



**Updated May 15, 2019**

Mr. Loren Moreland  
Classic Homes  
6385 Corporate Drive, Suite 200  
Colorado Springs, CO 80919

**Impact Identification Report  
The Ranch Development Project  
El Paso County, Colorado  
County File Reference # SKP-18-213**

Dear Mr. Moreland:

CORE Consultants, Inc. (CORE) presents this memo summarizing an impact identification report of the proposed Residential Development Project, The Ranch (hereafter referred to as the "Project"), in El Paso County (County), Colorado. The memo tiers to the requirements set-forth in the Impact Identification Report Checklist created by El Paso County. This report is required as part of a County submittal application for a Planned Unit Development (PUD). The Project is located in the Town of Falcon, Colorado, and is on the U.S. Geological Survey's (USGS) Falcon NW 7.5- x 7.5-minute Quadrangle (USGS 2017a; **Attachment I: Site Location Map**), in El Paso County. The study area is located southeast of the intersection of Raygor Road and Stapleton Drive, and is entirely within Section 35 in Township 12S, Range 65W (**Attachment I**).

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

- Significant topographic features;
- Potentially jurisdictional water features and floodplains;
- Potential for the occurrence of federally-listed threatened and endangered species (TES) and their associated habitats;
- Federally-designated Critical Habitat for TES;
- Potential for the occurrence of state threatened (ST), state endangered (SE), or state species of concern (SC), and their associated habitats;
- Big game migratory routes and species-specific concentration areas;
- Potential geologic hazards; and
- Potential wildfire hazards.

Publicly-available data sources reviewed via desktop included the U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Conservation (IPaC) System, the USFWS Critical Habitat Portal, species profiles and spatial data from Colorado Parks and Wildlife (CPW), the USFWS National Wetland Inventory (NWI), the USGS National Hydrography Dataset (NHD), Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panels, USGS aerial imagery, El Paso County Wildfire Hazard Map, and National Resources Conservation Service (NRCS) county soil surveys data (NRCS 1981;

NRCS 1992). A site reconnaissance was conducted on June 28, 2018 to field-verify the results of the desktop reviews.

## ENVIRONMENTAL SETTING

The study area encompasses approximately 630 acres within the Foothill Grasslands (Level IV) Ecoregion of the Southwestern Tablelands (Level III) Ecoregion (Chapman et al. 2006). Elevations of the study area range between approximately 7,010 feet above mean sea level (AMSL) to approximately 7,170 feet AMSL. Existing rural residential development surrounds the study area in varying densities. The Foothills Grasslands region is generally characterized by dissected and irregular plains with increasing residential development. Vegetative cover of the Foothills Grasslands is predominantly shortgrass prairie with blue grama (*Bouteloua gracilis*), buffalograss (*Bouteloua dactyloides*), green needlegrass (*Nassella viridula*), needle-and-thread (*Hesperostipa comata*), and purple three-awn (*Aristida purpurea*). Isolated areas of sand sagebrush (*Artemisia filifolia*), yucca (*Yucca spp.*), and cholla (*Cylindropuntia spp.*) also occur (Chapman et al. 2006). Along the more developed areas of the Front Range where the ecoregion begins to transition to the pine-oak woodlands, vegetation includes ponderosa pine (*Pinus ponderosa*), Gambel oak (*Quercus gambelii*), mountain mahogany (*Cercocarpus montanus*), skunkbush (*Rhus trilobata*), western serviceberry (*Amelanchier alnifolia*), and chokecherry (*Prunus virginiana*). Riparian areas often include cottonwoods (*Populus spp.*), willow trees and shrubs (*Salix spp.*), alders (*Alnus spp.*), and elms (*Ulmus sp.*). Wetlands may often contain typical high plains hydrophytes such as Nebraska sedge (*Carex nebrascensis*), arctic rush (*Juncus arcticus*), broadleaf cattail (*Typha latifolia*), and hardstem bulrush (*Schoenoplectus acutus*).

## BACKGROUND DOCUMENTATION REVIEW

### ***Wetlands and Waters of the U.S.***

The USFWS NWI and USGS NHD datasets were reviewed for the presence of potentially jurisdictional Waters of the U.S. (WOUS) within the Project. Aerial imagery was reviewed to locate water features not included within the NWI and NHD datasets. Aerial imagery indicated two well-defined channels and a pond with surface water within the southeastern portion of the Project. Vegetation appeared dense within the channels. NWI data depicted as many as seven wetlands; NHD data depicted two waterbodies, and two watercourses within the Project (**Attachment II: Project Figures**). Types and locations of NWI wetlands included:

- Four R4SBC (Riverine, Intermittent, Seasonally-flooded Streambed) wetlands, representing the majority of four depicted stream channels on the site;
- One PUBF (Palustrine, Unconsolidated Bottom, Semipermanently Flooded) wetland, a pond on the eastern boundary of the site;
- One PUSA (Palustrine, Unconsolidated Shore, Temporarily Flooded) wetland, a pond in the north-central portion of the site;
- One PEMIA (Palustrine, Persistent Emergent, Temporarily Flooded) wetland within the east fork of the westernmost stream.

### ***FEMA Zone-A Floodplains***

A review of FEMA FIRM floodplain maps was conducted to determine the existence, location, and extent of floodplains located within the Project. The FIRM maps depict floodplain areas along rivers and

tributaries. The maps record the following data: 100-year floodplains (1% chance of annual flooding) and 500-year floodplains (0.2% annual chance of flooding), the height of the base flood (Base Flood Elevations), and the risk premium zones developed from topographical information across a floodplain. The FEMA generates FIRM floodplain maps for flood insurance purposes.

A review of El Paso County FEMA FIRM panels indicates that the Project is located completely outside of any risk of inundation by a 100-year flood (**Attachment II**). The Project is located within FEMA FIRM panel 08041C0535G, El Paso County.

#### **Federal TES**

The USFWS IPaC database (USFWS 2018a) was used to determine the likelihood of occurrence of federally-listed TES within the Project. The IPaC query listed four species, including one bird, one fish, one flowering plant, and one mammal with the potential to occur within the Project; an additional five species were listed under a conditional effects analysis (**Table I: Federal TES Likelihood of Occurrence Within the Project**). The IPaC query did not identify any Critical Habitat as occurring within or adjacent to the proposed Project (2018b).

