



Biological Resources Assessment

WADDELL ROCK PIT EXPANSION

Happy Camp, Ca 96039

Siskiyou County APNs:

009-330-230, 009-330-240 & 009-340-350

2024

GeoServ, Inc

Mount Shasta, CA



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INTRODUCTION

GeoServ, Inc. conducted a Biological Resources Assessment (BRA) for a Study Area located north of Happy Camp, Siskiyou County, California. The purpose of the assessment was to collect information on sensitive biological resources present or with the potential to occur in the Study Area.

PURPOSE

The purpose of this reconnaissance-level BRA is to evaluate the presence of special-status species and/or habitats, as well as assess the potential for special-status species discussed in this BRA and listed in Appendices A-C to occur on or near the site of the proposed Waddell Rock Pit Expansion, pursuant to applicable Federal, State, and local regulations. This BRA also analyzes the potential for jurisdictional wetlands and other Waters of the United States to exist onsite.

PROJECT DESCRIPTION

The proposed Project would involve expanding the boundaries of the existing Waddell Rock Pit to allow for additional rock quarrying. The surrounding area contains recently burned forestland as well as industrial uses. Indian Creek Road runs through the Study Area, while Indian Creek itself runs south and west of the existing materials stockpile area. Public land previously identified as Northern Spotted Owl critical habitat occurs adjacent to the project on its northern end.

LOCATION

Site Overview

The Study Area is located north of Happy Camp in Siskiyou County. The Study Area encompasses portions of Section 08, Township 17 North, Range 7 East of the Deadman Point USGS 7.5-minute Quadrangle. It is situated at an elevation range between approximately 1515 feet and 2040 feet above mean sea level. The Study Area is located on Siskiyou County Assessor Parcel Numbers (APNs) 009-330-230, 009-330-240, and 009-340-350. The approximate center of the Study Area is located at latitude 41°53'4.36"N (WGS84) and longitude 123°25'46.32"W (WGS84) within the Lower Klamath (Hydrologic Unit Code #18010209) Watershed (Natural Resources Conservation Service [NRCS], USGS, and U.S. Environmental Protection Agency [USEPA] 2016).

Critical Habitat

Critical Habitat is designated by the U.S. Fish & Wildlife Service and provides special protections for habitats considered important for long-term persistence of endangered or threatened species. Specific to fish species, critical habitat and essential fish habitat are also designated by the National Oceanic and Atmospheric Administration (NOAA).

According to the NOAA Essential Fish Habitat Mapper, the portion of Indian Creek that runs near the materials stockpile area contains Essential Fish Habitat for Coho salmon and Chinook Salmon. However, with the implementation of best management practices (BMPs) for erosion and sedimentation, the expansion of the Waddell Rock Pit would not significantly impact Indian Creek. The existing stockpile area would not significantly impact Essential Fish Habitat/Critical Habitat through the continued implementation of its existing BMPs.

According to the USFWS IPaC report for the project (Appendix C), critical habitat for the Northern Spotted Owl (*Strix occidentalis caurina*, US Threatened) overlaps with the Study Area. Site visits confirmed that the critical habitat does not occur in the Study Area, but rather is adjacent to the Study Area boundary on public (US Forest Service) ownership.



Landforms & Water Features

The Study Area consists of the existing exposed Waddell rock pit, the land adjacent to the current permitted boundaries, and the existing materials stockpile area (See Sheet C1, "Overall Site Plan", in the Reclamation Plan Amendment application associated with this project). The area is characterized by former conifer/hardwood forest that has been severely burned; in many areas, mortality approaches 100 percent both onsite and in surrounding visible land. Site visits show a return of these features, largely through oak resprouting and conifer saplings. No water features exist onsite, though Indian Creek runs west of the existing materials stockpile area.

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Existing Structures

The Study Area includes the existing quarry area, with clear evidence of previous rock extraction. The materials stockpile area includes various stockpiles of rock/gravel, truck weighing scales, and various pieces of construction equipment (excavators, etc.). The materials stockpile area has a large gate to prevent public access. Indian Creek Road runs through the Study Area, running between the materials stockpile area and the proposed quarry boundaries.

Regional Land Uses

Surrounding land uses are largely public land and industrial uses. Public (US Forest Service) forestland exists to the north of the Study Area and is coincident with the Northern Spotted Owl critical habitat in the area. Additional forested land exists further out from the project. Additional industrial uses occur north of the Study Area.

METHODS

Records Search & Literature Review Conducted

- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) record search for the “Deadman Point” 7.5-minute quadrangle and the eight surrounding USGS quadrangles (Appendix A);
- California Native Plant Society (CNPS) electronic Inventory of Rare and Endangered Plants of California was queried for the “Deadman Point” 7.5-minute quadrangle and the eight surrounding USGS quadrangles (Appendix B).

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- United States Fish and Wildlife Service (USFWS) Information, Planning, and Consultation (IPaC) System Resource Report List for the Study Area (USFWS 2024, Appendix C).
- National Oceanic and Atmospheric Administration (NOAA) Protected Resources Map Application (NOAA 2024a).
- NOAA Essential Fish Habitat Map Application (NOAA 2024b).
- USFWS National Wetlands Inventory (NWI) Mapper (USFWS 2024).
- National Resource Conservation Service (NRCS) Web Soil Survey (NRCS 2024).

Additional literature was consulted to determine if sensitive species discussed have any potential to occur in the Study Area. See the References section for a full list.

Field Surveys

Two botanical and wildlife surveys were conducted throughout the Study Area in April and June 2023, when all sensitive plant species searched for would have been in bloom across the two dates. A follow-up survey was conducted in February 2024. Using CNDDB, CNPS, and USFWS records, the biologist developed a target list of sensitive species. Prior to the surveys, this target list was narrowed down by removing species which would not occur in the area due to characteristics such as elevation and habitat type. The survey was conducted by an experienced biologist, who has over six years of professional wildlife and botanical experience. The botanist extensively searched the project area, focusing on areas that contained habitat elements that may include one of the target species.

No sensitive species were discovered during the biological reconnaissance surveys, though several sensitive species have the potential to occur in the study area. These species have been addressed in mitigation recommendations later in this document.

RESULTS

NATURAL COMMUNITIES IN THE EVALUATION AREA

Using the field visits, a review of published literature, and the knowledge of GeoServ, Inc. staff, the natural communities present in the Study Area were cataloged and evaluated to determine the presence or likely presence of sensitive natural communities.

NATURAL COMMUNITIES WITHIN THE PROJECT SITE

Vegetation communities were identified within the Study Area based on the classification system presented in the California Wildlife Habitat Relationships

System. CNDDDB results (Appendix A) indicate that there are no sensitive natural communities within the study area, though two *Darlingtonia* seep areas were identified within the nine-quad scoping area.

No sensitive natural communities were observed within the Project area during the biological surveys. Vegetation types and communities observed during the field survey include the following:

Montane Hardwood-Conifer

Montane hardwood-conifer communities consist of hardwood species (especially Oregon white oak and/or California black oak) as well as conifers (including douglas-fir, ponderosa pine, incense cedar, etc.); additional vegetation includes pacific madrone and tanoak (CDFW 1988a). Montane hardwood-conifer represents a transitional zone between purer stands of higher-elevation conifer forest and lower-elevation hardwood woodland/forest, and they typically occur on course, well-drained mesic soils (CDFW 1988a). The significant presence of both conifers and hardwoods makes this community unique and able to support a wide range of wildlife (CDFW 1988a).

Onsite, the montane hardwood-conifer community has been impacted by recent severe, stand-replacing wildfire. Many portions of the Study Area approach 100 percent mortality of trees, though conifer/oak saplings and oak resprouts demonstrate that the area is recovering.

Unvegetated

The materials stockpile area, as well as portions of the existing quarry area, are largely unvegetated.

SPECIAL-STATUS PLANTS WITHIN THE PROJECT SITE

The botanical scoping process included a sensitive species search from the California Native Plant Society (CNPS) and California Natural Diversity Database (CNDDDB) within a nine-quadrangle area centered around the Study Area. The USFWS IPaC report (Appendix C) was also consulted, but did not include any federally listed plant species.

The records searches yielded a total of 74 sensitive species detections within the 9-quadrangle area. Of



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these 74 species, 13 were deemed to have no potential to occur due to the Project's elevational range: cut-leaf anemone (*Anemone multifida* var. *multifida*), green shield-moss (*Buxbaumia viridis*), split-hair paintbrush (*Castilleja schizotricha*), Mt. Eddy draba (*Draba carnosula*), yellow willowherb (*Epilobium luteum*), Siskiyou fireweed (*Epilobium siskiyouense*), Oregon bedstraw (*Galium oreganum*), Regel's rush (*Juncus regelii*), Oregon bluebells (*Mertensia bella*), Siskiyou phacelia (*Phacelia leonis*), snow dwarf bramble (*Rubus nivalis*), water bulrush (*Schoenoplectus subterminalis*), and Cascade stonecrop (*Sedum divergens*). All of these species have a lower elevational range well above the Study Area's maximum elevation of 2,040 feet.

