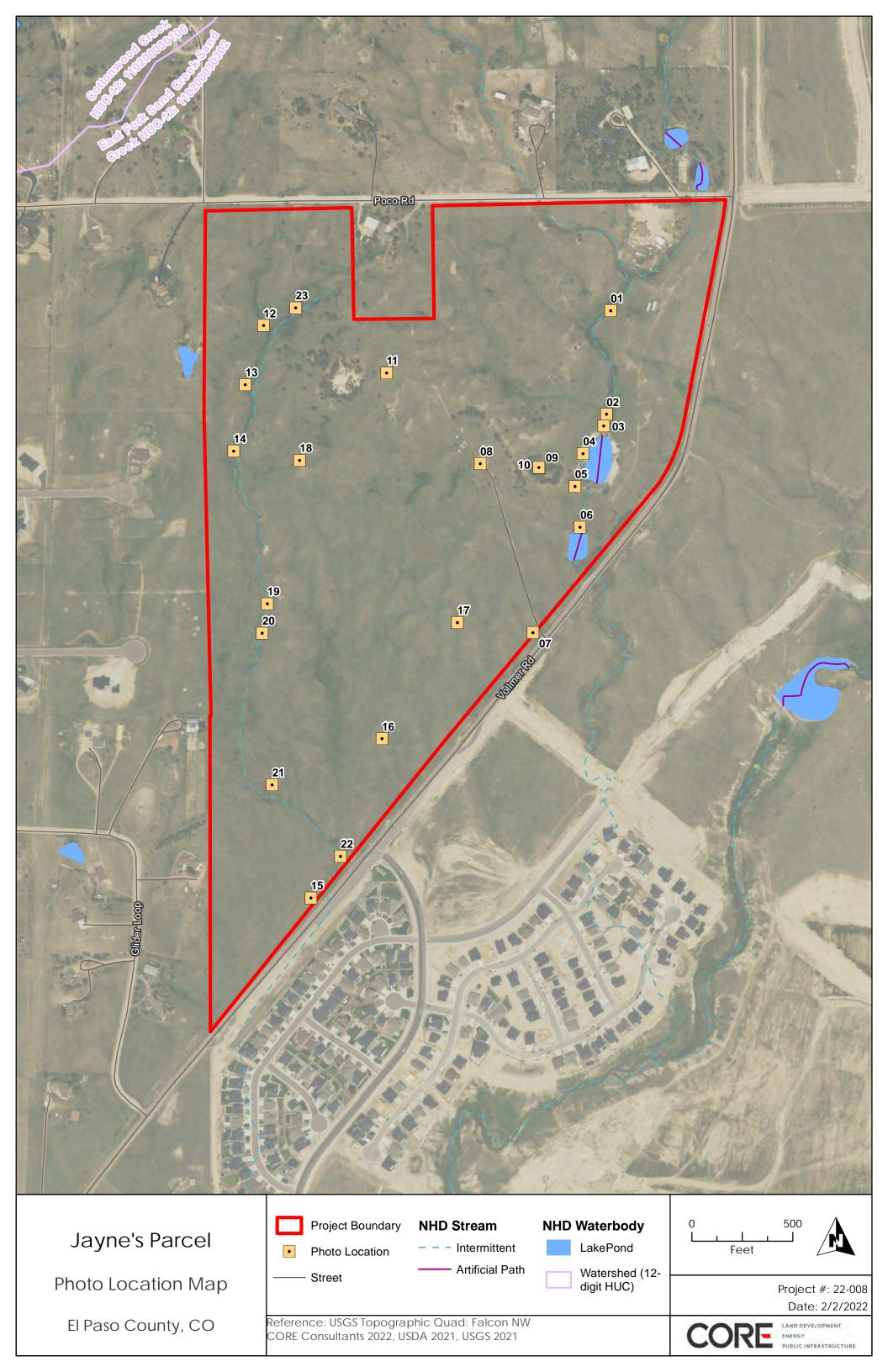
PROJECT LOCATION MAP





### **ATTACHMENT II**

PHOTO LOCATION MAP





### **ATTACHMENT III**

PHOTOGRAPHIC LOG





Photo ID	Date	Latitude	Longitude	Subject	Direction Taken
JP_001	1/26/2022	38.975207	-104.670271	Eastern Stream	North

Description: Northern end of the eastern streambed, downstream of the house in the northeastern corner of the Project Area.