**Table 1. Federal TES Likelihood of Occurrence within the Project (USFWS 2018a)**

COMMON NAME	SCIENTIFIC NAME	STATUS	LIKELIHOOD OF OCCURENCE
<b>Complete Effects Analysis</b>			
Greenback Cutthroat Trout	<i>Oncorhynchus clarki stomias</i>	FT, ST	Unlikely. Genetic sampling has confirmed that the only remaining native pure-strain population occurs in a four mile stretch of creek outside of its native range in Bear Creek, a small tributary in the Arkansas River Basin (Metcalf et al. 2012).
Mexican spotted owl	<i>Strix occidentalis lucida</i>	FT, ST	Unlikely; requires mixed-conifer stands and narrow canyons (Gutiérrez et al. 1995); designated Critical Habitat >10 miles from Project; lack of habitat connectivity.
North American Wolverine	<i>Gulo gulo luscus</i>	PFT	Very Unlikely; requires high-elevation alpine habitat (Aubry 2007).
Ute ladies'-tresses	<i>Spiranthes diluvialis</i>	FT	Unlikely; see discussion below
<b>Conditional Effects Analysis</b>			
Least tern	<i>Sternula antillarum</i> (interior population)	FE, SE	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.
Pallid sturgeon	<i>Scaphirhynchus albus</i> (entire population)	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	<i>Charadrius melanotos</i> (except Great Lakes watershed)	FT, ST	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	<i>Grus americana</i>	FE, SE	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	<i>Platanthera praecox</i>	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.

FE=Federally Endangered; FT=Federally Threatened; PFT=Proposed Federally Threatened; SE=State Endangered; ST=State Threatened

#### *Ute Ladies'-tresses Orchid*

Ute ladies'-tresses orchid (ULTO) is a perennial orchid listed as federally threatened. This forb has ivory flower clusters arranged in a spike growing approximately 8-20 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 (USFWS 2014). Surveys have indicated that the 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; NRCS 2009). Soils have a high micronutrient and organic matter content and often display gley features when field sampled (NRCS 2009).

A review of spatial data and aerial imagery indicated that habitat requirements for ULTO could be present within portions of the Project (**Attachment II**). Even though the entire Project is located outside a Zone A floodplain (National Hydrography Dataset 2017b; FEMA 2005), interpretation of aerial imagery would indicate that some areas receive regular inundation. The USFWS' *Interim Survey Requirements for Ute Ladies'-tresses Orchid* (1992) do not require ULTO surveys for sites above 6,500 feet in elevation in El Paso County, an elevation which the entire site is above. Furthermore, surveys are not required for tributaries in the Arkansas River basin that do not drain into the Monument Creek/Fountain Creek watersheds. Since the Project area is entirely above 6,500 feet AMSL and not in a watershed where surveys are required, impacts to the species from Project development are very unlikely.

#### *Preble's Meadow Jumping Mouse*

Even though Preble's meadow jumping mouse (*Zapus hudsonius preblei*, or PMJM) was not flagged during the IPaC review, suitable habitat does exist within El Paso County and the mouse is a state threatened species, and therefore warrants discussion.

PMJM is a federally-listed TES and is a ST species in Colorado. PMJM occurs along the Front Range of the Rocky Mountains throughout several counties in Wyoming and Colorado. Preferred habitat includes well developed riparian corridors with gentle slopes and adjacent grasslands that allow for movement in and out of the stream channel. Populations have declined due to habitat fragmentation and degradation resulting from urban development in and adjacent to riparian areas (USFWS 2004).

The Project area falls within the block clearance zone for Colorado Springs (**Attachment II**). Block clearances were established in order to eliminate the need for surveys for PMJM in areas where their presence was highly unlikely due to dense, urban development within the block clearance zone (USFWS 2017). Furthermore, the USFWS does not consider areas within the block clearance to be important for the recovery of the species (USFWS 2017c). Therefore, because the Project lies within the PMJM block clearance zone, development is not likely to adversely affect PMJM.

#### **Migratory Birds**

The USFWS IPaC database (USFWS 2018a) was used to determine the potential for occurrence of migratory birds within the Project that are protected under the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. §§ 703–712). Even though the IPaC query did not list any migratory birds of concern within the vicinity of the proposed project, breeding migratory birds, and the parts, nests, or eggs of

such a bird receive statutory protection under the MBTA, and intentionally disturbing such species (defined at 16 U.S.C. §§ 703–712) is prohibited.

***Colorado Parks and Wildlife Species Activity Mapping: El Paso County***

The CPW Species Activity Mapping (SAM) spatial data were reviewed to determine the likelihood of occurrence for state TES, state species of concern (SC), and other general wildlife, including big game species. The review indicated that there is potential for the occurrence of six mammals and sixteen reptiles, including one state SC mammal and one state-threatened mammal (**Table 2: Non-Federal TES Wildlife Potential of Occurrence**).

General wildlife does not receive statutory protection, and the Project area does not intersect with big game migratory routes. The Project does intersect with seasonal concentration areas and/or ranges of some big game including elk, mule deer, and white-tailed deer. Development of residential properties has the potential to attract black bears, since trash would be readily available for forage.

**Table 2. Non-Federal TES Wildlife Potential of Occurrence (CPW 2017)**

COMMON NAME	SCIENTIFIC NAME	TYPE OF OCCURENCE (CPW 2017)	STATUS
<b>Mammals</b>			
Brazilian free-tailed bat	<i>Tadarida brasiliensis</i>	Overall range	N/A
Black bear	<i>Ursus americanus</i>	Fall concentration area; black bear-human conflict area	N/A
Black-tailed prairie dog	<i>Cynomys ludovicianus</i>	Overall range	SC
Mule deer	<i>Odocoileus hemionus</i>	Overall range	N/A
Pronghorn	<i>Antilocapra americana</i>	Overall range	N/A
<b>Reptiles</b>			
Bullsnake	<i>Pituophis catenifer sayi</i>	Overall range	N/A
Coachwhip	<i>Masticophis flagellum</i>	Overall range	N/A
Common lesser earless lizard	<i>Holbrookia maculata</i>	Overall range	N/A
Eastern fence lizard	<i>Sceloporus undulatus</i>	Overall range	N/A
Hernandez's short-horned lizard	<i>Phrynosoma hernandesi hernandesi</i>	Overall range	N/A
Many-lined skink	<i>Plestiodon multivirgatus</i>	Overall range	N/A
Milk snake	<i>Lampropeltis triangulum</i>	Overall range	N/A
Ornate box turtle	<i>Terrapene ornata ornata</i>	Overall range	N/A
Painted turtle	<i>Chrysemys picta</i>	Overall range	N/A
Plains garter snake	<i>Thamnophis radix</i>	Overall range	N/A
Plateau fence lizard	<i>Sceloporus tristichus</i>	Overall range	N/A
Prairie rattlesnake	<i>Crotalus viridis</i>	Overall range	N/A
Six-lined racerunner	<i>Aspidoscelis sexlineata</i>	Overall range	N/A
Smooth green snake	<i>Opheodrys vernalis</i>	Overall range	N/A
Terrestrial garter snake	<i>Thamnophis elegans</i>	Overall range	N/A