Nine species were deemed to have no potential to occur due to the absence of their required serpentine habitat: Waldo rockcress (*Arabis aculeolata*), McDonald's rockcress (*Arabis mcdonaldiana*), serpentine sedge (*Carex serpenticola*), Waldo daisy (*Erigeron bloomeri* var. *nudatus*), Klamath mountain buckwheat (*Eriogonum hirtellum*), Siskiyou iris (*Iris bracteata*), horned butterwort (*Pinguicula macroceras*), Gasquet rose (*Rosa gymnocarpa* var. *serpentina*), and Del Norte checkerbloom (*Sidalcea elegans*).

Thirty-six species were considered non-status species, as they have a CNPS Rare Plant Rank of 4. The remaining 16 special status species were surveyed throughout the Study Area in April and June 2023, and February 2024. Focal plants included:

Scientific Name	Common Name	CNPS Rare Plant Rank
<i>Asarum marmoratum</i>	Marbled wild-ginger	2B.3
<i>Boechera koehleri</i>	Koehler's stipitate rockcress	1B.3
<i>Castilleja elata</i>	Siskiyou paintbrush	2B.2
<i>Cornus unalaschkensis</i>	Bunchberry	2B.2
<i>Epilobium oreganum</i>	Oregon fireweed	1B.2
<i>Erythronium hendersonii</i>	Henderson's fawn lily	2B.3
<i>Erythronium howellii</i>	Howell's fawn lily	1B.3
<i>Iliamna latibracteata</i>	California globe mallow	1B.2
<i>Lewisia cotyledon</i> var. <i>heckneri</i>	Heckner's lewisia	1B.2
<i>Lewisia cotyledon</i> var. <i>howellii</i>	Howell's lewisia	3.2
<i>Lomatium martindalei</i>	Coast range lomatium	2B.3

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<i>Monotropa uniflora</i>	Ghost-pipe	2B.2
<i>Piperia candida</i>	White-flowered rein orchid	1B.2
<i>Sidalcea celata</i>	Redding checkerbloom	3
<i>Silene hookeri</i>	Hooker's catchfly	2B.2
<i>Thermopsis robusta</i>	Robust false lupine	1B.2

All species observed during the survey were recorded, regardless of rare plant status, and are listed below:

Scientific Name	Common Name	Comment
<i>Achillea millefolium</i>	Common Yarrow	
<i>Adelinia grandis</i>	Hound's tongue	
<i>Allium bolanderi</i>	Bolander's onion	
<i>Amsinckia menziesii</i>	Fiddleneck	
<i>Arbutus menziesii</i>	Pacific madrone	
<i>Asclepias cordifolia</i>	Heartleaf milkweed	Monarch butterfly host plant
<i>Berberis aquifolium</i>	Oregon grape	
<i>Bromus tectorum</i>	Cheatgrass	
<i>Cardamine sp.</i>	Bittercress	
<i>Ceanothus sp.</i>	Ceanothus	
<i>Claytonia perfoliata</i>	Miner's lettuce	
<i>Cytisus scoparius</i>	Scotch Broom	
<i>Eriogonum nudum</i>	Naked buckwheat	
<i>Eriophyllum lanatum</i>	Common woolly sunflower	
<i>Erythranthe moschata</i>	Musk monkeyflower	Genus formerly <i>Mimulus</i>
<i>Grindelia nana</i>	Idaho gumweed	
<i>Isatis tinctoria</i>	Dyer's woad	
<i>Juncus occidentalis</i>	Western rush	

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<i>Lupinus sp.</i>	Lupine	
<i>Nicotiana attenuata</i>	Tobacco	
<i>Notholithocarpus densiflorus</i>	Tanoak	
<i>Penstemon heterophyllus</i>	Foothill penstemon	
<i>Penstemon deustus</i>	Hot rock penstemon	
<i>Pinus lambertiana</i>	Sugar pine	ID'd by cone given post-fire conditions
<i>Pinus ponderosa</i>	Ponderosa pine	ID'd by cone given post-fire conditions
<i>Plantago lanceolata</i>	Ribwort plantain	
<i>Polystichium munitum</i>	Western swordfern	
<i>Primula hendersonii</i>	Henderson's shooting star	
<i>Pseudotsuga menziesii</i>	Douglas-fir	ID'd by cone given post-fire conditions
<i>Pteridium aquilinum</i>	Western brackenfern	
<i>Hordeum murinum</i>	Barley	
<i>Tragopogon sp.</i>	Salsify	
<i>Trifolium sp.</i>	Clover	
<i>Ranunculus sp.</i>	Buttercup	
<i>Ribes roezlii</i>	Sierra gooseberry	
<i>Rubus armeniacus</i>	Himalayan blackberry	
<i>Sanicula graveolens</i>	Northern sanicle	
<i>Quercus kelloggii</i>	California black oak	ID'd from resprout
<i>Quercus garryana</i>	Oregon white oak	ID'd from resprout

No special-status plants were observed during the botanical surveys, and they are not expected to occur within the Project area.

WILDLIFE

Special-status Fish Species and Habitat:

Fish:

A records search was conducted within the Project area for special-status fish, critical habitat, and essential fish habitat through the following sources: CNDDDB (Appendix A), NOAA essential fish habitat mapper, NOAA Protected Resources App, and the USFWS IPaC report (See Appendix C).

No critical habitat was recorded in the Study Area; however, essential fish habitat for Coho salmon (*Oncorhynchus kisutch*) and Chinook salmon (*Oncorhynchus tshawytscha*) is present in Indian Creek, which runs south and east of the materials stockpile area. Additionally, CNDDDB records indicate that the Klamath River lamprey (*Entosphenus similis*, CA Species of Special Concern) and coast cutthroat trout (*Oncorhynchus clarkii clarkii*, CA Species of Special Concern) have the potential to occur in the portion of Indian Creek that passes near the Study Area.

Indian Creek runs south and west of the existing materials stockpile area, while the existing and proposed quarry areas are further from the creek across Indian Creek Road. No instream mining is proposed for this project; however, significant impacts to these fish species or essential fish habitat could occur if erosion or hazardous materials entered Indian Creek and polluted downstream habitat. With the implementation of Best Management Practices (BMPs) for erosion control and spill prevention (as described in the project's associated reclamation plan amendment), impacts to these fish species and their potential habitat would not occur. This would include existing BMPs as implemented at the existing materials/stockpile area, as well as BMPs associated with the current and expanded quarry area.

Special-Status Wildlife Species

The CNDDDB records and USFWS IPaC records identified the following special-status wildlife species that could potentially occur in the Project area:

- American peregrine falcon (*Falco peregrinus anatum*, CA Fully Protected)
- Bald Eagle (*Haliaeetus leucocephalus*, CA Endangered, CA Fully Protected)
- Bumble Bees:
 - Franklin's bumblebee (*Bombus franklini*, US Endangered)
 - Suckley's cuckoo bumblebee (*Bombus suckleyi*, CA Candidate endangered)
 - Western bumblebee (*Bombus occidentalis*, CA Candidate Endangered)
- Crustaceans:
 - Conservancy fairy shrimp (*Branchinecta conservatio*, US Endangered)
 - Vernal pool fairy shrimp (*Branchinecta lynchi*, US Threatened)
 - Vernal pool tadpole shrimp (*Lepidurus packardi*, US Endangered)

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- Foothill yellow-legged frog - north coast Distinct Population Segment (DPS) (*Rana boylei* population 1)
- Gray wolf (*Canis lupus*, US Endangered)
- Pacific marten, Coastal Distinct Population Segment (*Martes Caurina*)
- Marbled murrelet (*Brachyramphus marmoratus*, US Threatened)
- Monarch butterfly (*Danaus plexippus*, US Candidate)
- North American Wolverine (*Gulo gulo luscus*, US Proposed Threatened, CA Threatened, CA Fully Protected).
- Northern goshawk (*Accipiter gentilis*, CA Species of Special Concern)
- Northern spotted owl (*Strix occidentalis caurina*, US Threatened, CA Threatened)
- Pacific tailed frog (*Ascaphus truei*, CA Species of Special Concern)
- Salamanders:
 - Del Norte salamander (*Plethodon elongatus*, CA Watchlist)
 - Siskiyou Mountains Salamander (*Plethodon stormi*, CA Threatened)
 - Southern torrent salamander (*Rhyacotriton variegatus*, CA Species of Special Concern)
- Yellow-billed cuckoo (*Coccyzus americanus*, US Threatened)

American Peregrine Falcon:

American peregrine falcons are birds of prey that can be found in woodland, coastal, and forested habitats (CDFW 2000a). The species has been delisted federally and at the state level after recovering from DDT-related declines (CDFW 2000a, Cornell 2023a), but remains a state Fully Protected species.

Proximity to water, such as inland wetlands or riparian areas, is characteristic of American peregrine falcon habitat in both breeding and non-breeding areas (CDFW 2000a). Typically, American peregrine falcons' prey on birds, catching prey while in flight (CDFW 2000a).

American peregrine falcons breed from late March to early August, relying on cliff sites for nesting (CDFW 2000a).

American peregrine falcons have been observed in an adjacent quadrangle to the Study Area according to CNDDDB records, and therefore may utilize the project site. However, a nesting bird survey prior to vegetation removal would reduce impacts to American peregrine falcons to less than significant levels.

Bald Eagle:

Bald eagles are birds of prey that can be found across the United States. Once federally endangered due to DDT impacts, bald eagles have been delisted federally but remain listed as Endangered at the state level.