Photo ID	Date	Latitude	Longitude	Subject	Direction Taken
JP_002	1/26/2022	38.973793	-104.670362	Eastern Streambed and Willow	North

Description: Peachleaf willow growing along the eastern streambed, a short distance upstream from the larger pond.





Photo ID	Date	Latitude	Longitude	Subject	Direction Taken
JP_003	1/26/2022	38.973635	-104.670413	Large Pond	South

Description: Looking downstream at the larger pond in the Project Area, with surrounding vegetation including peachleaf willows, narrowleaf cottonwood, plains cottonwood, red-osier dogwood, and ponderosa pine. Cattails are visible at the far end of the pond.





Photo ID	Date	Latitude	Longitude	Subject	Direction Taken
JP 004	1/26/2022	38.973261	-104.670775	Large Pond	South

Description: South end of the large pond with a small patch of cattails and surrounding vegetation including peachleaf willows, narrowleaf cottonwood, plains cottonwood, and ponderosa pine.





Photo ID	Date	Latitude	Longitude	Subject	Direction Taken
JP_005	1/26/2022	38.972817	-104.67092	Small Pond	South

Description: Looking south from the top of the dam on the large pond. The smaller pond is visible with willows at center-left in the photo.





Photo ID	Date	Latitude	Longitude	Subject	Direction Taken
JP_006	1/26/2022	38.972267	-104.670839	Ponderosa Pines	East
Description: A row of ponderosa pines along the west side of Vollmer Road.					





Photo ID	Date	Latitude	Longitude	Subject	Direction Taken	
JP_007	1/26/2022	38.970828	-104.671681	Southern Meadow	Southwest	
Description: Broad view of the large meadow at the southern end of the Project Area.						





Photo ID	Date	Latitude	Longitude	Subject	Direction Taken
JP_008	1/26/2022	38.973138	-104.672567	Abandoned Structure	West

Description: Abandoned structure next to the main abandoned house (not pictured). The western end of the main ridge is visible in the background.





JP_009 1/26/2022 38.973076 -104.671533 Abandoned West	Photo ID	Date	Latitude	Longitude	Subject	Direction Taken
Structure	JP_009	1/26/2022	38.973076	-104.671533		West

Description: Abandoned structure in the eastern ponderosa pine grove. This structure and the pines have potential to support roosting bats.





Photo ID	Date	Latitude	Longitude	Subject	Direction Taken
JP_010	1/26/2022	38.973078	-104.671547	Nest on Ground	N/A

Description: Fallen nest on the ground in the eastern ponderosa pine grove. This nest appeared large enough to host large raptors.





Photo ID	Date	Latitude	Longitude	Subject	Direction Taken
JP 011	1/26/2022	38.974386	-104.674182	Western Pine Grove	West

Description: Looking toward the western grove of ponderosa pines from the top of the ridge. The mountain mahogany shrubs in the foreground have been browsed by mule deer or pronghorn.





Photo ID	Date	Latitude	Longitude	Subject	Direction Taken			
JP_012	JP_012 1/26/2022 38.975044 -104.67632 Small Tributary Northwest							
Description: A	Description: A short tributary near the headwaters of the western stream in the Project Area.							



Photo ID	Date	Latitude	Longitude	Subject	Direction Taken			
JP_013 1/26/2022 38.974236 -104.676651 Western Stream Southeast								
Description: L	Description: Looking downstream below the headwaters of the western stream.							