SC=State Species of Concern; N/A=No Statutory Designation

### **Geologic Hazards Review**

Soil survey data and reports were reviewed to determine the potential for the presence of geologic hazards within the Project (NRCS 1992 and NRCS 1981). The NRCS provides information on soil properties that would influence the development of building sites for dwellings with basements, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Quantitative soil ratings are assigned to each major soil group and include 'Not limited', 'Somewhat limited', and 'Very limited'. 'Not limited' indicates that the soil type has properties that are very favorable for the specified type of construction. 'Somewhat limited' indicates that the soil type has properties that are moderately favorable for the specified type of construction. These limitations can generally be overcome through planning and design considerations. 'Very limited' indicates that the soil type has properties that cannot generally be overcome through design and planning considerations (NRCS 2017). County soil survey data indicate that the Project is composed of Pring coarse sandy loam (3 to 8 percent slopes), Columbine gravelly sandy loam (0 to 3 percent slopes), and Blakeland loamy sand (1 to 9 percent slopes; NRCS 1992; NRCS 1981; **Attachment II**). The review of soils data indicated that Columbine gravelly sandy loam (0 to 3 percent slopes) comprise 75% of the Project. Pring coarse sandy loam (3 to 8 percent slopes) is found on 20% of Project Area. Finally, Blakeland loamy sand (1 to 9 percent slopes) is found within 5% of the Project area. All of these soils are considered 'Not limited' for the construction of dwellings with or without basements (**Attachment II**). However, it is anticipated that the Project will conduct appropriate on-site soil sampling prior to submittal of a site development plan to ensure that all planned portions of the Project can support dwellings with basements, if such buildings are planned.

### **Wildfire Hazards Review**

The El Paso County Wildfire Hazards Based on CVCP Indicators Map was reviewed to determine the potential wildfire hazard levels within the Project. The County assigns a rating of 'High Hazard' or 'Low Hazard' based on type of vegetation cover. Forested areas are considered 'High Hazard' and grass/shrub areas are considered 'Low Hazard'. A review of the map indicated that the Project consists of lands considered 'Low Hazard' (El Paso County 2007).

## **SITE RECONNAISSANCE**

A site reconnaissance and routine wetland delineation of the Project was conducted on June 28, 2018 (**Attachment III: Wetland Delineation Report**). The site reconnaissance confirmed the initial desktop findings pertaining to the likelihood of occurrence of biological resources on the Project.

### **Vegetation**

Dominant vegetation consisted of plants typical of the foothill grasslands and pine-oak woodlands. Native species observed included blue grama, needle-and-thread (*Hesperotipa comata*), yellow Indiangrass, fringed sage, blackbent (*Agrostis gigantea*), and buckwheats (*Polygonum* spp.). A variety of hydrophytic plants were present in wetlands (**Attachment III**). Noxious weed species observed included common mullein (*Verbascum thapsus*), Russian thistle, (*Cirsium arvense*), and diffuse knapweed (*Centaurea diffusa*). El Paso County requires that noxious weed populations be treated prior to construction on projects requiring ground disturbance (El Paso County 2014). Refer to the Project's *Noxious Weed Management Plan* (**Attachment IV**) for more information on noxious weed treatment recommendations.

### **Federal TES**

Habitat for federal and state TES is not present within the Project area. Four species were identified by IPaC as having the potential to occur in the area; among these, only two species (one federal TES and one state-listed species) had potential to occur based on their specific habitat requirements. Habitats at the Project site were inspected in the field to better determine the potential for these species' occurrence. After surveying the site, it was concluded that none of the two species – ULTO and PMJM – had potential to occur at the site based on the lack of their specific, constituent habitat requirements.

CORE evaluated Project impact areas for suitable ULTO habitat. Two long channels containing wetlands are located in the southwestern corner of the Project (**Attachment I**; **Attachment II**). As such, the wetland presents potentially suitable habitat for the ULTO. However, since ULTO do not typically occur above 6,500 feet amsl in Colorado, it is unlikely that the channels would support populations of ULTO. Further surveys for ULTO are not required based on the Project's location and elevation (USFWS 1992).

PMJM is a federally-listed TES and is a state threatened species in Colorado. Suitable habitat for PMJM is lacking within the Project, which also falls within the PMJM block clearance zone for Colorado Springs (**Attachment II**). Therefore, development is not likely to adversely affect PMJM, and further study is not required.

### **Migratory Birds**

Even though there are no migratory birds of conservation concern found on the Project, there is the likelihood of nesting migratory birds, possibly including raptors. 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 (CPW 2008). In addition, a ground clearance survey for breeding songbirds would confirm the presence or absence of active nesting birds during the breeding season (February 1 through July 15). If construction is not scheduled during the breeding season for birds, clearance surveys would not be necessary. No black-tailed prairie dog colonies (active or historic) were observed at the Project; as such, there is no potential for the occurrence of nesting burrowing owls (*Athene cunicularia*) – a state threatened species – on the Project.

### **CPW Species Activity Mapping**

The site reconnaissance determined a high likelihood for several wildlife species identified during the desktop review of CPW SAM data (CPW 2017). Mammals with a high likelihood of occurrence on the Project include Brazilian free-tailed bat, black bear, black-tailed prairie dog, mule deer, and pronghorn. Both mule deer and pronghorn were observed during site visits, and black-tailed prairie dogs have the potential to be present at nearby properties. The Project provides suitable habitat for many reptile and mammal species identified during the desktop review of CPW SAM data (CPW 2017).

