



Consultants in Natural Resources and the Environment

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# Natural Resources Assessment Parker Pointe Development Parker, Colorado

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## Executive Summary

Aspen 11, LLC retained ERO Resources Corporation (ERO) to provide a natural resources assessment for the property located southeast of Stroh Road and State Highway 83 in Parker, Colorado (project area). ERO assessed the project area for potential wetlands and waters of the U.S., threatened and endangered species, and general wildlife use. Below is a summary of the resources found at 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 Aspen 11, LLC. 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.** – Wetlands occur along Kinney Creek just south of the project area. ***If any work is planned within the potential wetlands, including stormwater outfalls, a nationwide permit (NWP) should be requested from the U.S. Army Corps of Engineers (Corps).*** Kinney Creek is considered jurisdictional by the Corps and if work is planned within the wetlands, a Section 404 permit would be required from the Corps for the placement of fill or dredge material within wetlands or below the ordinary high water mark. If no work is planned within the potential wetlands, no further action is necessary.

**Threatened and Endangered Species** – The project area contains known occupied habitat for Preble’s meadow jumping mouse (Preble’s). No other federally listed threatened or endangered species is likely to occur on the project area. ERO is currently preparing a biological assessment for Preble’s for review by Aspen 11, LLC and submittal to the Corps or U.S. Fish and Wildlife Service (Service), depending on the need for a NWP.

**Migratory Birds** – An active red-tailed hawk nest was observed in the project area during the 2018 site visit. In addition, the uplands could potentially provide nesting habitat for ground-nesting bird species, such as killdeer and western meadowlark.

The Denver Field Office of the Service (2009) and Colorado Department of Transportation (2011) have identified the primary nesting season for migratory birds in eastern Colorado as occurring between April 1 and mid to late August. However, some birds, such as the red-tailed hawk and great horned owl, can nest as early as February or March. Because of variability in the breeding seasons of various bird species, ***ERO recommends a nest survey be conducted within one week prior to construction*** to determine if any active nests are present in the project area so they can be avoided. If active nests are found, any work that would destroy the nests could not be conducted until the birds have vacated the nests.

**Other Wildlife** – 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. 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.

**Cultural Resources and Historic Properties** – A file review of the project area was completed with the Colorado Office of Archaeology and Historic Preservation. Previous surveys documented one multicomponent cultural resource (prehistoric/historical) and one historical cultural resource. ERO recommends that the project has the potential to cause effects per 36 Code of Federal Regulations (CFR) 800.3(a). ERO requests that the Service provide guidance regarding this recommendation and assistance in determining the area of potential effect per 36 CFR 800.4(a)(1), as defined in 36 CFR 800.16(d), and assistance in determining the appropriate level of effort (e.g., subsurface testing or geomorphic analysis) per CFR 800.4(b)(1) to identify historic properties.

