



October 08, 2020

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Crestone Peak Resources, LLC
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RE: Environmental Review and Site Inspection, Reserve North Pipeline, Adams County, CO

1.0 INTRODUCTION

Apex Companies, LLC (Apex) completed an environmental review and site inspection for the Reserve North Pipeline, located in Section 35, Township 3 South, Range 65 West, in Adams County, Colorado (Figure 1). The purpose of this review is to provide Crestone Peak Resources, LLC (CPR) with information regarding potential environmental constraints at the site, in order to comply with the Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA), Bald and Golden Eagle Protection Act (BGEPA), Colorado Parks and Wildlife (CPW) guidelines, Colorado Oil and Gas Conservation Commission (COGCC) rules, and U.S. Clean Water Act Sections 401/404.

2.0 METHODS

Apex conducted a desktop review to identify federally and state listed threatened and endangered (T&E) or sensitive species and habitat, and any other potential natural resource constraints, which may occur within the project area. Resources referenced for the desktop review included aerial imagery, the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory Mapper, USFWS Information for Planning and Consultation (IPaC) system, CPW Species Activity Mapping (SAM) data, and a proprietary database of over 1,000 mapped raptor nests throughout the Denver-Julesburg (DJ) Basin.

The desktop review was accompanied by a field site survey to assess potential suitable habitat for T&E and sensitive species and other natural resource constraints which may occur within the project area. The field site survey was conducted on October 02, 2020 and included a pedestrian and windshield survey of the site and surrounding areas accessible by landowner permission.

3.0 RESULTS & RECOMMENDATIONS

3.1 Wetlands and Waters of the U.S.

There are no wetlands or Waters of the U.S. within the pipeline right-of-way (ROW). However, it was noted that the pipeline crosses under a stormwater ditch and near multiple culverts (Photo 5) that may occasionally and temporarily contain stormwater.

No further action is recommended at this time.

3.2 100-Year Floodplain

The pipeline ROW is not within a Federal Emergency Management Agency (FEMA)-mapped 100-year floodplain.

No further action is recommended at this time.

3.3 Raptors

There are no trees currently suitable for nesting eagles within ½ mile of the pipeline ROW, nor is the ROW within any mapped eagle winter night roosts. There are trees suitable for other nesting raptors, but there are currently no known raptor nests within ½ mile of the pipeline ROW. The field site survey was conducted outside all raptor nesting seasons.

Please contact Apex if construction will begin between February 1 and July 31 to survey for raptor nesting activity.

3.4 Burrowing Owls

There is no potential burrowing habitat within 660 feet of the pipeline ROW. There is potential burrowing owl habitat within ¼ mile of the ROW; however, CPW only recommended a ¼ mile buffer distance for larger industrial disturbances, such as a drilling rig and other longer-term construction activities (CPW 2020).

Please contact Apex if construction will begin between March 15 and October 31 to survey for new potential burrowing owl habitat.

3.5 Migratory Birds

The IPaC query listed four (4) migratory birds that are either of conservation concern or warrant special attention that may occur in the project area. Three of the listed birds include the bald and golden eagle and the burrowing owl, all of which are discussed above (see Sections 3.3 and 3.4, respectively). The fourth listed bird is the lark bunting (*Calamospiza melanocorys*), which is a ground nesting bird. In addition to these USFWS-listed birds of special concern, additional MBTA-protected migratory birds may also be impacted if construction activities occur during the migratory bird nesting season.

Please contact Apex if construction will begin between April 1 and September 15 to survey for migratory bird nesting activity.

3.6 Other Threatened, Endangered, and Sensitive Species

The IPaC query listed eight (8) T&E species that may occur in the project area. These species are discussed below in Table 1.