### **WOUS**

Watercourses and other aquatic features identified in the preliminary desktop analysis were inspected in the field to assess their jurisdictional potential. A site visit and routine wetland delineation were conducted on June 28, 2018 (**Attachment III**). The wetland delineation was performed in accordance with the Western Mountains, Valleys, and Coasts Regional Supplement (Version 2.0; USACE 2010) to the 1987 USACE Wetland Delineation Manual (USACE 1987). During the field assessment, six total wetlands were confirmed in the field, all of them isolated and presumably non-jurisdictional. The westernmost streams both contained wetlands within significant portions of the stream channels; the only wetland associated

with the eastern streams was a pond on the eastern boundary of the Project area (**Attachment III**). One additional wetland not depicted in the NWI or NHD datasets was delineated in the field near the southeast corner of the Project area (**Attachment III**). This wetland and the pond at the eastern edge of the Project area were not associated with any other aquatic features and appear to be isolated wetlands, and are presumably not jurisdictional (**Attachment III**). Two streams in the western half of the Project area possessed a well-defined streambed and banks capable of conveying significant volumes of water, but lacked hydrologic connection to WOUS downstream; both are presumed non-jurisdictional. The other watercourses observed in the survey area were ephemeral with no defined bed and bank and no ordinary high water mark, and were also considered to be non-jurisdictional. This included the entirety of both eastern stream channels. Although CORE determined that all aquatic features on the site were likely non-jurisdictional, a determination on the regulatory status of these features is solely the purview of the USACE.

The USACE typically has jurisdiction over navigable or traditionally navigable waters, relatively permanent waters, and wetlands that abut such waters, and determines jurisdiction over other waters based predominantly on their significant nexus to navigable or traditionally navigable waters (i.e. WOUS). Because the aquatic resources on the site are all presumed non-jurisdictional, it is not expected that a permit under Section 404 of the Clean Water Act would be required for Project development.

## CULTURAL RESOURCES

Cultural resources are governed by the National Historic Preservation Act (NHPA) of 1966. Section 106 of the NHPA states that cultural resource surveys and possibly mitigation must be performed if a project will have a federal nexus (i.e. if the project receives federal funding or requires a federal permit or other authorization). If it is determined that the Project will require permitting under Section 404 of the Clean Water Act (CWA), or through another federal nexus, CORE will contract a cultural resources subcontractor to conduct the appropriate cultural resource reviews as indicated through coordination with the USACE or other federal agency.

## CONCLUSIONS

Upon completion of a desktop review, site reconnaissance, and routine wetland delineation, CORE finds that some biological constraints are present within the Project. It is possible that potentially suitable habitat for the federally threatened ULTO occurs on site. The USFWS' *Interim Survey Requirements for Ute Ladies'-tresses Orchid* (USFWS 1992) require ULTO surveys of relatively undisturbed jurisdictional wetlands within the 100-year floodplain on sites with elevations below 6,500 amsl. However, since Project elevations are well above 6,500 feet amsl, it is unlikely that Project development would result in impacts to ULTO or its associated habitats. Also, the Project is located entirely outside the 100-year floodplain. Further surveys are not required with regard to ULTO (USFWS 1992).

The site reconnaissance indicated that suitable PMJM habitat is not present within the Project. Furthermore, the Project lies within the Colorado Springs PMJM block clearance zone and development is not likely to adversely affect PMJM. Surveys are not required within PMJM block clearance zones (USFWS 2017).

Nest substrates for migratory birds were present on the site in the form of open grasslands, and nesting migratory birds and their nests were detected during the site reconnaissance. Breeding migratory birds, and the parts, nests, or eggs of such a bird receive statutory protection under the MBTA. Nesting raptor and ground-nesting breeding bird surveys would confirm the presence or absence of nesting birds within the Project, if Project construction would occur during the nesting seasons for migratory birds.

There is potential for other wildlife, including some big game, to occur within the Project. However, no big game migratory routes traverse the Project. Coordination with CPW would determine the appropriate avoidance measures to take during construction, if any, and any restrictions or covenants that might be required once the Project is built.

The wetland delineation determined that four potentially jurisdictional aquatic features are located within the study area. The jurisdictional nature of a given water feature can be determined only by the USACE. Should the Project impact jurisdictional water features on the Project, permitting pursuant to Section 404 of the CWA would be required.

Given the presence of these biological constraints, CORE provides the following recommendations/guidance:

- Confirm with the USFWS that ULTO surveys are not required for the Project.
- Should construction begin during the breeding bird season (February 1 through July 15), conduct nesting raptor and migratory nesting bird ground clearance surveys to determine the presence or absence of nesting birds within the Project.
- Coordinate with CPW to determine appropriate avoidance measures should CPW express concerns over the potential presence of other wildlife species such as big game within the Project.

- Avoid potentially jurisdictional water features. Should Project design unavoidably impact potentially jurisdictional water features, submit an application to the USACE for a permit pursuant to Section 404 of the CWA.
- Adhere to the Project's noxious weed management plan, and inventory and treat noxious weeds on the Project prior to construction.

If you have any questions, concerns or require additional information, please feel free to contact us at 303.703.4444, or by email at [maynard@corecivil.com](mailto:maynard@corecivil.com).

Sincerely,  
**CORE Consultants, Inc.**



Dan Maynard  
**Senior Ecologist**

## **LIST OF ATTACHMENTS**

- ATTACHMENT I:** SITE LOCATION MAP  
**ATTACHMENT II:** PROJECT FIGURES  
**ATTACHMENT III:** WETLAND DELINEATION REPORT  
**ATTACHMENT IV:** NOXIOUS WEED MANAGEMENT PLAN