# Natural Resources Assessment Parker Pointe Development Parker, Colorado

May 3, 2018

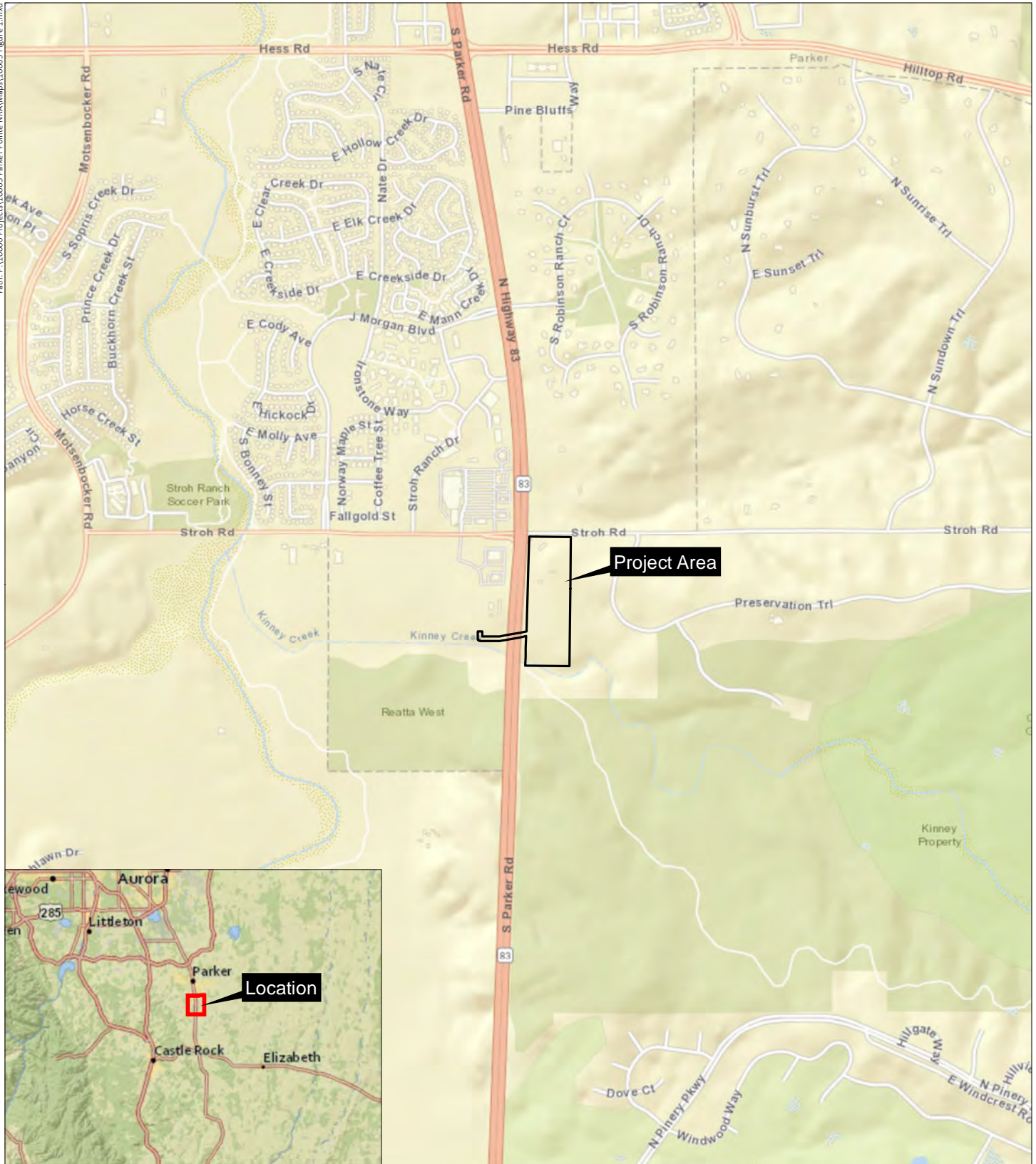
## Introduction

Aspen 11, LLC retained ERO Resources Corporation (ERO) to provide a natural resources assessment for the property located southeast of Stroh Road and State Highway 83 in Parker, Colorado (project area; Figure 1). On April 12, 2018, Anna Hennage and Ron Beane with ERO assessed the project area for natural resources (2018 site visit). During this assessment, activities included a review of potential wetlands, identification of potential federally listed threatened and endangered species habitat, and identification of other natural resources. ERO did not conduct a jurisdictional wetland delineation during this assessment. 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.

## Project Area Description

The project area is a 15.62-acre parcel in Section 3, Township 7 South, Range 66 West of the 6<sup>th</sup> Principal Meridian in Douglas County, Colorado (Figure 1). The UTM coordinates for the approximate center of the project area are NAD 83 520898 mE, 4369674 mN, Zone 13 North. The longitude/latitude of the project area is 104.757023°W/ 39.476408°N. The elevation of the project area is approximately 5,983 feet above sea level. Photo points of the project area are shown on Figure 2 and the photo log is in Appendix A.

The project area is bounded by undeveloped land on the east, north, and south with residential land on the west. The project area is also bounded by Stroh Road on the north and State Highway 83 on the west (Figure 2). The project area consists primarily of pastureland dominated by upland nonnative grassland species and noxious weeds such as smooth brome (*Bromus inermis*), diffuse knapweed (*Centaurea diffusa*), common mullein (*Verbascum thapsus*), and prairie sagewort (*Artemisia frigida*) (Figure 2; Photo 1). Nonnative pasture has been historically harvested for hay and Google Earth shows a long history of mowing within the project area. Cottonwood (*Populus deltoides*) trees occur along the eastern and southern boundaries of the project area. Kinney Creek occurs south of the project area and during the 2018 site visit contained wetland vegetation dominated by cattails (*Typha* sp.) and rushes (*Juncus* sp.) (Figure 2; Photo 2). Vacant buildings occur in the northern part of the project area (Photo 3).