Photo ID	Date	Latitude	Longitude	Subject	Direction Taken
JP_014	1/26/2022	38.973335	-104.676866	Western Stream	North

Description: Looking upstream along the western stream from near the western edge of the Project Area.





Photo ID	Date	Latitude	Longitude	Subject	Direction Taken
JP_015 1/26/2022 38.967246 -104.675581 Stream Culvert East					
Description: C	Culvert under Vo	ollmer Road at t	he southern end	of the western strean	n.





Photo ID	Date	Latitude	Longitude	Subject	Direction Taken
JP_016 1/26/2022 38.969403 -104.67432 Southern Meadow We					West
Description: B	road view acro	ss the meadow	near the souther	n end of the Project A	rea.





Photo ID	Date	Latitude	Longitude	Subject	Direction Taken
JP_017	1/26/2022	38.970975	-104.672995	Meadow with House	North

Description: View of the northern portion of the southern meadow. The main abandoned homestead is visible on the left side of the skyline, among the eastern grove of ponderosa pines.





Photo ID	Date	Latitude	Longitude	Subject	Direction Taken
JP_018	1/26/2022	38.973206	-104.675718	Burrowing Mammal Activity	N/A
	}			i Marrinar Activity	

Description: Burrowing activity of unknown rodents in the central-western part of the Project Area.



Photo ID	Date	Latitude	Longitude	Subject	Direction Taken
JP_019	1/26/2022	38.971254	-104.676308	Western Stream	South

Description: Looking downstream along the western stream near the central-western part of the Project Area.





Photo ID	Date	Latitude	Longitude	Subject	Direction Taken		
JP_020	1/26/2022	38.970858	-104.676388	Showy Milkweed	N/A		
Description: S	Description: Showy milkweed seed pods found along the western stream.						





Photo ID	Date	Latitude	Longitude	Subject	Direction Taken
JP_021	1/26/2022	38.968794	-104.676246	Southern Meadow	North

Description: A broad view of the meadow at the southern end of the Project Area, taken along the western stream.





Photo ID	Date	Latitude	Longitude	Subject	Direction Taken
JP_022	1/26/2022	38.967813	-104.675066	Western Stream	Northwest

Description: Looking upstream along the western stream from near its southern terminus within the Project Area.





Photo ID	Date	Latitude	Longitude	Subject	Direction Taken	
JP_023	1/26/2022	38.97528	-104.675763	Western Tributary	North	
Description: Looking upstream near the headwaters of the western stream.						





Photo ID	Date	Latitude	Longitude	Subject	Direction Taken
Raptor Nest 1	1/26/2022	38.975089	-104.675872	Inactive Raptor Nest	Northwest

Description: Inactive raptor nest in a small ponderosa pine. This is potentially an inactive, black-billed magpie nest, but has been documented in the event that a small raptor would choose to use it.



Photo ID	Date	Latitude	Longitude	Subject	Direction Taken
Raptor Nest 2	1/26/2022	38.973163	-104.671617	Inactive Raptor Nest	North

Description: Inactive raptor nest in the crown of a ponderosa pine on the ridge. This is potentially an inactive, black-billed magpie nest, but has been documented in the event that a small raptor would choose to use it.



Photo ID	Date	Latitude	Longitude	Subject	Direction Taken
Raptor Nest 3	1/26/2022	38.971883	-104.670614	Inactive Raptor Nest	South
Description: Inactive raptor nest in the crown of a ponderosa pine along Vollmer Road.					