Table 1. USFWS T&E Species within the Project Area

Species & Status	Habitat Assessment Results	Recommendations
Mammals		
Preble’s meadow jumping mouse (<i>Zapus hudsonius preblei</i>) Threatened	This species typically inhabits heavily vegetated streamside riparian habitats with adjacent grassy uplands (USFWS 2014). This species is not found in highly disturbed areas, landscaped and maintained lawns, irrigation ditches with no vegetation, channels where water is diverted underground, or sites that are maintained as cropland (USFWS 1998). There is no habitat suitable for this species within the pipeline ROW.	No further action is recommended at this time.
Birds		
Least tern (<i>Sterna antillarum</i>) Endangered	This species only needs to be considered if the project includes water-related activities or use in the N. Platte, S. Platte, and Laramie River Basins that may affect listed species in Nebraska (USFWS 2018).	If proposed construction activities do not include water-related activities or use of Coal Creek or other nearby waters, no further action is recommended at this time.
Mexican spotted owl (<i>Strix occidentalis lucida</i>) Threatened	This species primarily nests in closed-canopy forests or rocky canyons, and the forests utilized by this species for roosting and nesting frequently contain mature or old-growth stands with complex structure and high canopy closure (USFWS 2013). All records of this species in Colorado are from the San Juan Mountains in southwestern Colorado and from the Front Range as far north as the vicinity of Denver (USFWS 1993). There is no suitable habitat for this species within the ROW or immediate surrounding area.	No further action is recommended at this time.
Piping plover (<i>Charadrius melodus</i>) Threatened	This species only needs to be considered if the project includes water-related activities or use in the N. Platte, S. Platte, and Laramie River Basins that may affect listed species in Nebraska (USFWS 2018).	If proposed construction activities do not include water-related activities or use of Coal Creek or other nearby waters, no further action is recommended at this time.
Whooping crane (<i>Grus americana</i>) Endangered	This species only needs to be considered if the project includes water-related activities or use in the N. Platte, S. Platte, and Laramie River Basins that may affect listed species in Nebraska (USFWS 2018).	If proposed construction activities do not include water-related activities or use of Coal Creek or other nearby waters, no further action is recommended at this time.

Fishes		
Pallid sturgeon <i>(Scaphirhynchus albus)</i> Endangered	This species only needs to be considered if the project includes water-related activities or use in the N. Platte, S. Platte, and Laramie River Basins that may affect listed species in Nebraska (USFWS 2018).	If proposed construction activities do not include water-related activities or use of Coal Creek or other nearby waters, no further action is recommended at this time.
Plants		
Ute ladies'-tresses <i>(Spiranthes diluvialis)</i> Threatened	This species is typically found in wet meadows, floodplains, stream beds, lakeshores, and other similar moist habitats (Fertig et al. 2005). There is no habitat suitable for this species within the pipeline ROW.	No further action is recommended at this time.
Western prairie fringed orchid <i>(Platanthera praeclara)</i> Threatened	This species only needs to be considered if the project includes water-related activities or use in the N. Platte, S. Platte, and Laramie River Basins that may affect listed species in Nebraska (USFWS 2018).	If proposed construction activities do not include water-related activities or use of Coal Creek or other nearby waters, no further action is recommended at this time.

4.0 PHOTOS



Photo 1. Looking north from pipeline terminus south of Reserve pad.



Photo 2. Looking south from northwest corner of pipeline.



Photo 3. Looking west from northeast corner of pipeline.



Photo 4. Looking south from northeast corner of pipeline.



Photo 5. Pipeline intersection with ditch at edge of Reserve pad.



Photo 6. Pipeline intersection with fallow corn crop, near center of pipeline.



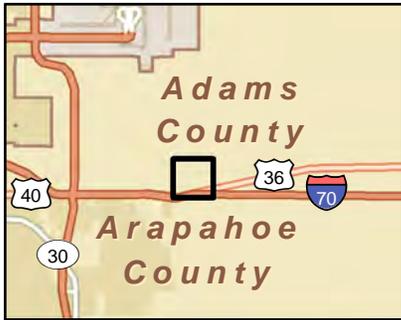
Photo 7. Looking west from pipeline corner north of Big Sandy pad entrance.



Photo 8. Looking north from southern terminus at Big Sandy pad.

5.0 REFERENCES

- (CPW) Colorado Parks and Wildlife. 2020. Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors (2020). Available online at: <https://cpw.state.co.us/Documents/WildlifeSpecies/LivingWithWildlife/Raptor-Buffer-Guidelines.pdf>. (Accessed October 2020)
- Fertig, W., R. Black, and P. Wolken. 2005. Rangewide Status Review of Ute Ladies'-Tresses (*Spiranthes diluvialis*). Prepared for the U.S. Fish and Wildlife Service and Central Utah Water Conservation District. 101 pp.
- (USFWS) U.S. Fish and Wildlife Service. 1993. Endangered and Threatened Wildlife and Plants; Final Rule to List the Mexican Spotted Owl as a Threatened Species. Federal Register 58:14248-14271.
- (USFWS) U.S. Fish and Wildlife Service. 1998. Endangered and Threatened Wildlife and Plants; Final Rule to List the Preble's Meadow Jumping Mouse as a Threatened Species. Federal Register 63(92):26517-26530.
- (USFWS) U.S. Fish and Wildlife Service. 2013. Mexican Spotted Owl (*Strix occidentalis lucida*). Available online at: http://www.fws.gov/southwest/es/MSO_Main.html. (Accessed October 2020)
- (USFWS) U.S. Fish and Wildlife Service. 2014. The Preble's Meadow Jumping Mouse 5-year Review. 15 pp.
- (USFWS) U.S. Fish and Wildlife Service. 2018. IPaC – Information Planning and Conservation System. Available online at: <http://ecos.fws.gov/ipac/>. (Accessed October 2020)