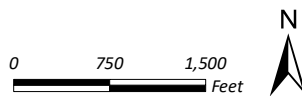


### Parker Pointe Development, Parker, Colorado

Section 3, T7S, R66W; 6th PM  
 UTM NAD 83: Zone 13N; 520898mE, 4369674mN  
 Longitude 104.757023°W, Latitude 39.476408°N  
 USGS Castle Rock North, CO Quadrangle  
 Douglas County, Colorado

Figure 1  
Vicinity Map

Prepared for: Aspen 11, LLC  
 File: 10065 Figure 1.mxd (GS)  
 June 14, 2018





Parker Pointe Development, Parker, Colorado











-  Red-tailed Hawk Nest
-  Photo Point
-  Flow Direction
-  Wetland Boundary
-  Prairie Dog Colony
-  Douglas County Riparian Conservation Zone
-  Project Area Boundary
-  Proposed Sanitary Sewer Line
-  Proposed 50-Foot Easement
-  Outfall and Drop Structure

Figure 2  
Existing Conditions

Image Source: Google Earth©, June 2017

Prepared for: Aspen 11, LLC  
File: 10065 Figure 2.mxd (GS)  
June 14, 2018

## Wetlands and Waters of the U.S.

### Background

The Clean Water Act (CWA) protects the physical, biological, and chemical quality of waters of the U.S. 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 waters of the U.S. In 2007, the Corps issued guidance in response to the Supreme Court ruling in the consolidated cases of *Rapanos v. United States and Carabell v. U.S. Army Corps of Engineers* stating that the Corps considers traditionally navigable waters (TNWs), wetlands adjacent to a TNW, and tributaries to TNWs that are relatively permanent waters (RPWs) and their abutting wetlands jurisdictional waters. Other wetlands and waters that are not TNWs or RPWs would require a significant nexus evaluation to determine their jurisdiction. A significant nexus evaluation assesses the flow characteristics and functions of a tributary and its adjacent wetlands to determine if they significantly affect the physical, biological, or chemical integrity of downstream TNWs.

On May 31, 2016, the U.S. Supreme Court concluded that approved jurisdictional determinations are judicially reviewable under the Administrative Procedure Act and, therefore, can be appealed in court. The Corps has recommended that requests for both approved and preliminary jurisdictional determinations be done using guidance outlined in Regulatory Guidance Letter 16-01 and that a jurisdictional form request be completed (Corps 2016). The Corps has indicated that jurisdictional determinations associated with a Section 404 CWA Permit request will preside over stand-alone jurisdictional determination requests. While ERO may provide its opinion on the likely jurisdictional status of wetlands and waters, the Corps makes the final determination.

### Site Conditions and Regulations

ERO assessed the project area for potential isolated wetlands, jurisdictional wetlands, and other waters of the U.S. Kinney Creek is shown on the National Hydrography Dataset (NHD) and the U.S. Geological Survey (USGS) topographic quadrangle map as occurring south of the project area (Figure 2). At Kinney Creek, south of the project area, the creek was vegetated with wetland species during the 2018 site visit and contained characteristics of waters of the U.S. Wetland vegetation was observed during the 2018 site visit along Kinney Creek and was dominated by sandbar willow, cattails, and rushes (Figure 2; Photo 2).

### Recommendations

The wetlands along Kinney Creek are potential waters of the U.S. Based on wetland characteristics and NHD data, ERO assumes Kinney Creek is a jurisdictional wetland. Assuming the wetlands are jurisdictional, the work that is planned within these areas, including stormwater outfalls, will require a Section 404 permit for the placement of fill or dredge material below the ordinary high water mark. If no work is planned within these areas, no action would be necessary.

## Threatened, Endangered, and Candidate Species

ERO assessed the project area for potential habitat for threatened, endangered, and candidate species under the Endangered Species Act (ESA). Federally listed threatened and endangered species are protected under the ESA of 1973, as amended (16 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 threatened and endangered species with potential habitat in Douglas County, or that would be potentially affected by projects in Douglas County (Table 1).