Bald eagles require large bodies of water, as their primary food source is fish (CDFW 1999). Individuals will perch on the limbs of large trees or snags while observing the water below to hunt (CDFW 1999).

Bald eagles typically nest near water too, with over 80% of nests found within 1 mile of water (CDFW 1999). Nest sites are typically large, live trees, especially Ponderosa pine (CDFW 1999). Bald eagles breed from February to July (CDFW 1999).

According to CNDDDB records, bald eagles have been observed approximately 11 miles southwest of the Study Area. However, the recent severe fire has greatly reduced the number of live trees that bald eagles may use to nest or roost. Therefore, bald eagles are not expected to occur in the Study Area, but would nevertheless be identified through pre-operation nesting bird surveys. Therefore, impacts to bald eagles would be less than significant.

Franklin's bumble bee:

Franklin's bumble bee is an extremely range-restricted bumble bee, only ever found within Northern California and Southern Oregon between the Sierra-Cascade Mountain ranges and Coast Mountain ranges (USFS 2022). Relatively abundant in its range until 1998, the species has experienced steep declines since that point, and was last seen in 2006 in Oregon near Mt. Ashland (USFS 2022, USFWS 2018a).

Habitat requirements for Franklin's bumble bee are poorly understood (USFWS 2018a, USFWS 2021), but the species is known to require floral plants such as *Agastache*, *Eschscholzia*, *Lupinus*, *Monardella*, and *Vicia*, for a food source (USFS 2022). Abandoned rodent burrows or rotting logs are also crucial as dwelling sites for the species (USFS 2022, USFWS 2018a).

Solitary queen bees who have successfully mated establish Franklin's bumble bee colonies, collecting nectar and pollen to support egg production (USFS 2022, USFWS 2018a). As the colony develops, offspring begin to assume food gathering and colony defense tasks (USFS 2022, USFWS 2018a). Eventually, new queens are produced, who mate with males, allowing the colonization process to begin again (USFS 2022). At this point, the original queen, males, and workers die, allowing the mated females to carry on the lineage (USFWS 2018a). In total, colonies consist of 50-400 worker bees plus the queen (USFWS 2018a).

Franklin's bumble bees may be extirpated in California and may be extinct in general (USFWS 2018a). Provided the species still exists in California, threats include introduced diseases from commercial bees, as well as pesticide use in its area (USFS 2022).

CNDDDB records indicate that the nearest occurrence of Franklin's bumblebee occurred in 1997 approximately 26 miles southeast east of the Study Area, outside of the normal nine-quad scoping area for the project. Additionally, the last sighting of Franklin's bumblebee occurred in 2006 near Mt. Ashland in Oregon, even further away. Therefore, Franklin's bumblebee is not expected to occur in the Project area, and no impacts to Franklin's bumblebee would occur as a result of the Project.

Western Bumble Bee and Suckley's Cuckoo Bumble Bee:

Western bumble bees are current candidates for California Endangered Species Act protections. The species has experienced sharp declines since the 1990s, likely due to a variety of factors, including novel pathogens, insecticide use, and habitat fragmentation (Xerces 2008). Western bumble bees require a diversity of wildflower resources and a stable supply of pollen; they are known to visit a wide array of bee-pollinated flower species, though their short tongues hamper their ability to feed from tube-shaped flowers (Xerces 2008). Western bumble bees will typically use abandoned rodent burrows as areas to establish colonies (Xerces 2008).

Like most bumble bees, western bumble bees come in three forms: queens, workers, and males. Fertilized queens begin colonies in the spring, first producing worker bees and caring for them herself (Xerxes 2008). Once a supply of workers are established, the queen focuses her time on egg-laying, while the workers take care of additional offspring (Xerxes 2008). The queen will then producing males and additional queens, who will then mate before entering diapause (similar to hibernation) to overwinter (Xerxes 2008).

A rare form of parasitic bumble bee, Suckley's cuckoo bumble bee, has also become a Candidate for CESA protections. Suckley's cuckoo bumble bee is a social parasite, meaning queens cannot establish a viable colony on her own. Suckley's cuckoo bumble bees cannot produce worker bees, and therefore seek out the colony of another bumble bee species (such as *Bombus occidentalis*), incapacitate the queen, and then commandeer the colony (Xerxes 2008). The parasitized colony then enables the queen Suckley's cuckoo bumble bee to lay her own eggs (males and queens), as the workers will provide for the offspring. Once males and queens mature and mate, queens overwinter and repeat the process the following spring (Xerces 2008).

Suckley's cuckoo bumble bees have similar habitat requirements to other bumble bee species in that they require a diversity and constant supply of flowers (Xerces 2008). The species has short to medium sized tongues, meaning they too struggle to feed on flowers with deep tube shapes (Xerces 2008).

Within the Study Area, floral diversity is somewhat limited due to the disturbance at the existing Waddell rock pit extents. Additionally, because CNDDDB records

observed these species approximately nine miles away from the Study Area, these bumble bees are not expected to occur in the Study Area. Therefore, no impacts to these bumble bees are expected to occur.

Crustaceans:

The USFWS IPaC report for the Project identified vernal pool fairy shrimp (*Branchinecta lynchi*, US Threatened), Conservancy fairy shrimp (*Branchinecta* conservation US Endangered), and vernal pool tadpole shrimp (*Lepidurus packardii*, US Endangered) as potentially occurring in the Project area. The vernal pool fairy shrimp and Conservancy fairy shrimp are both dependent on vernal pools and vernal pool-like habitats (USFWS 2005). The vernal pool tadpole shrimp occurs in a wider variety of ephemeral wetland habitats in addition to vernal pools (USFWS 2007). However, field surveys confirmed no ephemeral wetland habitats that could support these shrimp species are present on the project site; therefore, vernal pool fairy shrimp, Conservancy fairy shrimp, and vernal pool tadpole shrimp have no potential to occur in the Project area, and Project implementation would have no impacts on these species.

Foothill Yellow-legged Frog:

The foothill yellow-legged frog is a species found in or near rocky streams in hardwood, hardwood-conifer, riparian, pine, mixed conifer, coastal scrub, chaparral, and wet meadows (CDFW 2000b), with the stream habitat being the most crucial. The species is rarely found far from permanent water, with normal home ranges less than 33 feet in length (CDFW 2000b).

Foothill yellow-legged frog adults consume invertebrates, especially insects (California Herps 2022). Adults will bask on exposed rock surfaces near streams but will quickly retreat to underwater sediments or rocks when they perceive a threat; winter activities are typically spent hiding under rocks in or near the stream (CDFW 2000b).

Foothill yellow-legged frogs typically begin breeding/egg-laying from mid-March to May, with amplexus occurring in the water (CDFW 2000b, California Herps 2022). Egg clusters of 200-300 eggs are attached to gravel or rocks in moving water near the edge of the stream (CDFW 2000b). Tadpoles require at least three to four months of water to survive to metamorphosis (CDFW 2000b); tadpoles eat detritus and algae attached to the rocky substrate (California Herps 2022).

Ecologically, garter snakes are the primary predator of foothill yellow-legged frogs (CDFW 2000b). The species faces a variety of threats, including habitat modification from dam construction and altered streamflows/water releases, which can force adults upland and disrupt/detach egg masses within the stream areas (CFGC 2020). According to the California Fish and Game Commission (CFGC),

habitat modifications that threaten the species include mining, illegal cannabis cultivation, grazing, timber harvest, and even some restoration projects (CFGC 2020). Drought, wildfires, and other climate-related events also may impact foothill yellow-legged frog populations (CFGC 2020). Environmental threats such as chytrid fungus and agricultural pesticides add an additional threat to the species (CFGC 2020).

CNDDDB records indicate that foothill yellow-legged frogs have been found near streams approximately 13 miles northwest of the Study Area. However, the lack of wet areas within the Study Area precludes foothill yellow-legged frog presence in the Study Area, and none were observed onsite during field surveys. Therefore, no impacts to foothill yellow-legged frogs would occur.

Gray Wolf:

The gray wolf is a habitat generalist that only recolonized California in 2009 (CDFW 2022). Historically, wolves have occurred in forests, grasslands, deserts, and the tundra (CDFW 2011). In general, crucial habitat components include a water source, adequate prey (typically ungulates such as deer and elk), and a lack of human disturbance or population (CDFW 2011). Wolves historically occurred over large portions of the state, especially in the north; however, their total abundance was likely somewhat low (CDFW 2011).

Individual wolves can travel over 30 miles in a day and can disperse as far as 680 miles from their birthing place (CDFW 2011). Wolves typically travel in packs consisting of a mating alpha pair, as well as subordinate wolves, typically offspring (CDFW 2011). Subordinate wolves may leave the pack to start their own or join another pack (CDFW 2011). Packs typically claim and defend territories from other wolves; these territories can range from 20 square miles to 400 square miles (CDFW 2011). These large territorial needs, plus gray wolves' relatively successful recovery, has necessitated the species' expansion into new areas, including California.

Typically, alpha wolf pairs begin to breed at two years of age, and thereafter produce one litter of pups per year (CDFW 2011). Successful pup rearing requires a den for birthing, such as a hole, crevice, or hollow log/stump; as pups grow, they typically remain near older wolves at rendezvous sites, while the rest of the pack hunts (CDFW 2011). Wolves that survive to adulthood typically live four years, though they can live up to 13 years (CDFW 2011).

