



February 13, 2024

U.S Fish and Wildlife Service
Colorado Ecological Services Field Office
134 Union Boulevard, Suite 670
Lakewood, CO 80228

**RE: Technical Assistance / Effects Determination Concurrence Request
Monument Ridge Development
El Paso County, Colorado**

To Whom It May Concern:

This request for technical assistance from the U.S. Fish and Wildlife Service (USFWS) is being submitted in accordance with the requirements for informal consultation pursuant to 50 CFR § 402.13. Monument Ridge East, LLC (“Applicant”) is planning to construct the Monument Ridge housing development (“Project”), located south of the intersection of Monument Hill Road and Palmer Divide Avenue in El Paso County, Colorado (**Attachment A: Site Location Map**). The Project will be constructed in El Paso County Parcel Nos. 7102200006, 7102200008, 7102200010, 7102200013, 7102201001, and 7102201014. The Project is approximately two miles north of and approximately six miles south of designated Critical Habitat (DCH) for the federally threatened Preble’s meadow jumping mouse (*Zapus hudsonius preblei* or Preble’s). Pursuant to Section 7 of the Endangered Species Act (ESA) and 50 CFR § 402.13, Bristlecone Ecology, LLC (“B.E.”) has prepared this request for informal consultation and determination of effects for listed species that could be affected by the proposed Project. Attached please find supporting information, including a description of the anticipated environmental impact area (EIA) for federally listed species (including proposed and candidate species) and their respective habitats.

After reviewing the lists of threatened, endangered, proposed, and candidate species/critical habitat provided by the USFWS’ Information for Planning and Consultation (IPaC) tool and considering the effects of the proposed activity within the anticipated EIA, B.E. has determined that species warranting protection under the ESA may, but are unlikely to be adversely affected by the subject activity for the following reasons:

- A qualified ecologist with B.E. has determined that the Project is not within an area designated as Critical Habitat for Preble’s and is not likely to adversely affect Preble’s or Preble’s habitat based on the absence of primary constituent elements (PCEs) at the Project location.
- A qualified ecologist with B.E. has determined that indirect and cumulative effects on federally protected species and their habitats will be avoided or minimized to a negligible level through project design.
- A qualified ecologist with B.E. has determined that there is no potential to impact any other federally protected species/critical habitat and has provided supporting documentation.



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Listed Species Reviewed

B.E. reviewed the USFWS’ IPaC database for information regarding the potential for threatened, endangered, proposed, and candidate species to occur at the Project site (see **Attachment B: IPaC Resource List**). IPaC identified ten species as having the potential to occur at the site (**Attachment B**). Two of these species – piping plover (*Charadrius melodus*) and pallid sturgeon (*Scaphirhynchus albus*) – are listed under a conditional effects analysis, and only need to be considered if a project will involve water depletions in the N. Platte, S. Platte, or Laramie River basins. The Project is located in the South Platte River basin, but water depletions will not occur as a part of the Project, thus the Project will not affect species listed under a conditional effects analysis in these basins. The eight remaining species listed in the IPaC query were the federally endangered grey wolf (*Canis lupus*) and whooping crane (*Grus americana*), the federally threatened Preble’s meadow jumping mouse (*Zapus hudsonius preblei* or Preble’s), greenback cutthroat trout (*Oncorhynchus clarkii stomias* or GCT), Eastern black rail (*Laterallus jamaicensis ssp. jamaicensis*), Ute ladies’-tresses orchid (*Spiranthes diluvialis* or ULTO), and Western prairie fringed orchid (*Platanthera praeclara*), and the candidate monarch butterfly (*Danaus plexippus*). Each species is discussed individually in the table below (**Table 1: Federally Listed T&E Species Potentially Impacted by the Project**). Species potentially affected or those requiring additional information are discussed in greater detail in the sections below.