**Table 1. Federally listed threatened, endangered, and candidate species potentially found in Douglas County or potentially affected by projects in Douglas County.**

Common Name	Scientific Name	Status*	Habitat	Habitat Present
<b>Mammals</b>				
Preble's meadow jumping mouse (Preble's)	<i>Zapus hudsonius preblei</i>	T	Shrub riparian/wet meadows	Known occupied habitat
<b>Birds</b>				
Interior least tern**	<i>Sterna antillarum athalassos</i>	E	Sandy/pebble beaches on lakes, reservoirs, and rivers	No habitat, no depletions
Mexican spotted owl	<i>Strix occidentalis</i>	T	Closed-canopy forests in steep canyons	No habitat
Piping plover**	<i>Charadrius melodus</i>	T	Sandy lakeshore beaches and river sandbars	No habitat, no depletions
Whooping crane**	<i>Grus americana</i>	E	Mudflats around reservoirs and in agricultural areas	No habitat, no depletions
<b>Fish</b>				
Greenback cutthroat trout	<i>Oncorhynchus clarki stomias</i>	T	Flowing cold-water stream systems with cobble and rock	No habitat
Pallid sturgeon**	<i>Scaphirhynchus albus</i>	E	Large, turbid, free-flowing rivers with a strong current and gravel or sandy substrate	No habitat, no depletions anticipated
<b>Insects</b>				
Pawnee montane skipper	<i>Hesperia leonardus montana</i>	T	Dry, open ponderosa woodlands above 6,000 feet in elevation	No
<b>Plants</b>				
Colorado butterfly plant (CBP)	<i>Gaura neomexicana</i> var. <i>coloradensis</i>	T	Subirrigated alluvial soils on level floodplains and drainage bottoms between 5,000 and 6,400 feet in elevation	No habitat, project is at upper elevation range
Ute ladies'-tresses orchid (ULTO)	<i>Spiranthes diluvialis</i>	T	Moist to wet alluvial meadows, floodplains of perennial streams, and around springs and lakes below 7,800 feet in elevation	No habitat
Western prairie fringed orchid**	<i>Platanthera praeclara</i>	T	Mesic and wet prairies, sedge meadows	No habitat, no depletions

\*T = Federally Threatened Species; E = Federally 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 2018.

## **Site Conditions and Recommendations**

The proposed project would not directly affect the Mexican spotted owl, greenback cutthroat trout, or Pawnee montane skipper because of the lack of habitat in the project area. The interior least tern, 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.

Potential habitat for Preble's, CBP, and ULTO are generally more prevalent in areas across the Front Range. Because these species are more likely to be addressed by counties and regulatory agencies such as the Corps, a more detailed discussion is provided below.

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

#### ***Species Background and Regulatory Guidance***

Preble's was listed as a threatened species on May 13, 1998. Under existing regulations, either a habitat assessment or a full presence/absence survey for Preble's is required for any habitat-disturbing activities within areas determined to be potential Preble's habitat (generally stream and riparian habitats along the Colorado Front Range). Typically, Preble's occurs below 7,600 feet in elevation, generally in lowlands with medium to high moisture along permanent or intermittent streams and canals (Meaney et al. 1997). Preble's occurs in low undergrowth consisting of grasses and forbs, in open wet meadows, in riparian corridors near forests, or where multilevel shrubs and low trees provide adequate cover (Service 1999; Meaney et al. 1997).

#### ***Potential Habitat and Recommendations***

The wetlands adjacent to the project area are known occupied Preble's habitat. The project area is just outside of the area designated by the Service as the Preble's Denver metro block clearance zone and the southern portion of the project area is within the Douglas County Riparian Conservation Zone (RCZ). In addition, Preble's have been found in two locations along Kinney Creek both east and west of the project area (Walsh 2000). The project area consists of former agricultural fields and a majority of the project area is upland nonnative grasslands.

Because the project contains portions of the RCZ and utility lines and stormwater outfalls would be constructed within the RCZ, ERO has determined that Preble's and/or Preble's habitat is likely to be temporarily impacted by the project. ERO is currently preparing a biological assessment for Preble's for review by Aspen 11, LLC and submittal to the Corps or Service depending on the need for a nationwide permit.