## REFERENCES

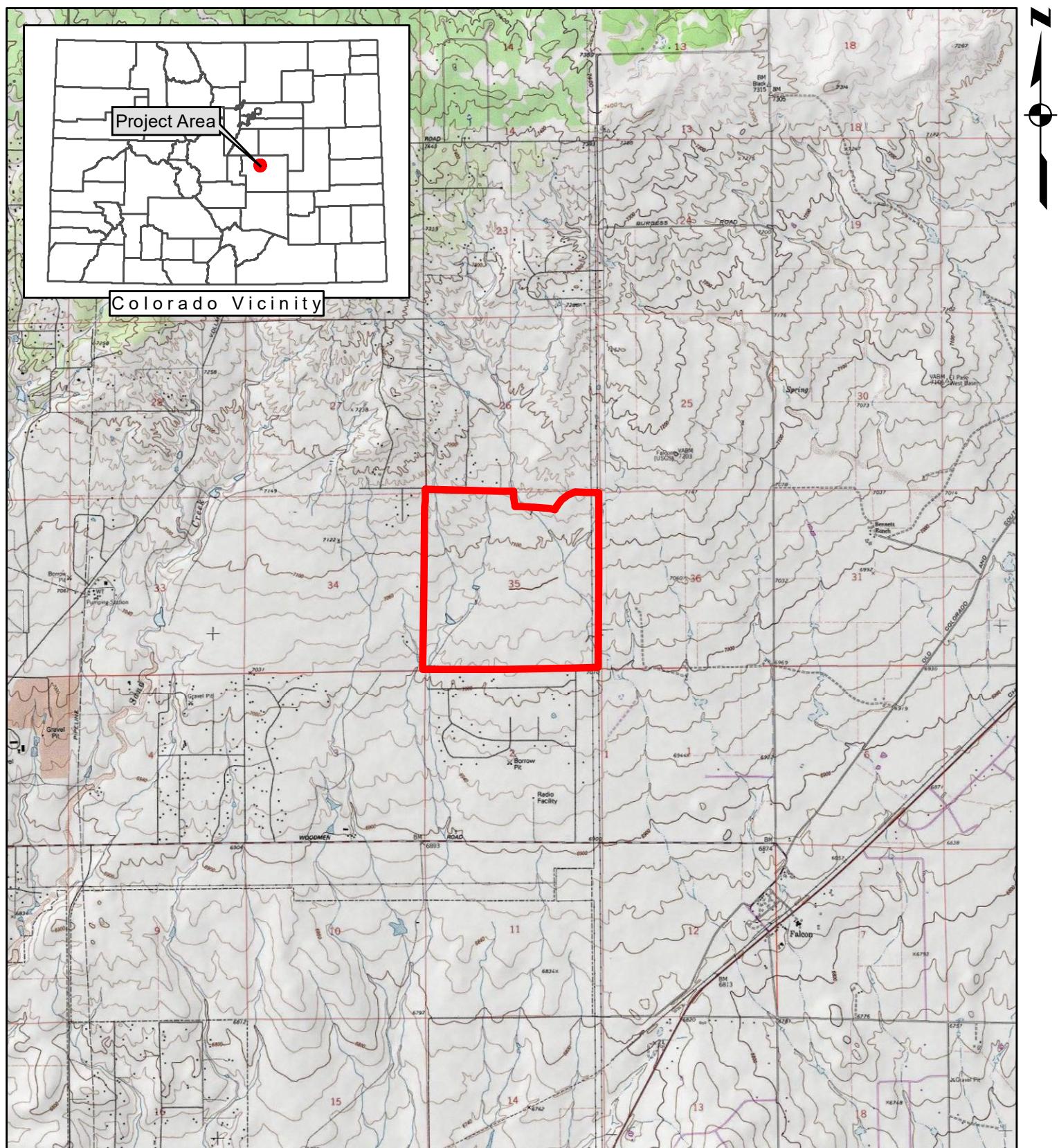
- Aubry, K. B., K. S. McKelvey, and J. P. Copeland. 2007. Distribution and broadscale habitat relations of the wolverine in the contiguous United States. *Journal of Wildlife Management*. 71:2147-2158.
- Chapman, S.S., G.E. Griffith, J.M. Omernik, A.B. Price, J. Freeouf, and D.L. Schrupp. 2006. Ecoregions of Colorado (color poster with map, descriptive text, summary tables, and photographs): Reston, Virginia, U.S. Geological Survey (map scale 1:1,950,000).
- CPW (Colorado Parks and Wildlife). 2017. CPW Species Activity Mapping Data. Updated February 2017. Available for download at:  
<https://www.arcgis.com/home/item.html?id=190573c5aba643a0bc058e6f7f0510b7>
- \_\_\_\_\_. 2008. Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors. Available online at <https://cpw.state.co.us/Documents/WildlifeSpecies/LivingWithWildlife/RaptorBufferGuidelines2008.pdf>.
- El Paso County. Noxious Weed Management Plan. 2014. Available online at  
<http://adm.elpasoco.com/Environmental%20Division/Forestry%20and%20Noxious%20Weeds/Documents/14-097.pdf>
- \_\_\_\_\_. 2007. Wildfire Hazards Based on CVCP Indicators. Available online at  
<http://adm.elpasoco.com/Development%20Services/Documents/All%20Maps/FireHazards.pdf>
- FEMA (Federal Emergency Management Agency). 2005. El Paso County, Colorado FEMA Flood Insurance Rate Maps. Panels. 08041C0260F and 08041C0270F.
- Fertig, W., R. Black, and P. Wolken. 2005. Rangewide Status Review of Ute's Ladies'- Tresses (*Spiranthes diluvialis*). Available online at [https://www.fws.gov/mountain-prairie/species/plants/uteladiestress/spdi\\_status%20review\\_fertig2005.pdf](https://www.fws.gov/mountain-prairie/species/plants/uteladiestress/spdi_status%20review_fertig2005.pdf).
- Gutiérrez, R.J., A.B. Franklin and W.S. Lahaye. 1995. Spotted Owl (*Strix occidentalis*), The Birds of North America Online (A. Poole, Ed.). Cornell Lab of Ornithology, Ithaca, New York, NY, USA. Available online at <http://bna.birds.cornell.edu/bna/species/179>.
- Metcalf, J. L., S. Love Stowell, C. M. Kennedy, K. B. Rogers, D. McDonald, J. Epp, K. Keepers, Cooper, J. J. Austin, and A. P. Martin. "Historical Stocking Data and 19th Century DNA Reveal Human-Induced Changes to Native Diversity and Distribution of Cutthroat Trout." *Molecular Ecology* 21, no. 21 (November 1, 2012): 5194–5207. doi:10.1111/mec.12028.
- NRCS (Natural Resources Conservation Service). 2017. Building Site Development: Dwellings and Small Commerical Buildings Report. Available online at:  
<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

