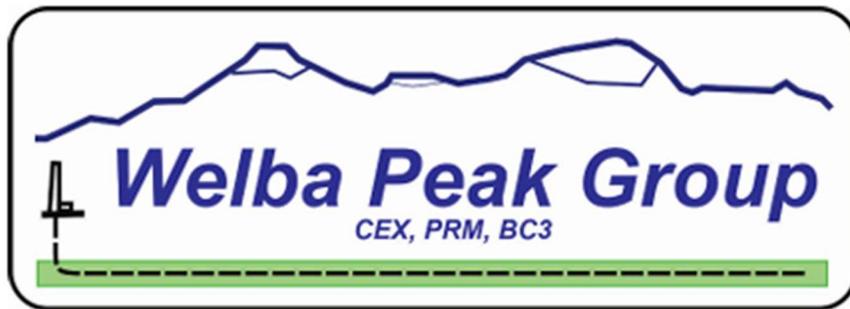




## **MIGRATORY BIRD / RAPTOR SURVEY REPORT**

**WELBA PEAK UNIT OIL & GAS LOCATION  
DUNCAN FACILITY & 14-1 WELL PAD LOCATIONS  
Moffat County, Colorado**



**April 4, 2024**

**Petroleum Resource Management**  
1580 Lincoln Street #635  
Denver, Colorado 80203

Contact: Duncan Shepherd

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**SUMMARY OF FINDINGS**

<b>Resource</b>	<b>Regulatory Authorities</b>	<b>Findings</b>
Eagles & Other Raptors	U.S. Fish and Wildlife Service (USFWS) – Bald and Golden Eagle Protection Act; USFWS - Migratory Bird Treaty Act (MBTA); ECMC – 1200 Series Rules	There are no eagle nests, raptor nests, nor CPW-mapped bald eagle winter night roost areas within 0.5 mile of the Location.
Western Burrowing Owl	USFWS – MBTA; Colorado Parks and Wildlife (CPW) – Nongame, Endangered or Threatened Species Conservation Act; ECMC – 1200 Series Rules	There is no suitable nesting habitat for burrowing owls within 0.25 mile of the Location.
Migratory Birds	USFWS – MBTA; ECMC – 1200 Series Rules	There is suitable habitat for nesting migratory birds within and adjacent to the Location.

## **1.0 INTRODUCTION**

Per the Energy and Carbon Management Commission (ECMC) 1200 Series Rules for the protection of wildlife and habitat, Petroleum Resources Management (PRM) is presenting this migratory bird and raptor survey for the Duncan Facility and 14-1 Oil & Gas Location (hereafter referred to as Location). The wildlife and habitat evaluations included in this report are part of the WMP to be submitted pursuant with the ECMC Form 2A permitting process, Rule 304.c.(17) Wildlife Mitigation Plan, and Rule 1201.b for an Oil and Gas Location within a High Priority Habitat (HPH). PRM and Colorado Parks and Wildlife (CPW) have engaged in detailed, continuous pre-application consultation beginning in May 2019 regarding minimizing unavoidable impacts, preliminary mitigation options and compensatory costs, and Alternative Location Analysis (ALA) needs for the Location.

State and federal regulations addressed include the Migratory Bird Treaty Act (MBTA), Bald and Golden Eagle Protection Act (BGEPA), Colorado Parks and Wildlife (CPW) Buffer Zones and Seasonal Restrictions for Colorado Raptors guidelines.

## **2.0 PROJECT DESCRIPTION**

The Location is in the NE quarter of section 14, township 11 north, and range 89 west (Figure 1). PRM is proposing to construct the 11.21-acre Location on private property owned by Duncan Ranch (surface owner). Of this, the constructed Duncan Facility is approximately 4.85 acres. The Operator has obtained informed consent from the RBU owners as to the siting of these locations as proposed and described in Section 1 of this document. The proposed Location was determined to be the optimal location based on several factors including vegetation removal, proximity to existing roads (County Road 1), topography constraints and nearby no surface occupancy (NSO) lease prohibiting that from being included as an available location, eliminating PRM's ability to relocate it.

Quandary Consultants (Quandary) surveyed a 0.50-mile buffer around the Location to accommodate for the widest potential environmental constraint. Analysis included a desktop review of appropriate databases and imagery collections, identification of features requiring focused survey in the field, and a site inspection to review these desktop-identified features and to search for other instances of protected and sensitive natural resources. Sixteen site visits and inspections were conducted over the following days:

- April 2023 – Preliminary Site Inspection (1 week)
- May - September 2023 – Follow-Up Assessments
- May 23, 2023 – Initial MBTA / Raptor Surveys for Location
- July 24, 2023 – Follow-up MBTA / Raptor Surveys for Location

The results for each natural resource element reviewed are described below.