Table 1. Federally Listed T&E Species Potentially Impacted by the Project (USFWS 2022)

Common Name	Scientific Name	Habitat Requirements and Likelihood of Impacts	Federal Status ¹
Mammals			
Gray wolf	<i>Canis lupus</i>	Previously extirpated from Colorado and not known to occur since 1945, however several individuals were released in Colorado in December 2023. As of February 2024, no wolves are known to be active in El Paso County. Likelihood of impacts: None; individuals not found in El Paso County.	FE
Preble’s meadow jumping mouse	<i>Zapus hudsonius preblei</i>	Inhabits well-developed riparian corridors with a nearby water source and adjacent, relatively undisturbed grassland communities. Riparian habitat includes a dense combination of grasses, forbs, and shrubs; a taller shrub and tree canopy may be present. Has been found to regularly use uplands at least as far out as 100 meters beyond the 100-year floodplain. The site is not within designated Critical Habitat or within CPW’s estimated occupied range (EOR) for Preble’s. Likelihood of impacts: Not likely; designated Critical Habitat is ~2 miles north and ~6 miles south of the site; EOR is ~1 mile south or northwest of the site in different drainages. PCEs are not present on the site.	FT
Fishes			
Greenback cutthroat trout	<i>Oncorhynchus clarkii stomias</i>	Cold, clear, gravely headwater streams and mountain lakes, with very limited distribution. Reintroduction efforts are ongoing in the South Platte River system. Likelihood of impacts: None; stream habitats are not present on the site.	FT
Pallid sturgeon	<i>Scaphirhynchus albus</i>	Water-related activities/use in the N. Platte, S. Platte and Laramie River Basins may affect listed species in Nebraska. Likelihood of impacts: None. The Project is within the S. Platte River basin; however, water depletions will not occur.	FE

¹ FE = Federally Endangered; FT = Federally Threatened; C = Candidate for Listing

Table 1 (cont.). Federally Listed T&E Species Potentially Impacted by the Project (USFWS 2022)

Common Name	Scientific Name	Habitat Requirements and Likelihood of Impacts	Federal Status ¹
Birds			
Piping plover	<i>Charadrius melodus</i>	Water-related activities/use in the N. Platte, S. Platte and Laramie River Basins may affect listed species in Nebraska. Likelihood of impacts: None. The Project is within the N. Platte River basin; however, water depletions will not occur.	FT
Eastern black rail	<i>Laterallus jamaicensis</i> ssp. <i>jamaicensis</i>	Eastern black rail is a subspecies of black rail that occurs east of the Rocky Mountains in North America. Black rails are small, cryptic marsh/wetland specialists, and depend entirely upon these habitats. Requires dense overhead cover (usually cattails [<i>Typha</i> spp.] or bulrushes [<i>Schoenoplectus</i> / <i>Scirpus</i> spp.]) and moist to saturated soils. Eastern black rails have been expanding their range in Colorado. Likelihood of impacts: None; minimal suitable marsh habitat is available on-site.	FT
Whooping crane	<i>Grus americana</i>	Whooping cranes currently exists in the wild in only 3 locations and the last bird in the reintroduced Rocky Mountains Population died in the spring of 2002. They occur in shallow marshes and adjacent grasslands. Likelihood of impacts: None; suitable habitat is not available on-site and the Project is well outside the species' normal migratory flyway.	FE
Insects			
Monarch butterfly	<i>Danaus plexippus</i>	Monarch butterflies require milkweeds (<i>Asclepias</i> spp.) as a host plant. This species is a candidate for listing under the ESA. The USFWS determined listing the species was warranted but precluded by work on higher priority listing actions. The species will remain a candidate for listing and reviewed yearly. There are no requirements for candidate species, but due diligence is encouraged. Likelihood of impacts: Unlikely; milkweeds were not observed on-site.	C
Flowering Plants			
Ute ladies'-tresses orchid	<i>Spiranthes diluvialis</i>	Primarily occurs along seasonally flooded river terraces, sub-irrigated or spring-fed abandoned stream channels, and lakeshores. May also occur along irrigation canals, berms, levees, irrigated meadows, gravel pits, borrow pits, and other human-modified wetlands. There are no known populations in El Paso County, and the site is above the elevation threshold (6,500 feet) where populations have been detected in Colorado, and above the threshold (7,000 feet) where surveys are required (USFWS 1992). Likelihood of impacts: None; site is above the elevation threshold where species have been detected and there are no known populations in El Paso County.	FT
Western prairie fringed orchid	<i>Platanthera praeclara</i>	Occurs in tallgrass prairie in Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and Oklahoma. Likelihood of impacts: None. The Project is within the S. Platte River basin; however, water depletions will not occur.	FT