## **Colorado Butterfly Plant**

### ***Species Background and Regulatory Guidance***

CBP is a short-lived perennial adapted to stream channels that are periodically disturbed. It occurs on moist subirrigated alluvial soils on level or slightly sloping floodplains and drainage bottoms at elevations from 5,000 to 6,400 feet. Colonies are often found in low depressions or along bends in wide, active, meandering stream channels that are periodically disturbed. Typically, CBP occurs in moist areas between wetlands and upland shortgrass prairies, which are open without dense or overgrown vegetation (Service 2018). The CBP flowers from June to September and produces fruit from July to October (Spackman et al. 1997). This species is federally listed as threatened under the ESA and is found within a small area in southeastern Wyoming, western Nebraska, and north-central Colorado (NatureServe 2012). Critical habitat for CBP has been designated in southeastern Wyoming (Service 2005). The Service has not established formal survey guidelines for the CBP, but has indicated that areas similar to, and slightly drier than, ULTO habitat should be assessed.

### ***Potential Habitat and Recommendations***

Habitat for CBP is not present in the project area because a perennial stream with an active floodplain does not occur within the project disturbance footprint. All project activities would occur in uplands. No action is necessary regarding CBP.

## **Ute Ladies'-Tresses Orchid**

### ***Species Background***

ULTO is federally listed as threatened. ULTO occurs at elevations below 7,800 feet in moist to wet alluvial meadows, floodplains of perennial streams, and around springs and lakes where the soil is seasonally saturated within 18 inches of the surface (Colorado Natural Heritage Program 2014). This species has also been found along irrigation canals, irrigated meadows, gravel pits, and other human-modified wetlands (Service 2018). Generally, the species occurs where the vegetative cover is relatively open and not overly dense or overgrazed. Once thought to be fairly common in low-elevation riparian areas in the interior western United States, ULTO is now rare (Service 1992a). The species' known range is from Nevada to British Columbia. The largest known populations occur in Utah, followed by Colorado (NatureServe 2012).

In Colorado, the Service requires surveys in habitat within the 100-year floodplain of the South Platte River, Fountain Creek, and Yampa River and their perennial tributaries, or in any area with suitable habitat in Boulder and Jefferson Counties. ULTO does not bloom until late July to early September (depending on the year) and timing of surveys must be synchronized with blooming (Service 1992b).

### ***Potential Habitat and Recommendations***

Kinney Creek is identified by the USGS as an intermittent stream. Because a perennial tributary to the South Platte River does not occur in the project area and the project area is in Douglas County, the project area does not fall within the Service's guidelines for ULTO surveys. No action is necessary regarding ULTO.

## **Other Species of Concern**

### **Black-Tailed Prairie Dog**

#### **Species Background and Regulatory Guidance**

The black-tailed prairie dog is a Colorado species of special concern (Colorado Parks and Wildlife (CPW) 2018). 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. 2002). Although prairie dogs are no longer in line for protected status 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.

#### **Potential Habitat and Recommendations**

Prairie dogs are present in the northern and central portions of the project area (Figure 2; Photo 4). If the proposed activities would impact the prairie dog colony, the prairie dogs would need to be removed from the project area.

If prairie dogs 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 between March 1 and October 31, colonies should be surveyed for western burrowing owls.

### **Western Burrowing Owl**

#### **Species Background and Regulatory Guidance**

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 (Kingery 1998; Andrews and Righter 1992). More than 70 percent of sightings reported by Colorado Breeding Bird Atlasers were in prairie dog colonies (Kingery 1998).

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 present in Colorado between March 15 and October 31, with breeding from mid-April to early/mid-August (Andrews and Righter 1992; Kingery 1998). CPW suggests conducting burrowing owl clearance surveys in prairie dog towns that are subject to poisoning and/or construction projects during the period from March 15 through October 31 (Colorado Division of Wildlife (CDOW) 2008). CPW has a recommended buffer of 150 feet surrounding active burrowing owl nests (CDOW 2008).

### **Potential Habitat and Recommendations**

The prairie dog burrows located in 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.