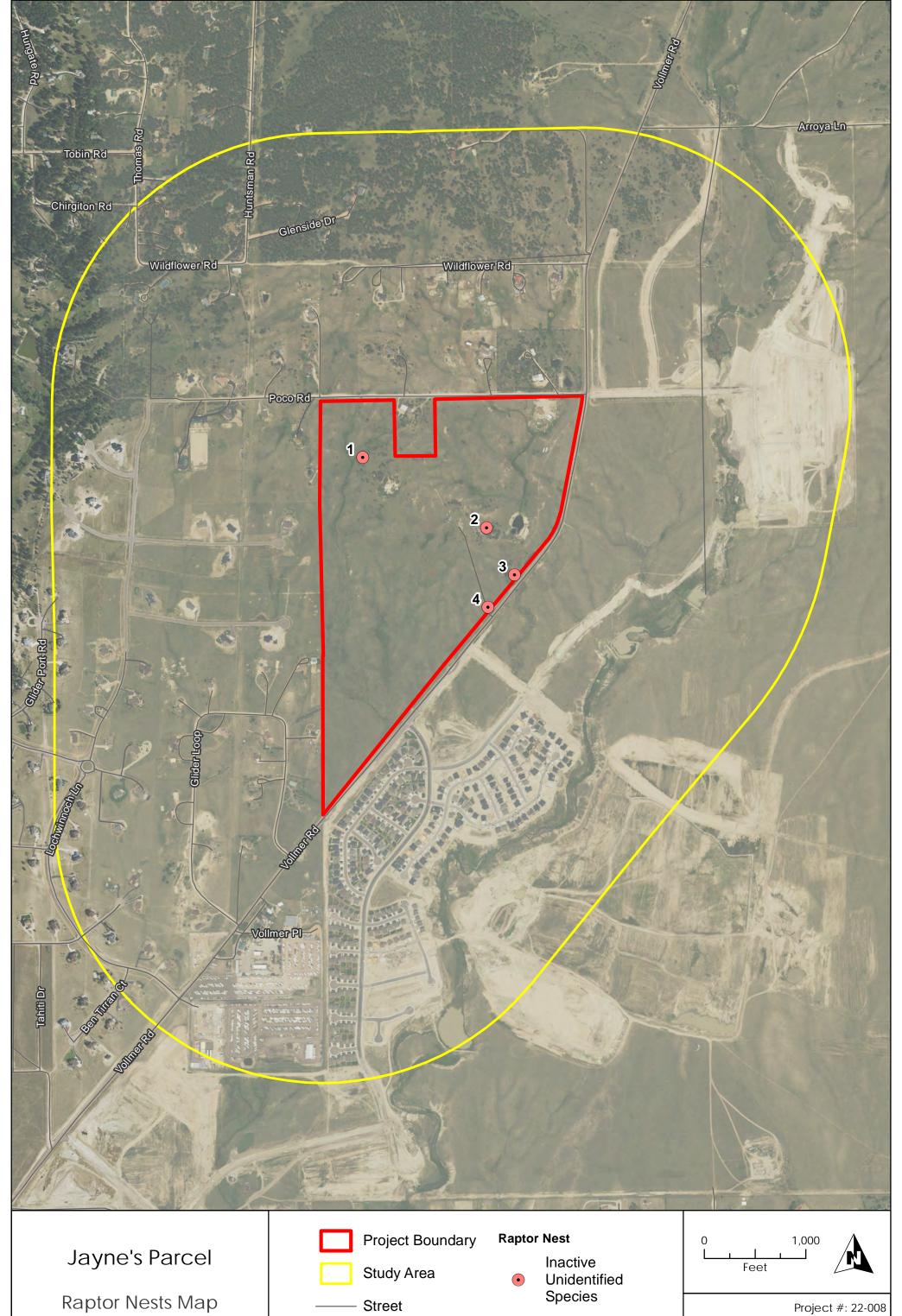


Photo ID	Date	Latitude	Longitude	Subject	Direction Taken	
Raptor Nest 4	1/26/2022	38.970957	-104.671537	Inactive Raptor Nest	South	
Description: Inactive raptor nest in a ponderosa pine along Vollmer Road.						



## **ATTACHMENT IV**

RAPTOR NESTS MAP



Reference: USGS Topographic Quad: Falcon NW CORE Consultants 2022, USDA 2021

El Paso County, CO

Date: 2/2/2022