¹ FE = Federally Endangered; FT = Federally Threatened; C = Candidate for Listing

B.E. assessed the Project site for potential habitat to support grey wolf, GCT, eastern black rail, whooping crane, ULTO, western prairie fringed orchid, monarch butterfly, and Preble's meadow jumping mouse. There was no habitat present for any of the species listed in the IPaC query. Because the site is in the same drainage where a Preble's riparian conservation zone (RCZ) has been designated just north of the site in Douglas County, B.E. performed an on-site evaluation of the suitability of the site to support Preble's. This species is discussed in greater detail below.



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Preble's Meadow Jumping Mouse

Preble's are found along well-developed riparian corridors with a perennial stream in the Front Range between 4,600 and 7,600 feet in elevation (USFWS 2018). Preble's hibernates for much of the year, entering dormancy in September or October and emerging the following May. Hibernation occurs outside of the active stream channel and alluvial floor in adjacent upland areas, though mice have also been found hibernating in the 100-year floodplain (Shenk and Silvert 1999, Schorr 2001). Upland habitats provide refuge and forage for the mouse during flood events, which are infrequently necessary to maintain a preferred shrubby vegetation canopy. Preble's constructs nests using forbs, grasses, and other available plant material, sometimes building multiple nests (Ryon 2001). Nests are typically located under well-developed shrubs or clumps of vegetation.

The site does not contain designated Critical Habitat (DCH) and is not within CPW's EOR; however, Douglas County has established an RCZ in the same drainage immediately north of the site, indicating its potential value as Preble's habitat. As such, B.E. performed an on-site survey on January 30, 2024, using CPW's *Preble's Meadow Jumping Mouse Habitat Scorecard* (v. Nov 2020) to assess the quality of the habitats present at the site (**Attachment C: Habitat Scorecard for Preble's Meadow Jumping Mouse**). Following the scorecard, B.E. surveyed the Project Area for any potential Preble's habitat or PCEs and determined that the most likely area for the species to occur was the area within and surrounding the wetland just south of Palmer Divide Avenue. All other portions of the Project Area did not contain any wetland or riparian habitat and were thus very unlikely to be inhabited by Preble's. The pre-Project conditions of potential habitat within the Project Area scored 61.1 using the scorecard, while the expected post-Project conditions scored 56.0 (**Attachment C**). The only condition to change between pre- and post-Project conditions was "land use within 100 yards", as the Project would convert ungrazed uplands to developed areas.

CPW's Preble's scorecard provided useful information about the quality of the habitats available to Preble's on the site. However, it was noted that multiple PCEs – including a perennial stream, a well-developed riparian corridor, and adjacent shrubby uplands – were absent from the site. The habitat present only contained two of the seven Preferred Habitat Conditions as listed by CPW on the scorecard. Due to the absence of the other five Preferred Habitat Conditions, and the low score of the pre- Project conditions, B.E. determined that the potential of the site to support Preble's is low to nonexistent. Without two PCEs

Determination of Effects

The desktop review and on-site Preble's habitat assessment concluded that development of the Project is not likely to adversely affect Preble's based on the lack of PCEs available at the site. No other listed species or their habitats were present at the site, and downstream effects are not anticipated because the Project will not involve water depletions. Therefore, it is B.E.'s professional opinion that no threatened, endangered, proposed, or candidate species, or their respective habitats would be adversely affected by the development of the Project. B.E. requests concurrence with the determine of not likely to adversely affect in accordance with the informal ESA consultation process pursuant to 50 CFR § 402.13. Should you



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disagree with this assessment, please contact Bristlecone Ecology at dmaynard@bristleconeecology.com. Because El Paso County Environmental Services requires confirmation from the USFWS regarding this determination of effects before considering the Project, we will await your response within 60 days before proceeding with the proposed action. Thank you for your attention to this matter.

Sincerely,

Bristlecone Ecology, LLC

A handwritten signature in black ink that reads 'Daniel Maynard'.