## REFERENCES, CONT.

- NRCS (Natural Resources Conservation Service). 2009. Ute Ladies'-Tresses (*Spiranthes diluvialis*) Plant Guide. Available online at [https://plants.usda.gov/plantguide/pdf/pg\\_spdi6.pdf](https://plants.usda.gov/plantguide/pdf/pg_spdi6.pdf)
- \_\_\_\_\_. 1992. Pike National Forest, Eastern Part, Colorado Parts of Douglas, El Paso, Jefferson, and Teller Counties Soil Survey.
- \_\_\_\_\_. 1981. El Paso County Soil Survey.
- USACE (U.S. Army Corps of Engineers). 1987. Wetlands Delineation Manual.
- \_\_\_\_\_. 2010. Mountains Valleys and Coasts Regional Supplement (Version 2.0).
- USFWS (U.S. Fish and Wildlife Service). 2018a. Information for Planning and Conservation Online System. Available online at <https://ecos.fws.gov/ipac/>.
- \_\_\_\_\_. 2018b. Critical Habitat Portal. Available online at [http://ecos.fws.gov/tess\\_public/profile/speciesProfile?spcode=E00F](http://ecos.fws.gov/tess_public/profile/speciesProfile?spcode=E00F). Accessed December 2016.
- \_\_\_\_\_. 2017. Preble's Meadow Jumping Mouse Block Clearance Letter Renewal. [Online]. Available at: [https://www.fws.gov/mountain-prairie/es/species/mammals/preble/2017-TA-1366 LETTER\\_Colorado\\_Springs\\_Block\\_Clearance\\_Extension\\_Request\\_CSU\\_signed.pdf](https://www.fws.gov/mountain-prairie/es/species/mammals/preble/2017-TA-1366 LETTER_Colorado_Springs_Block_Clearance_Extension_Request_CSU_signed.pdf)
- \_\_\_\_\_. 2014. Species Profile for Ute ladies'-tresses (*Spiranthes diluvialis*). Available online at <https://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=Q2WA>.
- \_\_\_\_\_. 2004. Preble's Meadow Jumping Mouse (*Zapus hudsonius preblei*) Survey Guidelines. Available online at <http://www.fws.gov/mountainprairie/species/mammals/preble/CONSULTANTS/pmjm2004guidelines.pdf>.
- \_\_\_\_\_. 1992. Interim Survey Requirements for Ute Ladies'-tresses Orchid. [Online]. Available at [https://www.fws.gov/utahfieldoffice/Documents/Plants/SPDI\\_interimSurveyRequirements\\_1992.pdf](https://www.fws.gov/utahfieldoffice/Documents/Plants/SPDI_interimSurveyRequirements_1992.pdf)
- USGS (U.S. Geological Survey). 2017a. U.S. Geological Survey 7.5-Minute Topographic Maps. 2017. Falcon Quadrangle – Colorado.
- \_\_\_\_\_. 2017b. National Hydrography Dataset. [Online]. Available at: [https://nhd.usgs.gov/NHD\\_High\\_Resolution.html](https://nhd.usgs.gov/NHD_High_Resolution.html). Data updated August 3, 2017.



**ATTACHMENT I**  
*SITE LOCATION MAP*



## The Ranch Project

### Site Location Map

El Paso County, Colorado

  Study Area

Reference:  
USGS 7.5 Minute  
Topographic Quadrangle  
Falcon NW, CO Quad

0 2,000 4,000

Feet

1 inch = 4,000 feet

Date: 7/13/2018

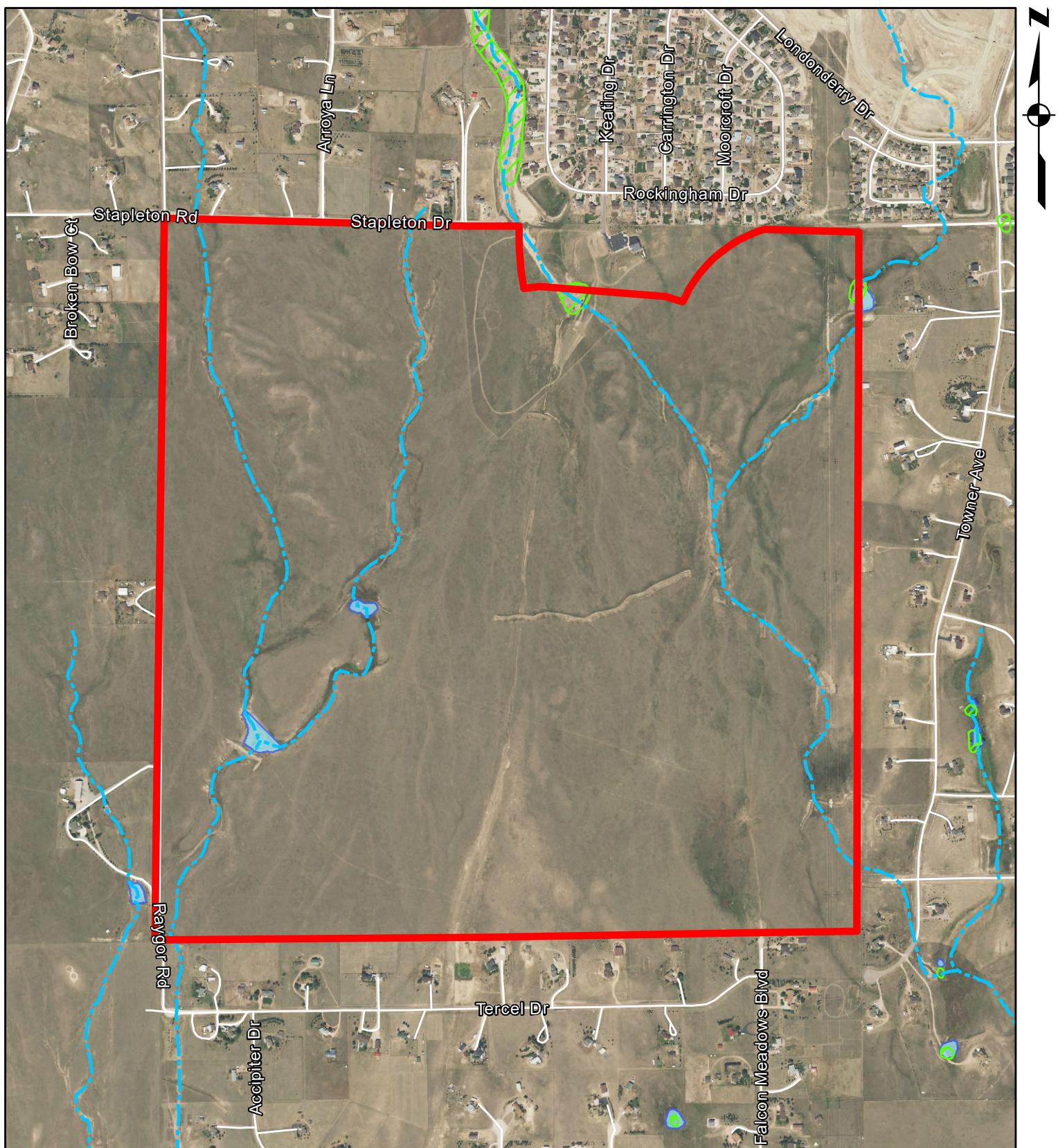


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**ATTACHMENT II**  
*PROJECT FIGURES*