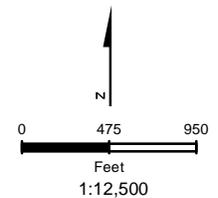
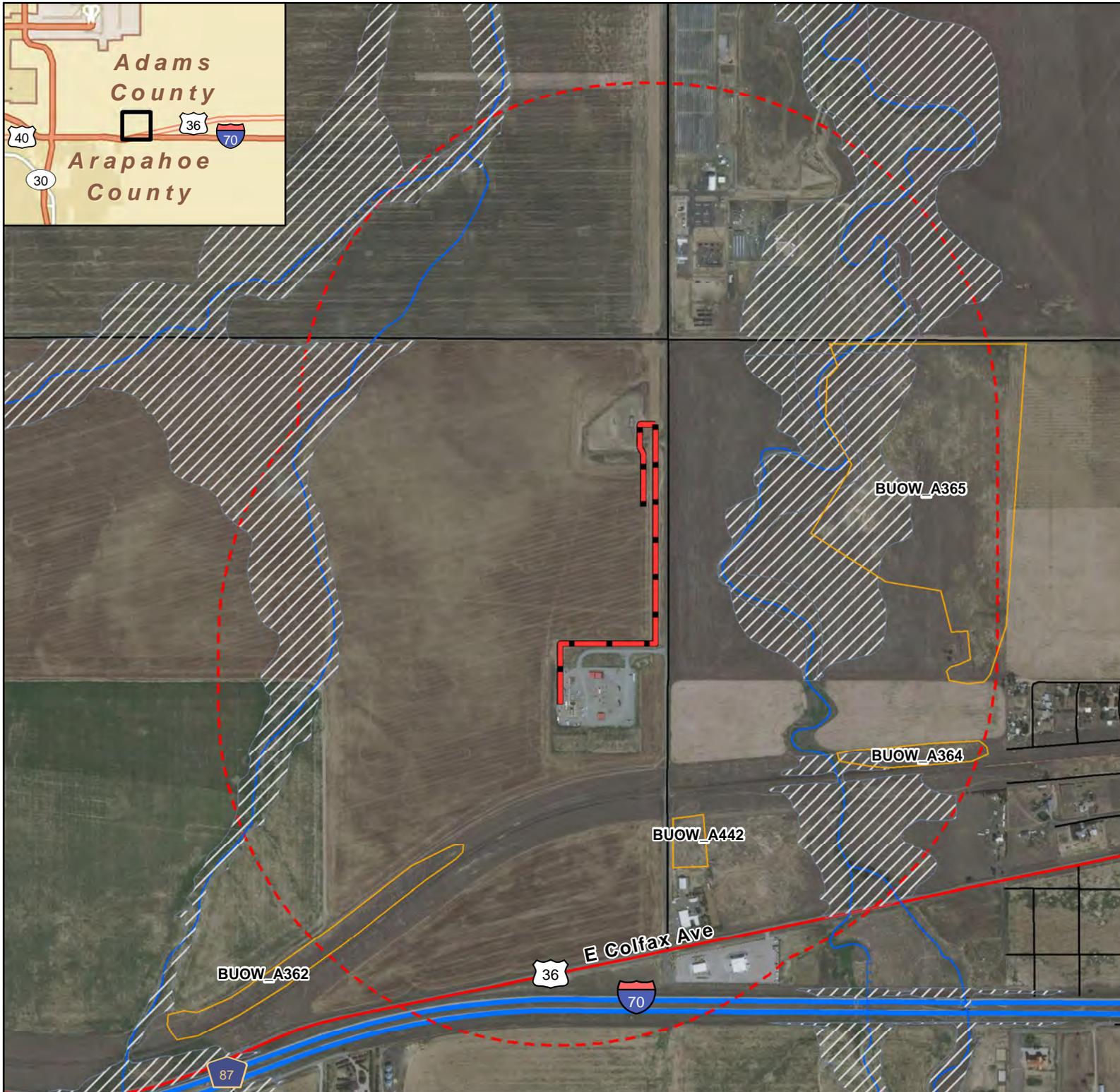


Reserve North Pipeline

Figure 1

Legend

- Pipeline
- Potential BUOW Habitat
- FEMA 100-Year Floodplain
- Stream
- Irrigation Ditch
- Nest Search Radius - Half Mile



Inspector: KD
 Inspection Date: 10/2/2020

Site Characteristics

Legal Location: Sec 35, T3S R65W
 County: Adams
 Land Use: Cropland
 Pre-Construction Vegetation Cover: Cropland

REVISED	BY	COMMENT
10/6/2020	KD	ERSI



Feature symbols not to scale