Daniel Maynard
Owner/Ecologist



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References

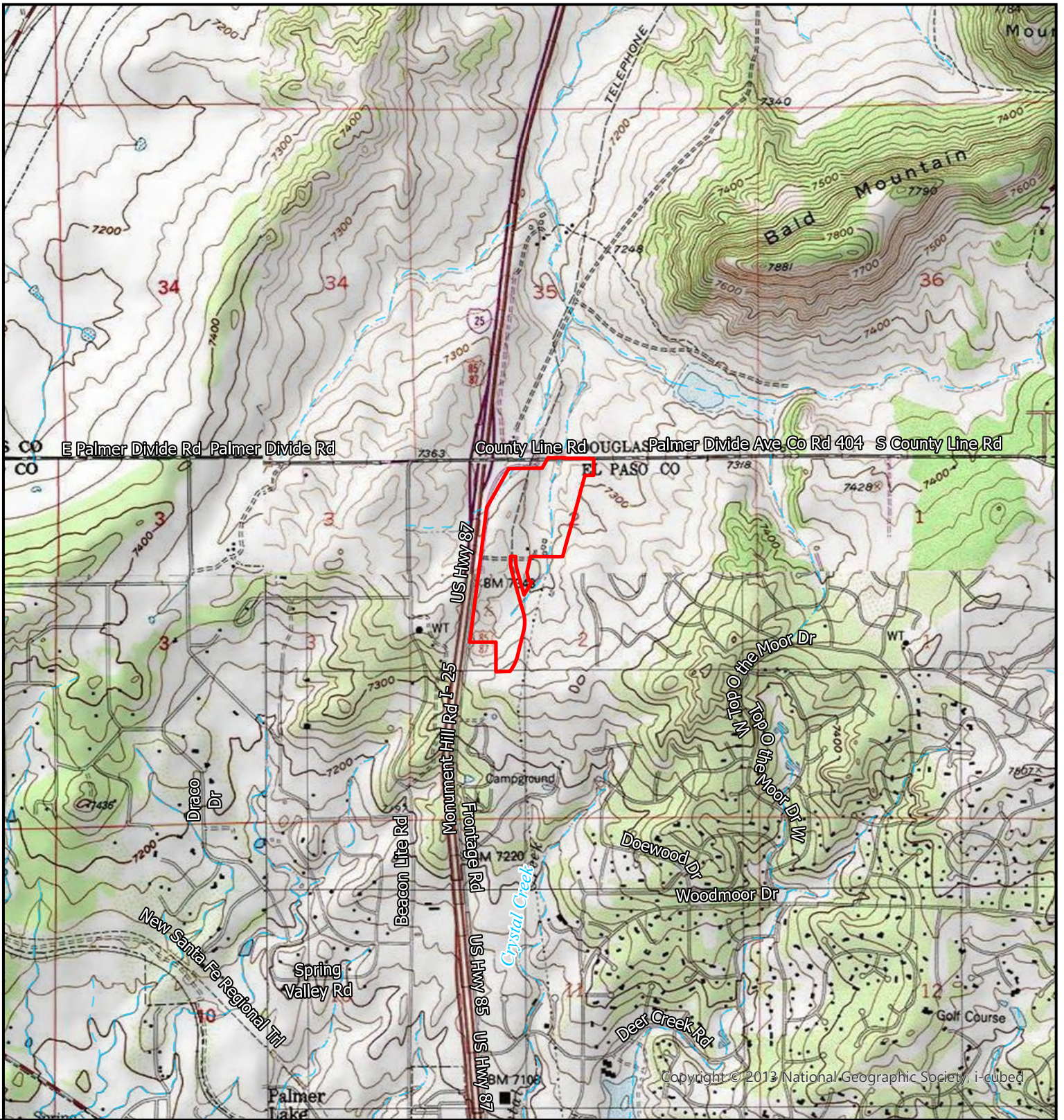
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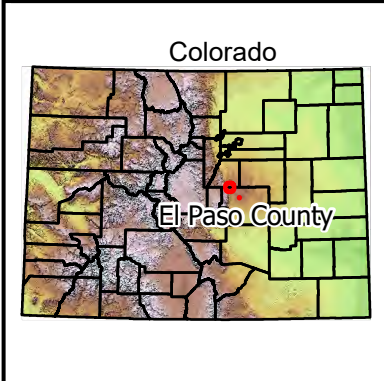
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ATTACHMENT A:
SITE LOCATION MAP