## **3.0 LOCATION SETTING**

Land use and vegetation within the Location were reviewed and are detailed below.

### 3.1 Land Use

The Duncan Location entirely intersects rangeland. Table 1 lists the approximate acreage of the existing land use types that occur within the disturbance area.

**Table 1: Land Use Acreage Within the Disturbance Area (DA)**

Land Use Type	Acreage Within DA	Description
Irrigated Crop Land	0	
Non-Irrigated Crop Land	0	
Rangeland	11.21	Agriculture/Disturbed Grassland
Forest	0	
Public	0	
Industrial	0	
Commercial	0	
Residential	0	

### 3.2 Vegetation

Field investigations identified that approximately 80% of ground cover within the Duncan Location is vegetation and 20% of ground cover is bare ground. The entirety of the Location is disturbed grassland due to grazing. Table 2 lists the predominate species composition of the Location and respective plant communities.

**Table 2: Predominate Vegetation Composition within the Disturbance Area**

Vegetation (Common Name)	Vegetation (Latin Name)	Plant Community
Sagebrush	<i>Artemisia tridentata</i>	Disturbed Grassland
Rabbit Brush	<i>Asteraceae ericameria</i>	Disturbed Grassland
Sideoats grama	<i>Bouteloua curtipendula</i>	Disturbed Grassland
Western wheatgrass	<i>Pascopyrum smithii</i>	Disturbed Grassland
Gambel Oak	<i>Quercus gambelii</i>	Disturbed Grassland

## 4.0 LOCATION FINDINGS

### 4.1 Wildlife

#### 4.1.1 Bald and Golden Eagles and Other Raptors

As of July 24, 2023, no bald eagle (BAEA) or golden eagle (GOEA) nests or other raptor nests were observed within 0.5 mile of the Location, and none are recorded within 0.5 mile of the Location (CPW 2023). The nearest recorded historical eagle nest is 2.16 miles north (GOEA) and nearest active eagle nest is 4.24 miles northeast (BAEA) of Location. The nearest active raptor nest is 3.95 miles southeast (Northern Goshawk) of Location. The Location is not within 0.5 mile of a CPW-mapped BAEA winter night roost area. The nearest recorded BAEA roost is 11 miles northeast of Location.