Currently, gray wolf individuals and packs have been sighted in Siskiyou County, Trinity County, and even further south in rare instances. As gray wolves are habitat generalists with the propensity for long-distance dispersal, it is possible that gray wolves could use the Study Area for foraging, dispersal, or denning. If a gray wolf den or rendezvous site is present on the Project area, construction

activities could potentially impact the gray wolf. These impacts would be significant. However, the potential for gray wolves to occur on the project area is exceedingly low, due to the current and historic disturbances (severe fire, rock quarrying, and nearby quarry material processing). Additionally, no gray wolves, dens, or rendezvous sites were observed onsite during field surveys or in CNDDDB records. Therefore, there would be no impacts to the gray wolf.

Pacific Marten (Coastal Distinct Population Segment):

The Pacific marten is a mammal found in the forests of the North Coast, Sierra Nevada, Cascade, and Klamath Mountains (CDFW 1988c). Martens are carnivorous and typically eat small mammals, but will also take birds, insects, and even fruit if other food sources are unavailable (CDFW 1988c). Martens are primarily nocturnal or crepuscular.

In general, martens require old-growth coniferous forest with decadent features for denning and nesting purposes. Martens rely on cavities for denning, and may utilize large tree cavities, snags, stumps/logs, burrows, or caves/crevices for such purposes. Martens will use similar den habitats for nesting (CDFW 1988c). Small clearings, meadows, and riparian areas are crucial for foraging, but large areas with no tree canopy are typically avoided (CDFW 1988c). Human disturbance typically excludes martens from using a habitat area.

Pacific martens are not considered sensitive species in their inland populations. However, the Coastal Distinct Population Segment (DPU) is listed as threatened under the U.S. Endangered Species Act, while it is also listed as Endangered by the California Endangered Species Act (USFWS 2020a, CDFW 2024).

Similar to other species dependent on old-growth forests discussed in this document, the severe, stand-replacing fires that have recently occurred in and around the project area preclude Pacific martens from utilizing the site. As mentioned above, martens typically refrain from using areas with human disturbance and areas with no tree canopy. Taken together, the severe fire, previous human disturbance, and lack of tree canopy all indicate that Pacific martens do not use the Study Area, and no impacts to Pacific martens would occur as a result of the Project.

Marbled Murrelet:

Marbled murrelets are coastal birds that rely on old-growth forest characteristics for their habitats (USFWS 1997). These old growth characteristics include large trees, multistoried canopies, and moderate to high canopy closure (USFWS 1997). Marbled murrelets are rarely found more than 50 miles inland from the coast (USFWS 1997). Therefore, as the project is approximately 53 miles due east of the California coast and the region has lost its old growth characteristics from recent

severe, stand-replacing fire, marbled murrelets have no potential to occur in the Study Area. No impacts to the marbled murrelet are expected as a result of this project.

Monarch Butterfly:

The USFWS IPaC report for the Project identified the monarch butterfly (*Danaus plexippus*, US Candidate) as potentially occurring in the Project area.

The monarch butterfly is a migratory butterfly species which uses northern California as part of its vast summer breeding area, before overwintering in coastal California and Baja California (USFWS 2020b). Adult monarch butterflies require a diversity of blooming nectar resources during breeding and migration, with its obligate host plant, milkweed (*Asclepias* sp.) essential for breeding (USFWS 2020b).

When monarch caterpillars hatch in their breeding grounds, they spend 9-18 days as caterpillars, eating milkweed and molting several times (USFWS 2020b). After 6-14 days in a chrysalis, adult monarch butterflies begin their reproductive life, mating, laying eggs on milkweed, and replenishing lipid stores with nectar-producing flowers (USFWS 2020b). Typically, Monarch butterflies live 2-5 weeks as adults before dying (USFWS 2020b). This reproductive cycle occurs multiple times throughout the warm summer months; however, every year the final generation of monarchs become overwintering monarchs, with a different life history (USFWS 2020b).

Overwintering monarchs enter reproductive diapause, and instead make a migratory journey of 500 km to 1600 km (310 to 995 miles) to the overwintering grounds on the coast of California or Baja California. Here, the monarchs wait out the winter, still relying on nectar-producing flowers to feed (USFWS 2020b). The following spring, monarch adults who survived the winter breed at the overwintering site before migrating back to the area where they hatched; adult female monarchs lay their eggs on milkweed as they encounter it along the way (USFWS 2020b). In total, overwintering monarchs live 6-9 months as adults (USFWS 2020b).

As discussed above, the monarch butterfly requires its host plant, milkweed (*Asclepias* sp.) to breed in the area. Two heartleaf milkweed (*Asclepias cordifolia*) plants were observed during the 2023 botanical surveys within the Study Area, making the Study Area potentially suitable for monarch butterfly use. Quarrying activities which remove these milkweeds could significantly impact the species of monarch butterflies are using the milkweeds at the time of vegetation removal, and the removal of these plants would constitute in a small reduction of monarch butterfly habitat.

To mitigate these impacts, observed milkweeds will be flagged by a qualified biologist and checked for monarch butterfly adults, caterpillars, or chrysalises prior to removal. If monarch butterflies of any life stage are discovered, milkweed removal will not occur until the butterflies have completed their use of the plants. Given that milkweed is present abundantly in the wider region (having recovered well post-fire), the removal of the two observed milkweed plants onsite will not result in significant impacts to the monarch butterfly.

North American Wolverine:

Wolverines are highly mobile mammals that can travel long distances in a day and typically inhabit very large home ranges (upwards of 100 square miles) (USFWS 2018b). Wolverine are extremely territorial, with individuals of the same sex rarely inhabiting the same areas (USFWS 2018b). The large wolverine territories plus the strong territorial behavior in wolverines is a major factor for the low population densities of wolverines, even in areas where the species is thriving (CDFW 1988b).

Wolverines typically inhabit coniferous forest, alpine dwarf-shrub, or montane riparian habitats (CDFW 1988b). However, wolverines strongly prefer to settle in territories with low human disturbance and are commonly found in relatively human-inaccessible areas (USFWS 2018b). Wolverine will both scavenge for food and will hunt, with prey often changing based on the season and available prey/carrion items. The species uses caves as well as hollows in logs, rock outcrops, and burrows for cover.

Wolverines exhibit an unusual reproductive behavior: males are polygamous, but females have an extended pregnancy, as implantation can be delayed for up to six months, followed by a short (40 days or less) gestation period (USFWS 2018b). This reproductive life history leads wolverines to reproduce from May to July, but wolverine birth typically occurs from January to April (CDFW 1988b).

CNDDDB records indicate a wolverine was observed 2.1 miles southwest of the study area in 1971. However, the study area has gone through recent severe fire, nearby rock quarrying, and quarry material processing. Therefore, the amount of human disturbance and low-quality habitat in the area precludes wolverine occupancy of the area. Therefore, there is minimal potential for wolverines to occur in the Study Area. No impact would occur to North American wolverines.

Northern Goshawk:

Northern goshawks are birds of prey which typically do not exhibit migratory behavior, relying mainly on a specific territory or home range as habitat and prey conditions allow (CDFW 2005a). Northern goshawks typically occur in dense, mature, closed-canopy coniferous forests, though they will also occur in deciduous forests with similar habitat characteristics (CDFW 2005a). Prey requirements

include various bird and mammal species such as Douglas squirrels, Belding's ground squirrels, Northern flickers, and Steller's jays (Shuford and Gardali 2008).

Northern goshawks typically begin to breed in April to June and will aggressively defend their nest (CDFW 2005a). Water is a crucial component of northern goshawks' territory, with a water source typically nearby; in particular, northern goshawks will typically construct nests in a dense part of their forested habitat, yet in an area near an opening in the forest and near water (CDFW 2005a). Habitat loss and degradation are the primary threats to the species (Shuford and Gardali 2008).

CNDDDB records indicate that a northern goshawk was observed 13 miles southwest of the Study Area. However, northern goshawks rely on mature coniferous forests for their habitat and are sensitive to human disturbance. Therefore, severe fire impacts that occurred in the Study Area preclude northern goshawk habitation of the site. Nevertheless, as part of environmental mitigations, the Project area will be subject to a nesting bird survey prior to vegetation removal, eliminating any possible harm to northern goshawks. Therefore, impacts to northern goshawks would be less than significant.

Northern Spotted Owl:

Northern spotted owls are birds of prey which require old-growth coniferous forests for nesting and roosting (UFWFS 2011). Specific habitat requirements include stand complexity, including a multilayered, multispecies canopy with high canopy closure, including decadent trees, snags, broken-topped trees, and cavities for nesting (USFWS 2011). Northern spotted owls feed on rodents; woodrats are a primary food source (USFWS 2011).

Northern spotted owls typically begin their breeding season in late February with the prelaying stage, with the female spending most of her time in the selected nest cavity (USFWS 2012). Copulation and nesting lasts for approximately six days, followed by an approximate 30-day incubation period, where the female will only leave the eggs for 10 to 20 minutes (USFWS 2012). Upon hatching, spotted owl nestlings spend approximately 35 days as nestlings, temporarily exiting the nest to perch on nearby limbs (USFWS 2012). Fledglings spend 80 – 120 days (until mid to late September) out of the nest but still dependent on their parents for food (USFWS 2012).