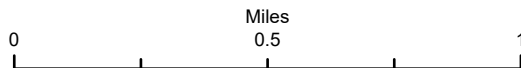
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Colorado

El Paso County

Project Area (66 acres)



1:24,000

Monument Ridge Development

Site Location Map





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ATTACHMENT B:
IPAC RESOURCE LIST

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

El Paso County, Colorado



Local office

Colorado Ecological Services Field Office

☎ (303) 236-4773

📅 (303) 236-4005

MAILING ADDRESS

Denver Federal Center
P.O. Box 25486
Denver, CO 80225-0486

PHYSICAL ADDRESS

134 Union Boulevard, Suite 670
Lakewood, CO 80228-1807

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

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1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
<p>Gray Wolf <i>Canis lupus</i></p> <p>This species only needs to be considered if the following condition applies:</p> <ul style="list-style-type: none"> Lone, dispersing gray wolves may be present throughout the state of Colorado. If your activity includes a predator management program, please consider this species in your environmental review. <p>There is final critical habitat for this species. https://ecos.fws.gov/ecp/species/4488</p>	Endangered
<p>Preble's Meadow Jumping Mouse <i>Zapus hudsonius preblei</i></p> <p>Wherever found</p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/4090</p>	Threatened

Birds

NAME	STATUS
<p>Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i></p> <p>Wherever found</p> <p>No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/10477</p>	Threatened
<p>Piping Plover <i>Charadrius melodus</i></p> <p>This species only needs to be considered if the following condition applies:</p> <ul style="list-style-type: none"> Project includes water-related activities and/or use in the N. Platte, S. Platte, and Laramie River Basins which may affect listed species in Nebraska. <p>There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6039</p>	Threatened

Whooping Crane <i>Grus americana</i>	Endangered
There is final critical habitat for this species. Your location does not overlap the critical habitat.	
https://ecos.fws.gov/ecp/species/758	

Fishes

NAME	STATUS
Greenback Cutthroat Trout <i>Oncorhynchus clarkii stomias</i>	Threatened
Wherever found	
No critical habitat has been designated for this species.	
https://ecos.fws.gov/ecp/species/2775	
Pallid Sturgeon <i>Scaphirhynchus albus</i>	Endangered
Wherever found	
This species only needs to be considered if the following condition applies:	
<ul style="list-style-type: none"> Project includes water-related activities and/or use in the N. Platte, S. Platte, and Laramie River Basins which may affect listed species in Nebraska. 	
No critical habitat has been designated for this species.	
https://ecos.fws.gov/ecp/species/7162	

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i>	Candidate
Wherever found	
No critical habitat has been designated for this species.	
https://ecos.fws.gov/ecp/species/9743	

Flowering Plants

NAME	STATUS
Ute Ladies'-tresses <i>Spiranthes diluvialis</i>	Threatened
Wherever found	
No critical habitat has been designated for this species.	
https://ecos.fws.gov/ecp/species/2159	

Western Prairie Fringed Orchid *Platanthera praeclara*

Threatened

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/1669>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

There are no documented cases of eagles being present at this location. However, if you believe eagles may be using your site, please reach out to the local Fish and Wildlife Service office.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply). To see a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the [Eagle Act](#) should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>

- Measures for avoiding and minimizing impacts to birds
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern \(BCC\)](#) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Ferruginous Hawk <i>Buteo regalis</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/6038	Breeds Mar 15 to Aug 15

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

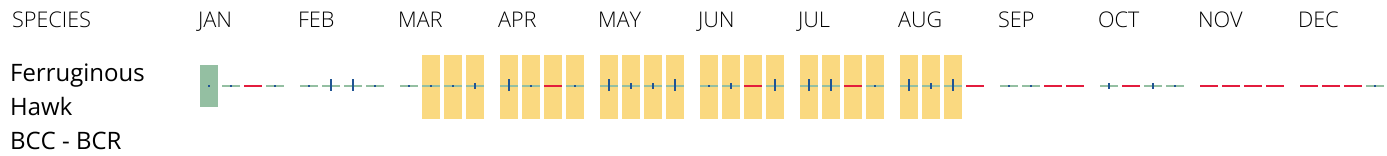
No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

■ probability of presence ■ breeding season | survey effort — no data



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird

on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key

component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.