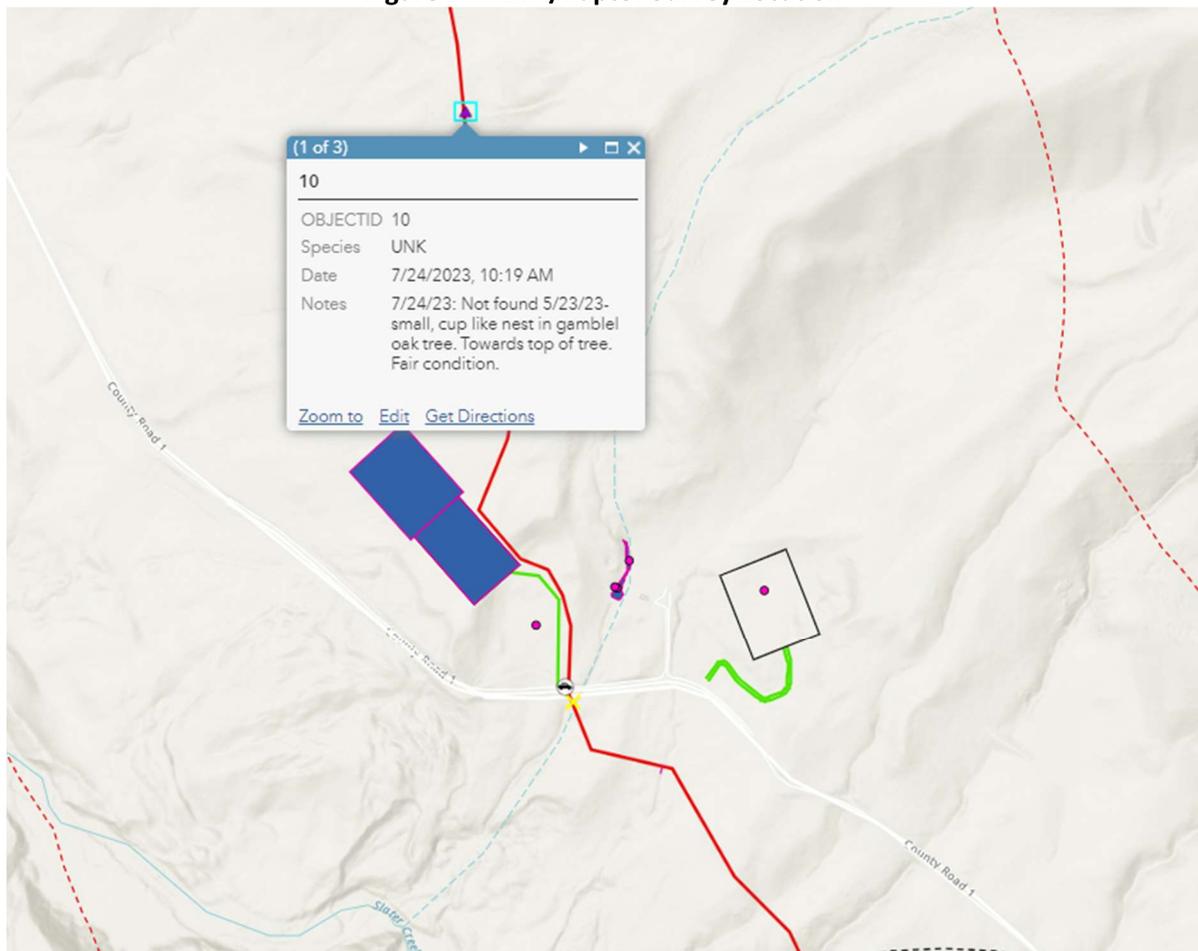
#### 4.1.2 Burrowing Owl

No suitable nesting habitat for burrowing owls (e.g., prairie dog colony) was observed within 0.25 mile of the Location at the time of the assessments conducted between April 2023 and September 2023.

#### 4.1.3 Migratory Birds

There is suitable habitat for nesting migratory birds within and adjacent to the Location, predominately in the form of tall grasses and ground-nesting habitat for ground-nesting birds. Surveys conducted on May 23, 2023, and again on July 24, 2023, found no active MBTA nest within Location.

**Figure 1. MBTA/Raptor Survey Location**



#### 4.1.4 Federally Listed Species

According to the USFWS IPaC, two federally listed species should be considered in an effects analysis for the Location: Mexican Spotted Owl (*Strix occidentalis lucida*) and Yellow-billed Cuckoo (*Coccyzus americanus*).

Table 1 provides a summary review of endangered and threatened species considered in the effects analysis for the Location.

**Table 3: Federally Listed Species Reviewed**

Species	Federal Status	Likelihood of species presence at location?
<b>Birds</b>		
Mexican Spotted Owl ( <i>Strix occidentalis lucida</i> )	Threatened	Low; Mexican spotted owl occurs in forested mountains and canyonlands throughout the southwestern U.S. Nesting habitat is typically in areas with complex old growth forest structure or rocky canyons. No suitable habitat nor birds were observed at the Location.
Yellow-billed Cuckoo ( <i>Coccyzus americanus</i> )	Threatened	Low; Yellow-billed cuckoos use wooded habitat with dense cover and water nearby, including woodlands with low, scrubby, vegetation, overgrown orchards, abandoned farmland and dense thickets along streams and marshes. No suitable habitat nor birds were observed at the Location.

## 5.0 PHOTOGRAPHS

Photo 1. Duncan / 14-1 Location.



Photo 2. Duncan / 14-1 Location.