## The Ranch Project

### National Wetland Inventory Map

El Paso County, Colorado

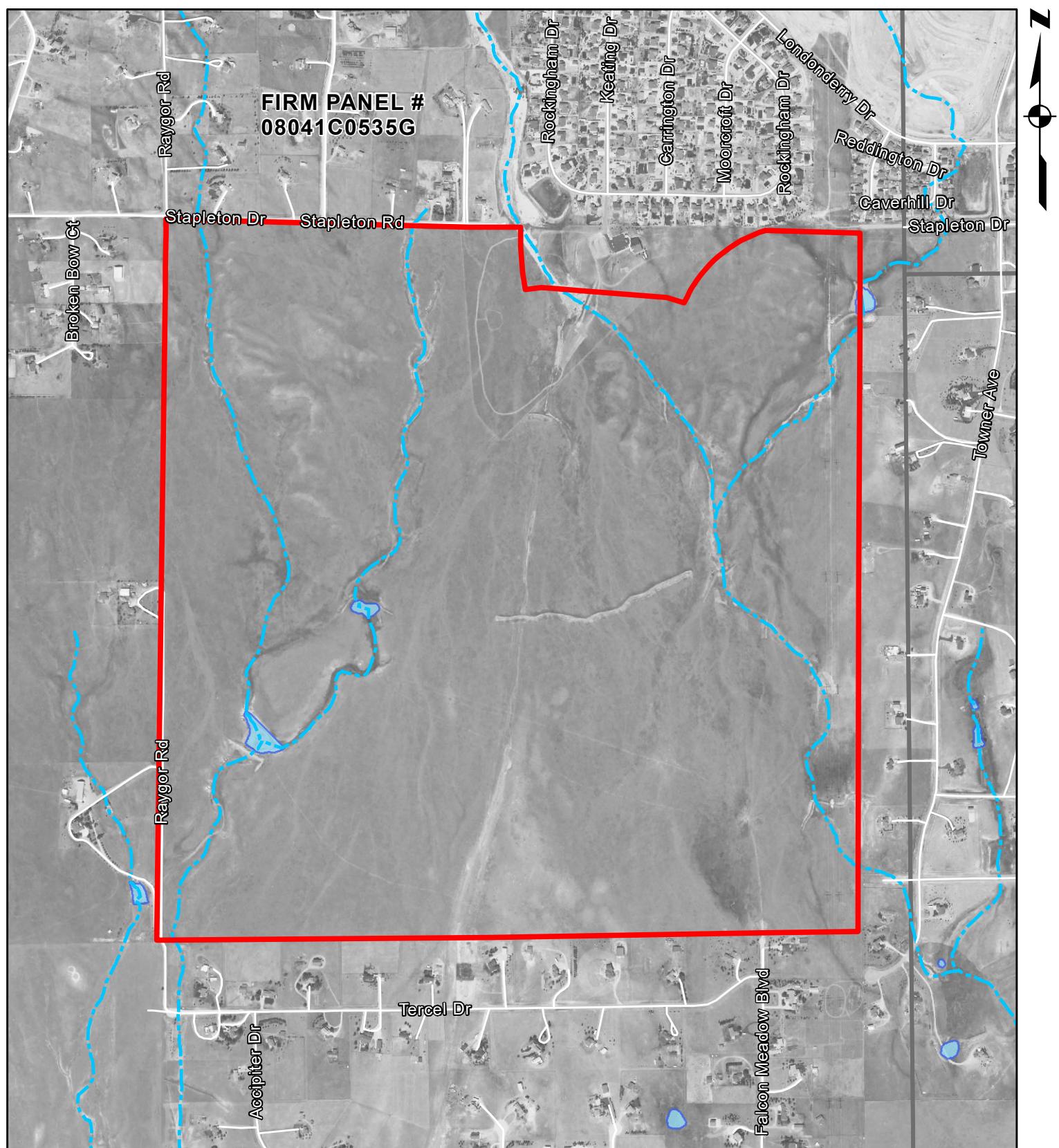
0 500 1,000

Feet

1 inch = 1,000 feet

- Study Area
- NHD Watercourse
- NHD Waterbody
- NWI Wetland

Date: 7/13/2018



## The Ranch Project

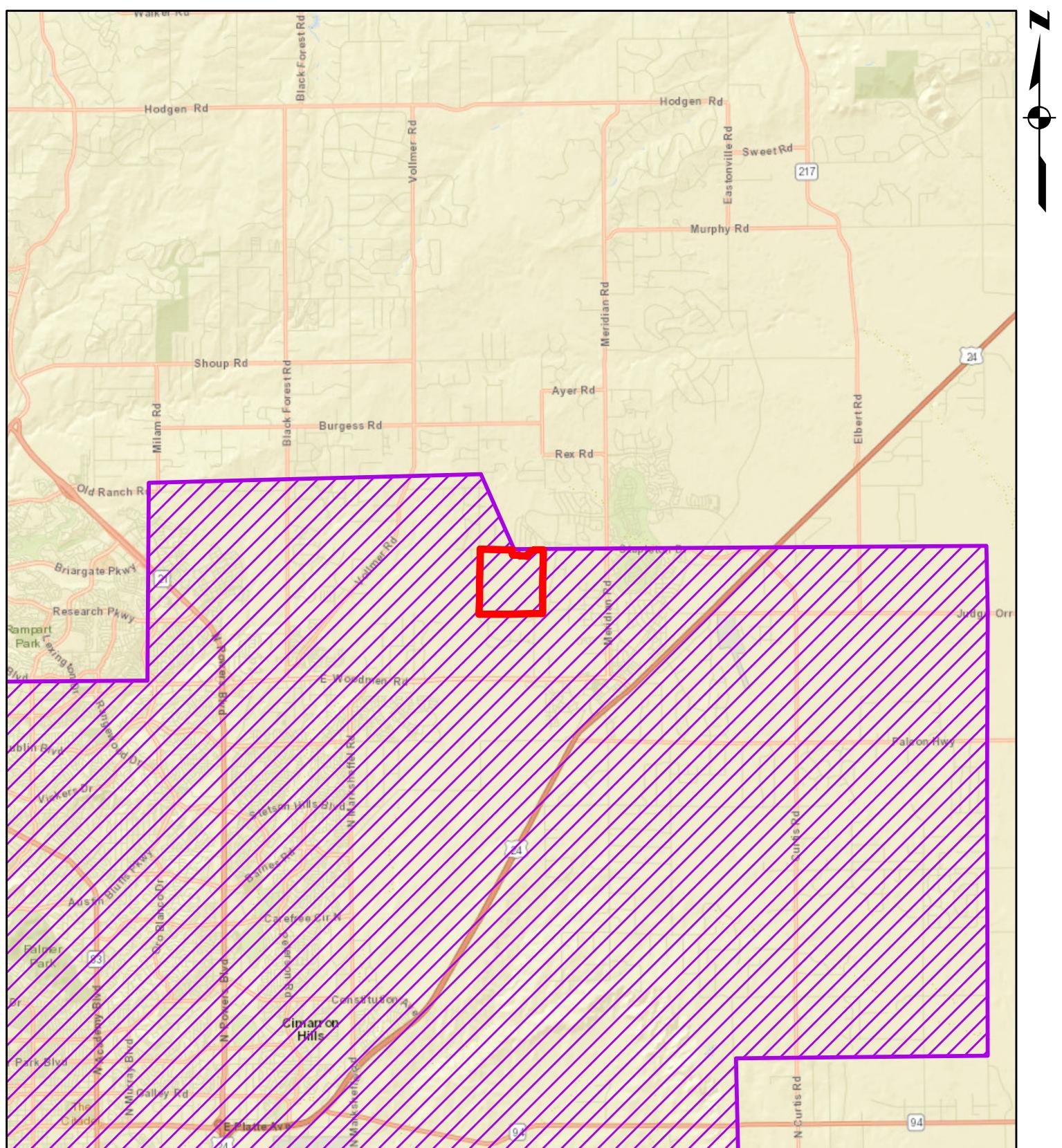
### FEMA Flood Insurance Rate Map

El Paso County, Colorado

0 500 1,000  
Feet

1 inch = 1,000 feet

Date: 7/13/2018



## The Ranch Project PMJM Block Clearance Map

El Paso County, Colorado