To avoid potential impacts on burrowing owls, site activities should occur between November 1 and March 14. If site activities would occur within a 150-foot buffer surrounding any burrow within or adjacent to the project area, a burrowing owl survey should be conducted during the breeding season (March through October). If owls are present, activities should be restricted until the owls have migrated from the site, which can be determined through monitoring.

### **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 (Migratory Bird Permit Memorandum, 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.

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 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 31 and August 31, depending on the species. Public awareness of the MBTA has grown in recent years, and most MBTA enforcement actions are the result of a concerned member of the community reporting a violation.

### **Potential Habitat**

During the 2018 site visit, one active red-tailed hawk nest was observed in southeastern part of the project area (Figure 2). In addition, ground-nesting bird nests are difficult to detect and may be present in the uplands in the project area. The breeding season for most birds in Colorado is March through August, with the exception of a few species that begin breeding in February, such as great horned owls

and red-tailed hawks. The breeding season for red-tailed hawks in Colorado is February 15 through July 15.

### **Recommendations**

A full nest survey was conducted during the 2018 site visit, including searching barns and outbuildings for the presence of barn owls. Only a single active red-tailed hawk nest was observed, although northern flicker and other cavity-nesting species were actively singing – an indication of early season courtship behavior. To avoid destruction of potential ground-nesting, cavity-nesting, or other migratory bird nests, trees and vegetation should be removed outside of the April 1 through August 31 breeding season.

Both the Denver Field Office of the Service (2009) and the Colorado Department of Transportation (2011) have identified the primary nesting season for migratory birds in eastern Colorado as occurring between April 1 and mid to late August. 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 of various bird species, ERO recommends that a nest survey be conducted within one week prior to construction to determine if any active nests are present in the project area so 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 within 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 in the nonbreeding season to avoid disturbing active nests, or to avoid a “take” of the migratory bird nests within the project area. Nests can be removed during the nonbreeding season, September 1 through March 31, 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 birds to abandon young in the nest could not be conducted until the birds have vacated the nests.

### **Other Wildlife**

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 decline include some raptors and possibly coyotes. Species likely to increase include red fox, raccoon, and great horned owl. 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.

## Cultural Resources and Historic Properties

To assist federal agencies' consultation obligations under Section 106 of the National Historic Preservation Act (NHPA), ERO archaeologist Clive Briggs conducted a file review of the project area with the Colorado Office of Archaeology and Historic Preservation (OAHP). Any consultation with the Service for Preble's will likely require agency-to-agency consultation under the NHPA. The file search area covered the project area defined on Figure 1. The OAHP provided the file search results on April 24, 2018 (OAHP File Search No. 21052), and the OAHP letter memo results are included in Appendix B. The file search results indicate five previous surveys have taken place in the project area and two previously documented cultural resources are located in the project area. The west half of the project area was previously surveyed in association with two Colorado Department of Highways undertakings (MC.CH.R111 [1977] and MC.CH.R126 [1979]) and one survey was conducted by Powers Elevation Co., Inc. (DA.PA.R8 [1989]). Two additional surveys, Corps (DA.AE.R9 [1998]) and Colorado Department of Highways (DA.CH.R7 [1989]) undertakings, were conducted in the project area, but the areas surveyed are not mapped by the OAHP.

The previous surveys documented one multicomponent cultural resource (prehistoric/historical) (Kinney Creek Site: 5DA269 [officially needs data, 1991]) and one historical cultural resource (Allison's Twin House: 5DA.875 [officially not eligible, 1989]). Because one officially needs data cultural resource (5DA269) was identified in the file search, ERO recommends that the project has the potential to cause effects per 36 Code of Federal Regulations (CFR) 800.3(a). ERO requests that the Service provide guidance regarding this recommendation and assistance in determining the area of potential effect per 36 CFR 800.4(a)(1) as defined in 36 CFR 800.16(d). ERO also requests that the Corps provide additional guidance and determine the appropriate level of effort (e.g., subsurface testing or geomorphic analysis) per CFR 800.4(b)(1) to identify historic properties.

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**Photo 1** - Overview of uplands in the southeastern part of the project area. View is to the northeast.



**Photo 2** - Overview of wetlands south of the project area. View is to the southeast.

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**Photo 3** - Overview of buildings in the northern part of the project area. View is to the northwest.



**Photo 4** - Overview of a prairie dog colony in the central part of the project area. View is to the southwest.