Northern spotted owls are primarily threatened by loss of old-growth habitat due to logging and catastrophic wildfire (USFWS 2011); however, the introduction of the barred owl (*Strix varia*) to historic Northern spotted owl habitat has created an additional threat, as barred owls will outcompete, harm, and even hybridize with spotted owls (USFWS 2011).

In the Northern California Klamath region, northern spotted owls typically occupy home ranges with a 1.3-mile radius (USFWS 2012). Disturbances, noise impacts, and/or vegetation removal within this home range of a known spotted owl activity center would be considered significant impacts to the species. Additionally, Northern Spotted Owl critical habitat (US Forest Service ownership) abuts the quarry area to the north.

According to CNDDDB records, the nearest spotted owl observation from the project area is approximately 1.7 miles away, which places the project area outside of any northern spotted owl home range. Additionally, the high-severity burn that moved through the Study Area and the nearby critical habitat make the area unsuitable for spotted owl nesting, roosting, or foraging. Northern spotted owls have minimal potential to occur in the project area, and thus would not be impacted by the project. As quarrying will not occur on public land, critical habitat will also be unaffected by the project.

Pacific Tailed Frog:

The Pacific tailed frog (also known as the coastal tailed frog) is a frog found from the northern California coast to as far inland as eastern Siskiyou County (CDFW 2013). The Pacific tailed frog is found in permanent streams, which is crucial to the species' reproductive methods. Mating occurs underwater, and eggs are attached to the underside of submerged rocks (CDFW 2000c). Tadpoles require 2 to 3 years to metamorphose into adults, so only permanent streams are capable of supporting the species. Therefore, although CNDDDB records place Pacific tailed frogs as close as eight miles away from the Study Area, the species has no potential to occur in the Study Area, which lacks streams. Therefore, no impacts would occur to Pacific tailed frogs.

Salamanders:

Two species of terrestrial salamanders, Del Norte salamander (*Plethodon elongatus*, CA Watchlist) and Siskiyou Mountains salamander (*Plethodon stormi*, CA Threatened), have been recorded within one mile of the Study Area, according to CNDDDB records. Both salamander species are part of the closely-related *Plethodon elongatus* species complex, a trio of recently-diverged taxa which also includes the Scott Bar salamander (*Plethodon asupak*). These terrestrial salamanders typically occur in "old-growth with rocky soils containing fractured rock outcrops or stable talus" (USFWS 2018c). Wildfire is noted as a primary threat to the species complex, as the removal of old-growth forest conditions can cause the dessication of soil which previously provided suitable moisture levels for these salamanders (USFWS 2018c). Therefore, similar to the northern spotted owl, the Study Area likely provided suitable habitat for these salamanders prior to the recent severe, stand-replacing fire. Given the current, post-fire conditions, these salamanders have no

potential to occur within the study area, and no impacts to the Del Norte salamander or Siskiyou Mountains salamander would occur.

A third salamander species, the southern torrent salamander (*Rhyacotriton variegatus*, CA Species of Special Concern) relies on cold, well-shaded permanent streams and spring seepages (CDFW 2005b). As there are no permanent springs or streams mapped or observed in the Study Area, southern torrent salamanders have no potential to occur in the Study Area, and no impacts to southern torrent salamanders would occur.

Yellow-billed Cuckoo:

Yellow-billed cuckoos are insectivorous birds that generally breed in large blocks of riparian habitat; in particular, cottonwood and willow trees are an important habitat component for yellow-billed cuckoos (USFWS 2014). In the Western United States, yellow-billed cuckoos tend to be restricted to the larger rivers which cut through more arid environments, such as the Sacramento River (Cornell 2022b).

Large caterpillars are a main food source for yellow-billed cuckoos (Cornell 2022b). In the arid west, cuckoos will forage in cottonwoods, but will build stick nests on horizontal branches in willow trees near their cottonwood foraging sites (Cornell 2022b).

The USFWS IPaC report for the Project identified the yellow-billed cuckoo (*Coccyzus americanus*, U.S. Threatened) as potentially occurring in the Project area. However, no riparian elements nor cottonwoods occur in the Study Area, though Indian Creek is south of the Study Area. Nevertheless, the nesting bird survey conducted prior to project construction would eliminate the possibility of impacts to yellow-billed cuckoos, if present. Therefore, impacts to yellow-billed cuckoos would not be significant.

Non-status Wildlife:

CNDDDB records identified nine non-status animals as potentially occurring in the area: hooded lancetooth (*Ancotrema voyanum*), great blue heron (*Ardea herodias*), obscure bumblebee (*Bombus caliginosus*), western ridged mussel (*Gonidea angulata*), highcap lanx (*Lanx alta*), silver-haired bat (*Lasionycteris noctivagans*), hoary bat (*Lasiurus cinereus*), western pearlshell (*Margaritifera falcata*), and Klamath tailedropper (*Prophysaon* sp. 1). Though no specific actions are proposed for non-status species, great blue herons would be identified and protected if encountered during a nesting bird survey. Aquatic species would likewise be protected from best management practices for erosion and sedimentation. Additionally, none of these species were observed during field surveys.

WETLANDS AND STREAMS

The NWI wetland mapper identified an 0.57-acre Riverine habitat classified as R4SBC (Riverine, Intermittent, Streambed, Seasonally Flooded) as occurring within the Study Area. The mapped feature purportedly runs across the western side of the materials stockpile area from the northeast to the southwest. However, the feature was not observed during the biological surveys, and appears to be nonexistent. The feature was mapped from aerial imagery captured in 1975 at a 1:80,000 scale; therefore, it appears the feature is an imprecision of the wetland mapping effort, and not a real feature.

As mentioned previously, Indian Creek runs to the west and south of the materials stockpile area. The NWI wetland mapper identifies Indian Creek as R3USC (Riverine, Upper Perennial, Unconsolidated Shore, Seasonally Flooded). Though Indian Creek is not within the quarrying area or materials stockpile area, BMPs for erosion and sedimentation for quarrying and stockpiling operations should be implemented to prevent impacts to Indian Creek. The existing BMPs for the materials stockpile area should also be maintained.

SOILS & LOCAL GEOMORPHOLOGY

According to the Natural Resources Conservation Service Web Soil Survey (NRCS 2024), three soil types were identified in the Study Area:

- Clallam, deep-Deadwood families association, 50 to 90 percent slopes (112)
- Clallam family, very deep-River wash association, 0 to 15 percent slopes (115)
- Deadwood-Clallam, deep families association, 50 to 90 percent slopes (118)

The soil units are composed of residuum weathered from metamorphic rock, as well as sandy and gravelly alluvium.

SUMMARY & CONCLUSIONS

Wildlife

Protection measures for surveyed species are summarized below:

Species	Preemptive Action	Protection Trigger	Follow-up Action
Nesting Bird or Raptor	Nesting Bird Survey prior to vegetation removal or noise disturbance in	Nest Site	CDFW Consultation

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	quarry expansion area		
Monarch butterfly	Examine Milkweed (<i>Asclepias sp.</i>) for chrysalis prior to removal	Discovery of Monarch butterfly, caterpillar, or chrysalis	USFWS Consultation; no milkweed removal until monarch use of milkweed is complete.
Sensitive Fish & Essential Fish Habitat	Best management practices for erosion and sedimentation.	N/A	N/A

With the implementation of the above protection measures, sensitive species potentially occurring on the Project area would not be significantly impacted.

Plants

No special-status species were observed during the botanical surveys. Therefore, no protection measures are required.

Wetlands

Surveys confirmed that no wetlands occur within the Project boundaries. However, Indian Creek flows near to the materials stockpile area, and BMPs for erosion/sedimentation should be implemented to prevent impacts to Indian Creek.

REGULATORY FRAMEWORK

FEDERAL ENDANGERED SPECIES ACT

The U.S. Fish and Wildlife Service (USFWS) has jurisdiction over federally listed threatened and endangered species under the federal Endangered Species Act (FESA). The ESA protects plants and animals that are listed as endangered or threatened by USFWS and the National Marine Fisheries Service (NMFS). Section 9 of ESA prohibits, without authorization, the taking of listed wildlife, where take is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct” [50 Code of Federal Regulations (CFR) 17.3]. For plants, this statute governs removing, possessing, maliciously damaging, or destroying any listed plant under federal jurisdiction and removing, cutting, digging up, damaging, or destroying any listed plant in any other area in knowing violation of state law [16 U.S. Code (USC) 1538].

Under Section 7 of ESA, federal agencies are required to consult with USFWS and/or NMFS if their actions, including permit approvals and funding, could



adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion (BO), USFWS and NMFS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of ESA provides for the issuance of incidental take permits where no other federal actions are necessary provided a habitat conservation plan is developed.