Technical Assistance / Effects Determination Concurrence Request
Monument Ridge Development
El Paso County, Colorado

February 13, 2024

ATTACHMENT C:
HABITAT SCORECARD FOR PREBLE'S MEADOW JUMPING MOUSE

DISCLAIMER: This scorecard is designed specifically for the Colorado Parks and Wildlife (CPW) Wetland Wildlife Conservation Program. It does not replace protocols required by U. S. Fish and Wildlife Service (USFWS). Please contact USFWS regarding questions about their required protocols for species listed under the Endangered Species Act.

Habitat Scorecard for Preble's Meadow Jumping Mouse (v. Nov 2020)

Assessment of habitat before and after restoration or management actions

Project Name: Monument Ridge Project Area (acres): 65 ac Habitat Area (acres): 0.35 ac

Size of Contiguous Habitat outside Project Area (acres): N/A Ownership (circle): Same / Different / Conservation Easement

Scorecard Instructions: Enter one value that best describes early to mid-summer conditions of each habitat variable, using the numbers in the value column. Habitat variables are in shaded boxes; ranges of condition are directly below each variable. **If condition is outside range or is not described, enter a zero.**

Project Area and Habitat Area: The project area includes the entire area affected by the project. The habitat is the area that will provide (in case of pre-project) or does provide (post-project) habitat for each potential target species within the project area. The habitat area may be the same size as the project area or it might be smaller and it may be defined differently for different target species. If there is contiguous habitat area outside the project area, note the size and whether the ownership of the contiguous areas is the same or different and whether it is under conservation easement or other habitat protection. If the habitat area within your project area is noncontiguous and/or if sections are in very different conditions, consider using multiple scorecards so that each scorecard represents the general conditions. If you use multiple scorecards, identify each habitat area on a map.

Key habitat variable and conditions	Value	Pre-Project	Expected Post-Project	Actual Post-Project
Date of assessment <u>1/30/24</u>				
Dominant vegetation				
Combination of sedges, grasses, annual and perennial forbs and dense shrubs	13.2			
Combination of sedges, grasses, and dense shrubs	8.8	4.4	4.4	
Combination of sedges, grasses, and more open shrubs	4.4			
Percent grass cover				
>40%	13.2			
>20 – 40%	8.8	13.2	13.2	
10 – 20%	4.4			
Percent shrub cover				
>80%	13.2			
>50 – 80%	8.8	4.4	4.4	
5 – 50%	4.4			
Distance from habitat patch to water				
<10 yards	12.5			
10 – 20 yards	8.4	12.5	12.5	
>20 – 40 yards	4.2			
Species richness (number of species in vegetation community)				
>20 species	11.9			
10 – 20 species	7.9	7.9	7.9	
<10 species	4.0			
Habitat size				
>60 acres	10.6			
50 – 60 acres	7.0	3.5	3.5	
<50 acres	3.5			
Percent forb cover				
>35 – 50%	10.4			
>15 – 35%	6.9	3.5	3.5	
5 – 15%	3.5			

Continued on next page.

Habitat Scorecard for Preble's Meadow Jumping Mouse (v. Nov 2020)

Assessment of habitat before and after restoration or management actions

Preble's Meadow Jumping Mouse Scorecard *continued.*

Key habitat variable and conditions	Value	Pre-Project	Expected Post-Project	Actual Post-Project
Height of herbaceous vegetation (grasses and forbs)				
>20 – 40 inches	9.9	6.6	6.6	
8 – 20 inches	6.6			
<8 inches	3.3			
Land use within 100 yards				
Ungrazed	5.1	5.1	0	
Grazed lightly	3.4			
Grazed moderately	1.7			
Total (of 100 possible): add all numbers in before or after columns		61.1	56.0	