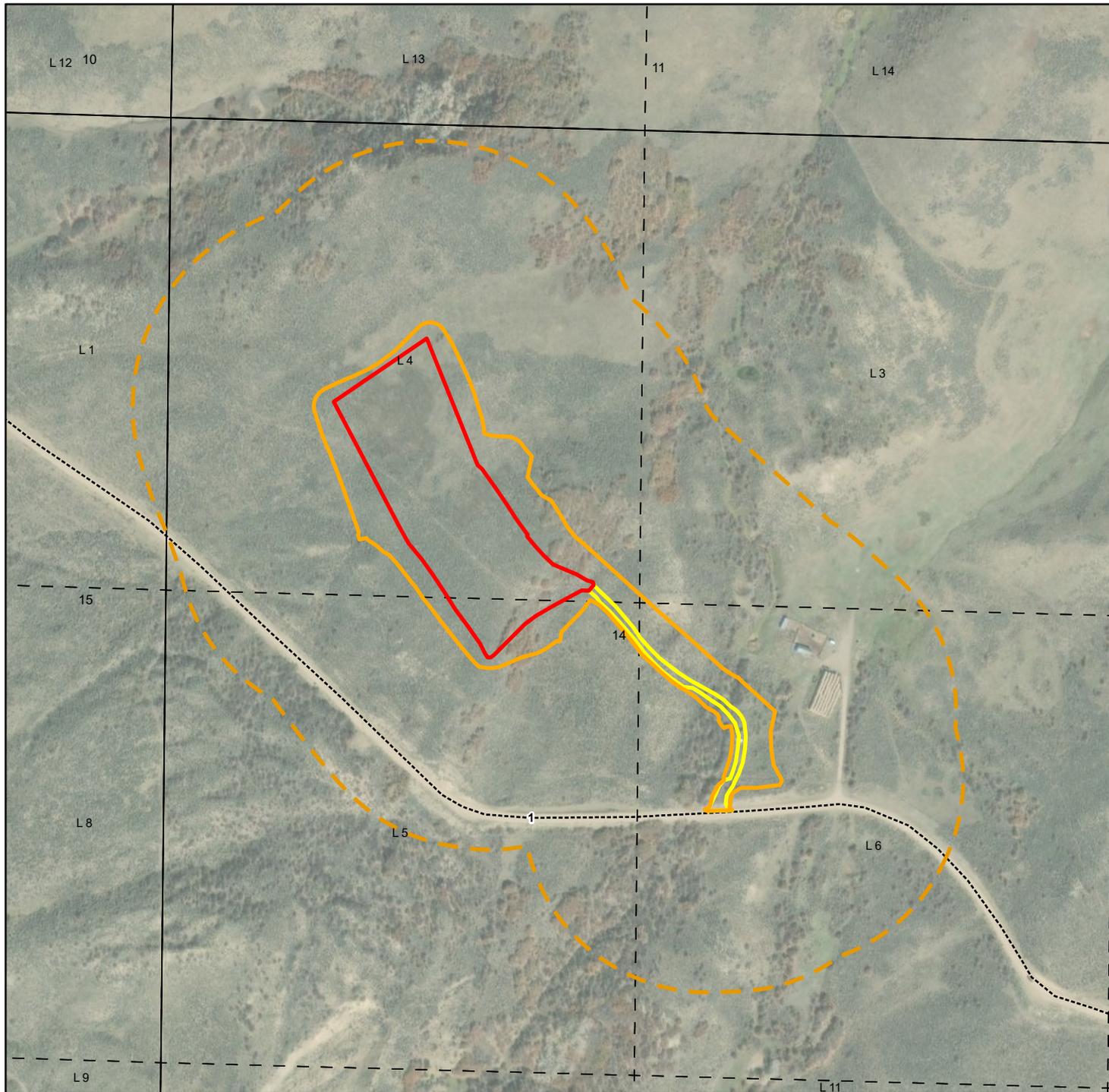
## 6.0 REFERENCES

The following sources were used in the review and evaluation process of the Duncan Facility Location and in preparation of the MBTA/Raptor surveys:

(CPW) Colorado Parks & Wildlife. 2023. HPH ECMC SB181 Data. Available online at: <https://www.arcgis.com/home/group.html?id=280f7c0420604edaa66ed6c0311d31d9#overview>. (Accessed May/July 2023).

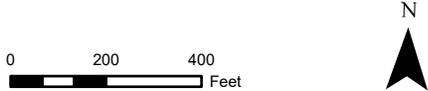
(CPW) Colorado Parks & Wildlife. 2023. CPW Nest Data. Available online at: <https://www.arcgis.com/apps/mapviewer/index>. (Accessed May/July 2023).

(USFWS) U.S. Fish and Wildlife Service. 2023a. IPaC – Information Planning and Conservation System. Available online at: <http://ecos.fws.gov/ipac/>. (Accessed May/July 2023).



**Legend**

- ..... Road
- Access Road
- Oil and Gas Location (Disturbance Area)
- Working Pad Surface
- Oil and Gas Location 500' Buffer
- PLSS Quarter-Quarter
- PLSS Section



**PETROLEUM RESOURCE MANAGEMENT**

**Figure 2. Duncan Facility 14-1 Pad OGD Site Location Map**

Disturbance Area: 11.21 Acres  
 40.91267, -107.35227  
 Lot 3, 4, 5, & 6, Sec 14, T11N, R89W, 6PM  
 Moffat County, CO



**QUANDARY  
CONSULTANTS**

Author: JG Date: 04/04/2024

Data Sources: Esri, CGIAR, USGS, Maxar