CALIFORNIA ENDANGERED SPECIES ACT

The California Endangered Species Act (CESA) protects any plant or animal listed or proposed for listing as rare (plants only), threatened, or endangered. Species identified as candidates for listing may also receive protection. Section 2080 of the California ESA prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit. Take is defined in Section 86 of the California Fish and Game Code as “hunt, pursue, catch,

capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” The California ESA allows for incidental to otherwise lawful projects under permits issued by CDFW.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 15380(b) of the California Environmental Quality Act (CEQA) Guidelines provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria include definitions like definitions used in ESA, the California ESA, and NPPA. Section 15380 was included in the CEQA Guidelines primarily to address situations in which a project under review may have a significant effect on

a species that has not been listed under ESA, the California ESA, or NPPA, but that may meet the definition of endangered, rare, or threatened. Animal species identified as species of special concern (SSC) by CDFW, and plants identified by the CNPS as rare, threatened, or endangered may meet the CEQA definition of rare or endangered.

CLEAN WATER ACT

Under Section 404 of the federal Clean Water Act, the U.S. Army Corps of Engineers (Corps) is responsible for regulating the discharge of fill material into

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waters of the United States. Waters of the U.S. and their lateral limits are defined in 33 CFR Part 328.3 (a) and include streams that are tributary to navigable waters and their adjacent wetlands. Wetlands that are not adjacent to waters of the U.S. are termed "isolated wetlands" and, depending on the circumstances, may also be subject to Corps jurisdiction.

Projects involving activities that have no more than minimal individual and cumulative adverse environmental effects may meet the conditions of one of the Nationwide Permits already issued by USACE (Federal Register [FR] 82:1860, January 6, 2017). If impacts on wetlands could be substantial, an individual permit is required. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the Regional Water Quality Control Board (RWQCB).

CALIFORNIA WATER QUALITY REGULATORY PROGRAMS

Pursuant to Section 401 of the federal Clean Water Act and the state's Porter-Cologne Act, projects that are regulated by the Corps must obtain water quality certification from the Regional Water Quality Control Board (RWQCB). These regulations require compliance with the National Pollutant Discharge Elimination System (NPDES), including compliance with the California Storm Water NPDES General Construction Permit for discharges of stormwater runoff associated with construction activities. General Construction Permits for projects that disturb one or more acres of land require development and implementation of a Stormwater Pollution Prevention Plan.

Under the Porter-Cologne Water Quality Act, the RWQCB regulates actions that would involve "discharging waste, or proposing to discharge waste, with any region that could affect the water of the state" [Water Code 13260(a)]. Waters of the State are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" [Water Code 13050 (e)]. The RWQCB regulates all such activities, as well as dredging, filling, or discharging materials into Waters of the State, that are not regulated by USACE due to a lack of connectivity with a navigable water body. The RWQCB may require issuance of a Waste Discharge Requirements for these activities.



REFERENCES

- California Department of Fish and Wildlife (CDFW). 1988a. California Wildlife Habitat Relationships System. Montane Hardwood-Conifer. Available: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=67336&inline>
- _____. 1988b. Wolverine (*Gulo gulo*). Available: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2593>
- _____. 1988c. California Wildlife Habitat Relationships System. MARTEN, *Martes caurina*. Available: Online:<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2585>
- _____. 1999. California Wildlife Habitat Relationships System. BALD EAGLE, *Haliaeetus leucocephalus*. Available: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=1661>
- _____. 2000a. California Wildlife Habitat Relationships System. PEREGRINE FALCON, *Falco peregrinus*. Available: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=1687>
- _____. 2000b. California Wildlife Habitat Relationships System. FOOTHILL YELLOW-LEGGED FROG, *Rana boylei*. Available: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=1500>
- _____. 2000c. California Wildlife Habitat Relationships System. COASTAL TAILED FROG, *Ascaphus truei*. Available: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=1466&inline=1>
- _____. 2005a. NORTHERN GOSHAWK (*Accipiter gentilis*). Available: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=10394>
- _____. 2005b. California Wildlife Habitat Relationships System. SOUTHERN TORRENT SALAMANDER, *Rhyacotriton variegatus*.
- _____. 2011. GRAY WOLVES IN CALIFORNIA: AN EVALUATION OF HISTORICAL INFORMATION, CURRENT CONDITIONS, POTENTIAL NATURAL RECOLONIZATION AND MANAGEMENT IMPLICATIONS. Available: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=76636&inline>
- _____. 2013. California Wildlife Habitat Relationships System. COASTAL TAILED FROG, *Ascaphus truei*. Range Map. Available: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=1467&inline=1>
- _____. 2022. OR-7 –A Lone Wolf’s Story. Available: <https://wildlife.ca.gov/Conservation/Mammals/Gray-Wolf/OR7-Story>.

Waddell Rock Pit
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_____. 2024. Special Animals List, January 2024. Available Online:
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406>.

California Fish & Game Commission (CFGF). 2020. Notice of findings for Foothill Yellow-legged Frog (*Rana boylei*), March 10, 2020. Available:
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=177905&inline>

California Herps. 2022. Foothill yellow-legged Frog – *Rana boylei*. Available:
<http://www.californiaherps.com/frogs/pages/r.boylei.html>

Cornell University. 2022a. All About Birds: Peregrine Falcon. Available:
https://www.allaboutbirds.org/guide/Peregrine_Falcon/overview

Cornell University. 2022b. All About Birds: Yellow-billed Cuckoo. Available:
https://www.allaboutbirds.org/guide/Yellow-billed_Cuckoo/overview

National Oceanic and Atmospheric Administration (NOAA). 2024a. Protected Resources App. Available:
<https://www.webapps.nwfsc.noaa.gov/portal/apps/webappviewer/index.html?id=7514c715b8594944a6e468dd25aaacc9>.

_____. 2024b. Essential Fish Habitat Mapper. Available Online:
https://www.habitat.noaa.gov/apps/efhmapper/?page=page_4.

_____. 2024. National Wetlands Inventory. Map Application. Available:
<https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper>

Natural Resources Conservation Service (NRCS), U.S. Geological Survey (USGS), and Environmental Protection Agency (EPA). 2016. Watershed Boundary Dataset for California. Available: <https://datagateway.nrcs.usda.gov>.

_____. 2024. The Web Soil Survey. Available online:
<https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>.

Shuford, W.D., and Gardali, T. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento. Available:
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=1669>

United States Fish and Wildlife Service (USFWS). 1997. Recovery Plan for the Marbled Murrelet (Washington, Oregon, and California Populations). Available:
https://ecos.fws.gov/docs/recovery_plan/970924.pdf

Waddell Rock Pit
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- _____. 2005. Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon. Section II. Biology of Covered Species. Available:
https://ecos.fws.gov/docs/recovery_plans/2006/060307_docs/doc533.pdf
- _____. 2007. Vernal Pool Fairy Shrimp (*Branchinecta lynchi*) 5 year review: Summary and Evaluation. Available:
https://www.fws.gov/cno/es/images/graphics/vpfs_5yr%20review%20cno%20final%2027sept07.pdf
- _____. 2011. Revised Recovery Plan for the Northern Spotted Owl (*Strix occidentalis caurina*). Available:
https://www.fws.gov/sites/default/files/documents/NSO_RevisedRP_2011.pdf
- _____. 2012. PROTOCOL FOR SURVEYING PROPOSED MANAGEMENT ACTIVITIES THAT MAY IMPACT NORTHERN SPOTTED OWLS. Available:
<https://www.fws.gov/sites/default/files/documents/2012RevisedNSOprotocol.2.15.12.pdf>
- _____. 2014. Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*)—Overview. Available: <https://www.fs.fed.us/rm/grassland-shrubland-desert/docs/projects/vulnerable-obligate-species/species-reports/western-yellowbilled-cuckoo.pdf>
- _____. 2018a. Franklin’s bumble bee (*Bombus franklini*) Species Status Assessment. Available: <https://ecos.fws.gov/ServCat/DownloadFile/164615>
- _____. 2018b. Species status assessment report for the North American wolverine (*Gulo gulo luscus*). Version 1.2. March 2018. U.S. Fish and Wildlife Service, Mountain-Prairie Region, Lakewood, CO. Available:
<https://ecos.fws.gov/ServCat/DownloadFile/187253>
- _____. 2018c. Siskiyou Mountains Salamander (*Plethodon stormi*). Draft Species Account and Evaluation form for Pacific Southwest Region Management Plan.
- _____. 2020a. Endangered and Threatened Wildlife and Plants; Threatened Species Status for Coastal Distinct Population Segment of the Pacific Marten with a Section 4(d) Rule. Available Online:
<https://www.federalregister.gov/documents/2020/10/08/2020-19136/endangered-and-threatened-wildlife-and-plants-threatened-species-status-for-coastal-distinct>
- _____. 2020b. Monarch (*Danaus plexippus*) Species Status Assessment Report, version 2.1. September 2020. Available:
<https://www.fws.gov/sites/default/files/documents/Monarch-Butterfly-SSA-Report-September-2020.pdf>

Waddell Rock Pit
Expansion Project
Biological Resources Assessment

_____. 2021. Recovery Outline for Franklin's Bumble Bee (*Bombus franklini*).

Available Online:

https://ecos.fws.gov/docs/recovery_plan/Recovery_Outline_for_Franklins_Bumblebee_20211217.pdf

_____. 2023. Information for Planning and Conservation. Internet website:

<https://ipac.ecosphere.fws.gov/>.

United States Forest Service. 2022. Franklin's Bumble Bee (*Bombus franklini*).