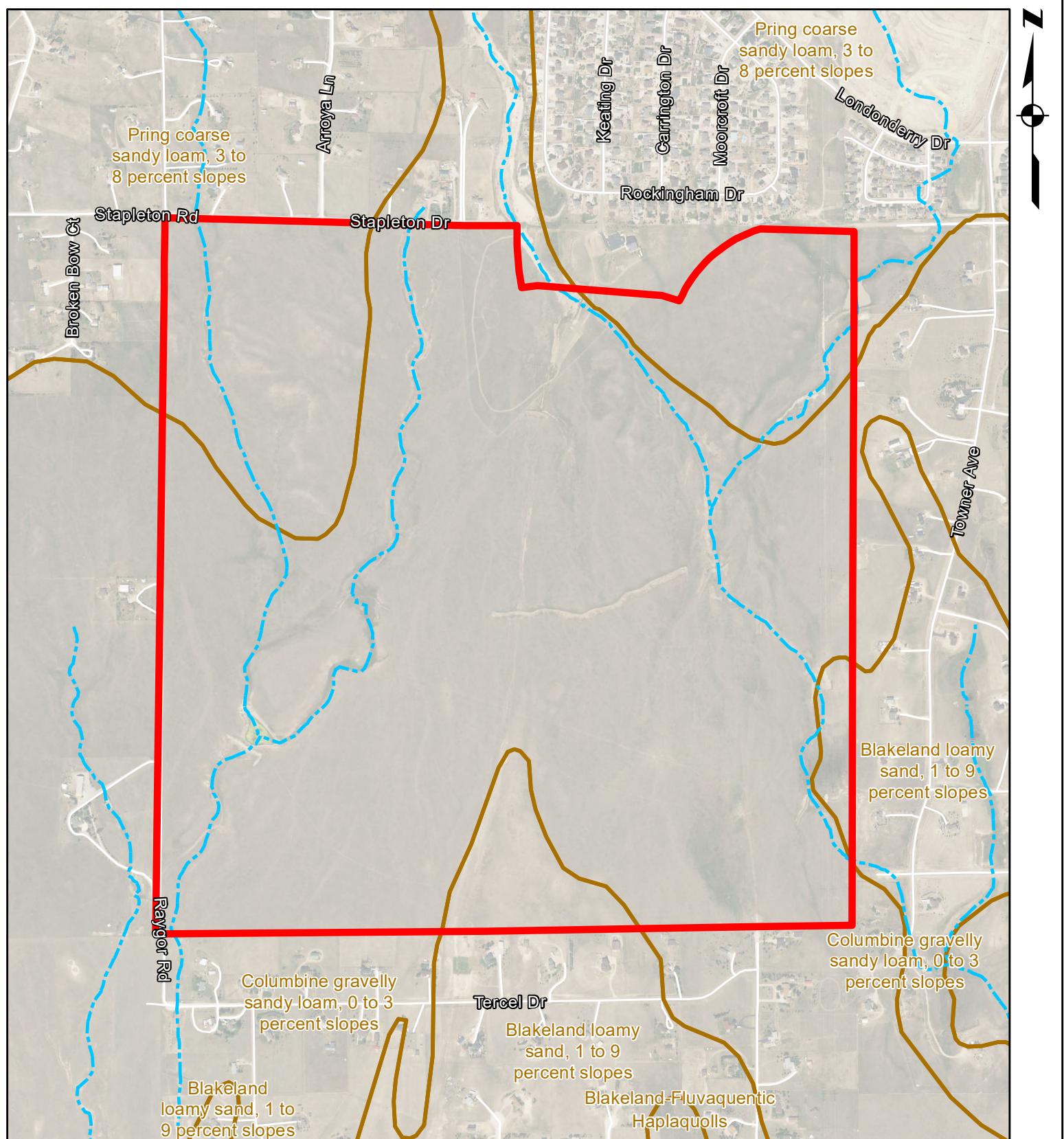
  Study Area  
 USFWS PMJM Block Clearance

0 1 2  
Miles

Date: 7/13/2018

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## The Ranch Project County Soil Survey Map

El Paso County, Colorado

0 500 1,000

Feet

1 inch = 1,000 feet

- Study Area
- NHD Watercourse
- Soil

Date: 7/13/2018



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**ATTACHMENT III**  
*WETLAND DELINEATION REPORT*



**ATTACHMENT IV**  
*Noxious Weed Management Plan*