Available: <https://www.fs.fed.us/wildflowers/pollinators/pollinator-of-the-month/franklins-bumble-bee.shtml>

Xerces Society. 2008. Status Review of Three Formerly Common Species of Bumble Bee in the Subgenus *Bombus*. Available Online:

https://xerces.org/sites/default/files/2019-10/xerces_2008_bombus_status_review_0.pdf

Washington Department of Fish and Wildlife. 2022. Suckley's cuckoo bumble bee

(*Bombus suckleyi*). Available Online: <https://wdfw.wa.gov/species-habitats/species/bombus-suckleyi#resources>. Accessed November 2022.

Appendix A

CNDDDB Results



SNAME	CNAME	TAXONGROUP	FEDLIST	CALLIST	RPLANTRANK	CDFWSTATUS
Accipiter gentilis	northern goshawk	Birds	None	None		SSC
Ancotrema voyanum	hooded lancetooth	Mollusks	None	None		
Ancotrema voyanum	hooded lancetooth	Mollusks	None	None		
Ancotrema voyanum	hooded lancetooth	Mollusks	None	None		
Ancotrema voyanum	hooded lancetooth	Mollusks	None	None		
Ancotrema voyanum	hooded lancetooth	Mollusks	None	None		
Ancotrema voyanum	hooded lancetooth	Mollusks	None	None		
Ancotrema voyanum	hooded lancetooth	Mollusks	None	None		
Ancotrema voyanum	hooded lancetooth	Mollusks	None	None		
Anemone multifida var. multifida	cut-leaf anemone	Dicots	None	None	2B.2	
Arabis aculeolata	Waldo rockcress	Dicots	None	None	2B.2	
Arabis mcdonaldiana	McDonald's rockcress	Dicots	Endangered	Endangered	1B.1	
Arabis mcdonaldiana	McDonald's rockcress	Dicots	Endangered	Endangered	1B.1	
Ardea herodias	great blue heron	Birds	None	None		
Ardea herodias	great blue heron	Birds	None	None		
Ardea herodias	great blue heron	Birds	None	None		
Ardea herodias	great blue heron	Birds	None	None		
Ardea herodias	great blue heron	Birds	None	None		
Ardea herodias	great blue heron	Birds	None	None		
Asarum marmoratum	marbled wild-ginger	Dicots	None	None	2B.3	
Asarum marmoratum	marbled wild-ginger	Dicots	None	None	2B.3	
Asarum marmoratum	marbled wild-ginger	Dicots	None	None	2B.3	
Asarum marmoratum	marbled wild-ginger	Dicots	None	None	2B.3	
Asarum marmoratum	marbled wild-ginger	Dicots	None	None	2B.3	
Asarum marmoratum	marbled wild-ginger	Dicots	None	None	2B.3	
Asarum marmoratum	marbled wild-ginger	Dicots	None	None	2B.3	
Ascaphus truei	Pacific tailed frog	Amphibians	None	None		SSC
Ascaphus truei	Pacific tailed frog	Amphibians	None	None		SSC
Ascaphus truei	Pacific tailed frog	Amphibians	None	None		SSC
Ascaphus truei	Pacific tailed frog	Amphibians	None	None		SSC
Ascaphus truei	Pacific tailed frog	Amphibians	None	None		SSC
Boechera koehleri	Koehler's stipitate rockcress	Dicots	None	None	1B.3	
Boechera koehleri	Koehler's stipitate rockcress	Dicots	None	None	1B.3	
Boechera koehleri	Koehler's stipitate rockcress	Dicots	None	None	1B.3	
Bombus caliginosus	obscure bumble bee	Insects	None	None		
Bombus occidentalis	western bumble bee	Insects	None	Candidate Endangered		
Bombus suckleyi	Suckley's cuckoo bumble bee	Insects	None	Candidate Endangered		
Buxbaumia viridis	green shield-moss	Bryophytes	None	None	2B.2	
Carex serpenticola	serpentine sedge	Monocots	None	None	2B.3	
Castilleja elata	Siskiyou paintbrush	Dicots	None	None	2B.2	
Castilleja elata	Siskiyou paintbrush	Dicots	None	None	2B.2	
Castilleja schizotricha	split-hair paintbrush	Dicots	None	None	1B.3	
Castilleja schizotricha	split-hair paintbrush	Dicots	None	None	1B.3	
Castilleja schizotricha	split-hair paintbrush	Dicots	None	None	1B.3	
Castilleja schizotricha	split-hair paintbrush	Dicots	None	None	1B.3	
Castilleja schizotricha	split-hair paintbrush	Dicots	None	None	1B.3	

Cornus unalaschkensis	bunchberry	Dicots	None	None	2B.2		
Darlingtonia Seep	Darlingtonia Seep	Marsh	None	None			
Darlingtonia Seep	Darlingtonia Seep	Marsh	None	None			
Draba carnosula	Mt. Eddy draba	Dicots	None	None	1B.3		
Entosphenus similis	Klamath River lamprey	Fish	None	None			SSC
Entosphenus similis	Klamath River lamprey	Fish	None	None			SSC
Entosphenus similis	Klamath River lamprey	Fish	None	None			SSC
Entosphenus similis	Klamath River lamprey	Fish	None	None			SSC
Epilobium luteum	yellow willowherb	Dicots	None	None	2B.3		
Epilobium oregonum	Oregon fireweed	Dicots	None	None	1B.2		
Epilobium siskiyouense	Siskiyou fireweed	Dicots	None	None	1B.3		
Epilobium siskiyouense	Siskiyou fireweed	Dicots	None	None	1B.3		
Epilobium siskiyouense	Siskiyou fireweed	Dicots	None	None	1B.3		
Erigeron bloomeri var. nudatus	Waldo daisy	Dicots	None	None	2B.3		
Erigeron bloomeri var. nudatus	Waldo daisy	Dicots	None	None	2B.3		
Erigeron bloomeri var. nudatus	Waldo daisy	Dicots	None	None	2B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Erythronium hendersonii	Henderson's fawn lily	Monocots	None	None	2B.3		
Erythronium howellii	Howell's fawn lily	Monocots	None	None	1B.3		
Falco peregrinus anatum	American peregrine falcon	Birds	Delisted	Delisted			FP
Gonidea angulata	western ridged mussel	Mollusks	None	None			
Gonidea angulata	western ridged mussel	Mollusks	None	None			
Gonidea angulata	western ridged mussel	Mollusks	None	None			
Gonidea angulata	western ridged mussel	Mollusks	None	None			
Gonidea angulata	western ridged mussel	Mollusks	None	None			
Gonidea angulata	western ridged mussel	Mollusks	None	None			

Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Rana boylei pop. 1	foothill yellow-legged frog - north coast DPS	Amphibians	None	None			SSC
Rana boylei pop. 1	foothill yellow-legged frog - north coast DPS	Amphibians	None	None			SSC
Rana boylei pop. 1	foothill yellow-legged frog - north coast DPS	Amphibians	None	None			SSC
Rhyacotriton variegatus	southern torrent salamander	Amphibians	None	None			SSC
Rhyacotriton variegatus	southern torrent salamander	Amphibians	None	None			SSC
Rhyacotriton variegatus	southern torrent salamander	Amphibians	None	None			SSC
Rosa gymnocarpa var. serpentina	Gasquet rose	Dicots	None	None	1B.3		
Rubus nivalis	snow dwarf bramble	Dicots	None	None	2B.3		
Rubus nivalis	snow dwarf bramble	Dicots	None	None	2B.3		
Sedum divergens	Cascade stonecrop	Dicots	None	None	2B.3		
Sedum divergens	Cascade stonecrop	Dicots	None	None	2B.3		
Silene hookeri	Hooker's catchfly	Dicots	None	None	2B.2		
Thermopsis robusta	robust false lupine	Dicots	None	None	1B.2		
Thermopsis robusta	robust false lupine	Dicots	None	None	1B.2		
Thermopsis robusta	robust false lupine	Dicots	None	None	1B.2		
Thermopsis robusta	robust false lupine	Dicots	None	None	1B.2		
Thermopsis robusta	robust false lupine	Dicots	None	None	1B.2		

Appendix B
CNPS- RPI



ScientificName	CommonName	CRPR	CESA	FESA	BloomingPeriod	ElevationLow_ft	ElevationHigh_ft
Galium oreganum	Oregon bedstraw	3	None	None	May-Sep	4920	4920
Sidalcea celata	Redding checkerbloom	3	None	None	Apr-Aug	445	5005
Lewisia cotyledon var. howellii	Howell's lewisia	3.2	None	None	Apr-Jul	490	6595
Iris bracteata	Siskiyou iris	3.3	None	None	May-Jun	590	3510
Sidalcea elegans	Del Norte checkerbloom	3.3	None	None	May-Jul	705	4480
Carex geeyeri	Geyer's sedge	4.2	None	None	May-Aug	3790	7200
Cypripedium californicum	California lady's-slipper	4.2	None	None	Apr-Aug(Sep)	100	9025
Cypripedium fasciculatum	clustered lady's-slipper	4.2	None	None	Mar-Aug	330	7990
Cypripedium montanum	mountain lady's-slipper	4.2	None	None	Mar-Aug	605	7300
Darlingtonia californica	California pitcherplant	4.2	None	None	Apr-Aug	0	8480
Dicentra formosa ssp. oregana	Oregon bleeding heart	4.2	None	None	Apr-May	1395	4870
Fritillaria glauca	Siskiyou fritillaria	4.2	None	None	(Apr-May)Jun-Jul	5695	8005
Hesperocyparis bakeri	Baker cypress	4.2	None	None		2690	6545
Lilium bolanderi	Bolander's lily	4.2	None	None	Jun-Jul	100	5250
Lilium rubescens	redwood lily	4.2	None	None	(Mar)Apr-Aug(Sep)	100	6265
Mitellastris caulescens	leafy-stemmed mitrewort	4.2	None	None	(Mar)Apr-Oct	15	5580
Pleuropogon refractus	nodding semaphore grass	4.2	None	None	(Feb-Mar)Apr-Aug	0	5250
Allium siskiyouense	Siskiyou onion	4.3	None	None	(Apr)May-Jul	2805	8205
Antennaria suffrutescens	evergreen everlasting	4.3	None	None	Jan-Jul	1640	5250
Arabis modesta	modest rockcress	4.3	None	None	Mar-Jul	395	2625
Arnica cernua	serpentine arnica	4.3	None	None	Apr-Jul	1640	6300
Arnica spathulata	Klamath arnica	4.3	None	None	May-Aug	2100	5905
Arnica viscosa	Mt. Shasta arnica	4.3	None	None	Aug-Sep	5595	9005
Callitropsis nootkatensis	Alaska cedar	4.3	None	None		2135	8205
Cardamine bellidifolia var. pachyphylla	fleshy toothwort	4.3	None	None	Jun-Aug	6235	9300
Carex scabriuscula	Siskiyou sedge	4.3	None	None	May-Jul	2330	7695
Doellingeria glabrata	Siskiyou aster	4.3	None	None	Jun-Sep	395	8875
Draba howellii	Howell's draba	4.3	None	None	Jun-Jul	4495	9845
Epilobium rigidum	Siskiyou Mountains willowherb	4.3	None	None	Jul-Aug	490	3935
Erigeron cervinus	Siskiyou daisy	4.3	None	None	Jun-Aug	80	6235
Eriogonum congdonii	Congdon's buckwheat	4.3	None	None	(May)Jun-Aug(Sep)	2625	7695
Eriogonum ternatum	ternate buckwheat	4.3	None	None	Jun-Aug	1000	7300
Iris thompsonii	Thompson's iris	4.3	None	None	(Mar-Apr)May-Jun(Jul-Aug)	295	1970
Lathyrus delnorticus	Del Norte pea	4.3	None	None	Jun-Jul	100	4755
Lilium pardalinum ssp. wigginsii	Wiggins' lily	4.3	None	None	Jun-Aug	1590	6560
Pedicularis howellii	Howell's lousewort	4.3	None	None	Jun-Aug	4920	6235
Ptilidium californicum	Pacific fuzzwort	4.3	None	None	May-Aug	3740	5905
Ribes marshallii	Marshall's gooseberry	4.3	None	None	Jun-Jul	3935	6890
Sedum laxum ssp. heckneri	Heckner's stonecrop	4.3	None	None	Jun-Jul	330	6890
Trifolium howellii	Howell's clover	4.3	None	None	Jun-Aug	2625	5905
Veratrum insolitum	Siskiyou false-hellebore	4.3	None	None	Jun-Aug	150	5365
Arabis mcdonaldiana	McDonald's rockcress	1B.1	CE	FE	May-Jul	445	5905
Epilobium oreganum	Oregon fireweed	1B.2	None	None	Jun-Sep	1640	7350
Iliamna latibracteata	California globe mallow	1B.2	None	None	Jun-Aug	195	6560
Lewisia cotyledon var. heckneri	Heckner's lewisia	1B.2	None	None	(Apr)May-Jul	740	6890

Piperia candida	white-flowered rein orchid	1B.2	None	None	(Mar-Apr)May-Sep	100	4300
Thermopsis robusta	robust false lupine	1B.2	None	None	May-Jul	490	4920
Boechera koehleri	Koehler's stipitate rockcress	1B.3	None	None	(Mar)Apr-Jul	510	5445
Castilleja schizotricha	split-hair paintbrush	1B.3	None	None	Jul-Aug	4920	7545
Draba carnosula	Mt. Eddy draba	1B.3	None	None	Jul-Aug	6350	9845
Epilobium siskiyouense	Siskiyou fireweed	1B.3	None	None	Jul-Sep	5580	8205
Eriogonum hirtellum	Klamath Mountain buckwheat	1B.3	None	None	Jul-Sep	2000	6235
Erythronium howellii	Howell's fawn lily	1B.3	None	None	Apr-May	655	3755
Phacelia leonis	Siskiyou phacelia	1B.3	None	None	Jun-Aug	3935	6560
Rosa gymnocarpa var. serpentina	Gasquet rose	1B.3	None	None	Apr-Jun(Aug)	1310	5660
Anemone multifida var. multifida	cut-leaf anemone	2B.2	None	None	Apr-Jul	5580	9025
Arabis aculeolata	Waldo rockcress	2B.2	None	None	Apr-Jun	1345	5905
Buxbaumia viridis	green shield-moss	2B.2	None	None		3200	7220
Castilleja elata	Siskiyou paintbrush	2B.2	None	None	May-Aug	0	5740
Cornus unalaschkensis	bunchberry	2B.2	None	None	May-Jul	195	6300
Mertensia bella	Oregon bluebells	2B.2	None	None	May-Jul	4920	6560
Monotropa uniflora	ghost-pipe	2B.2	None	None	Jun-Aug(Sep)	35	1805
Pinguicula macroceras	horned butterwort	2B.2	None	None	Apr-Jun	130	6300
Silene hookeri	Hooker's catchfly	2B.2	None	None	(Mar)May-Jul	490	4135
Asarum marmoratum	marbled wild-ginger	2B.3	None	None	Apr-Aug	655	5905
Carex serpenticola	serpentine sedge	2B.3	None	None	Mar-May	195	3935
Epilobium luteum	yellow willowherb	2B.3	None	None	Jul-Sep	4920	7200
Erigeron bloomeri var. nudatus	Waldo daisy	2B.3	None	None	Jun-Jul	1970	7545
Erythronium hendersonii	Henderson's fawn lily	2B.3	None	None	Apr-Jul	985	5250
Juncus regelii	Regel's rush	2B.3	None	None	Aug	2495	6235
Lomatium martindalei	Coast Range lomatium	2B.3	None	None	May-Jun(Aug)	785	9845
Rubus nivalis	snow dwarf bramble	2B.3	None	None	Jun-Aug	3560	4430
Schoenoplectus subterminalis	water bulrush	2B.3	None	None	Jun-Aug(Sep)	2460	7380
Sedum divergens	Cascade stonecrop	2B.3	None	None	Jul-Sep	5250	7645

Appendix C

U.S. Department of Interior List of threatened and endangered species





United States Department of the Interior



FISH AND WILDLIFE SERVICE
Yreka Fish And Wildlife Office
1829 South Oregon Street
Yreka, CA 96097-3446
Phone: (530) 842-5763 Fax: (530) 842-4517

In Reply Refer To:
Project Code: 2023-0098598
Project Name: Waddell Rock Pit Expansion

February 28, 2024

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: <https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see [Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service \(fws.gov\)](#).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Yreka Fish And Wildlife Office

1829 South Oregon Street

Yreka, CA 96097-3446

(530) 842-5763

PROJECT SUMMARY

Project Code: 2023-0098598

Project Name: Waddell Rock Pit Expansion

Project Type: Surface Extraction - Non Energy Materials

Project Description: Expansion of the Waddell Rock Pit, near Happy Camp, California. The new area will expand the rock quarry to roughly 17 acres, with newly quarried areas adjacent to the current quarry. Approval is being sought so that work can begin later this year (2023).

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.88441855,-123.43058040459852,14z>



Counties: Siskiyou County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 11 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [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.

MAMMALS

NAME	STATUS
Gray Wolf <i>Canis lupus</i> Population: U.S.A.: All of AL, AR, CA, CO, CT, DE, FL, GA, IA, IN, IL, KS, KY, LA, MA, MD, ME, MI, MO, MS, NC, ND, NE, NH, NJ, NV, NY, OH, OK, PA, RI, SC, SD, TN, TX, VA, VT, WI, and WV; and portions of AZ, NM, OR, UT, and WA. Mexico. There is final critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/4488	Endangered
North American Wolverine <i>Gulo gulo luscus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5123	Threatened
Pacific Marten, Coastal Distinct Population Segment <i>Martes caurina</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9081	Threatened

BIRDS

NAME	STATUS
Marbled Murrelet <i>Brachyramphus marmoratus</i> Population: U.S.A. (CA, OR, WA) There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4467	Threatened
Northern Spotted Owl <i>Strix occidentalis caurina</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1123	Threatened
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

INSECTS

NAME	STATUS
Franklin's Bumble Bee <i>Bombus franklini</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7022	Endangered
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRUSTACEANS

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

CRITICAL HABITATS

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Northern Spotted Owl <i>Strix occidentalis caurina</i> https://ecos.fws.gov/ecp/species/1123#crithab	Final

IPAC USER CONTACT INFORMATION

Agency: GeoServ

Name: Jake Ewald

Address: PO Box 831

City: Mount Shasta

State: CA

Zip: 96067

Email je@geoscienceserv.com

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