BIOLOGICAL STUDY REPORT

Wastewater Collection and Treatment Project

City of Dorris, Siskiyou County, California

Prepared for:

City of Dorris

Prepared by:

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Records Searches Updated May 2021

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1. INTRODUCTION

The proposed project entails improvements to the City of Dorris' wastewater collection system, Seattle Street Lift Station, and Wastewater Treatment Plant (WWTP) that are required in order to repair and replace aging infrastructure and improve efficiency in the wastewater treatment process.

The purpose of this biological study report (BSR) is to identify and characterize sensitive biological resources that could be adversely affected by implementation of the proposed project. This BSR is intended to serve as a baseline study to assist in preparation of subsequent environmental documentation. For purposes of this BSR, "study area" and "project site" shall refer to the project footprint, which includes areas for staging and construction access, and locations of proposed improvements.

ENPLAN is an environmental consulting firm with over 35 years of experience with projects throughout northern California. All work associated with this project was performed by Donald Burk, Environmental Services Manager, and Jacob Ewald, Wildlife Biologist. Resumes for the biologists are provided in **Appendix A**.

Mr. Burk received his Master of Science degree in Botany, and Bachelor of Arts degrees in Chemistry and Biological Sciences, from California State University, Chico. Having worked in the environmental consulting field since 1981, he has an in-depth background in a broad spectrum of environmental studies. His experience includes managing the preparation of CEQA/NEPA environmental compliance documents, environmental site assessments, wildlife and botanical studies, wetland delineations, reclamation plans, and stream restoration projects. Mr. Burk was responsible for the botanical survey, wildlife survey, determination of potential jurisdictional waters of the United States, and final report review.

Mr. Ewald received his Bachelor of Science degree in Biology from the University of California, Davis. He has over four years of experience in California, where he has conducted stream surveys, endangered species surveys, nesting bird surveys, and construction monitoring. Mr. Ewald drafted this report.

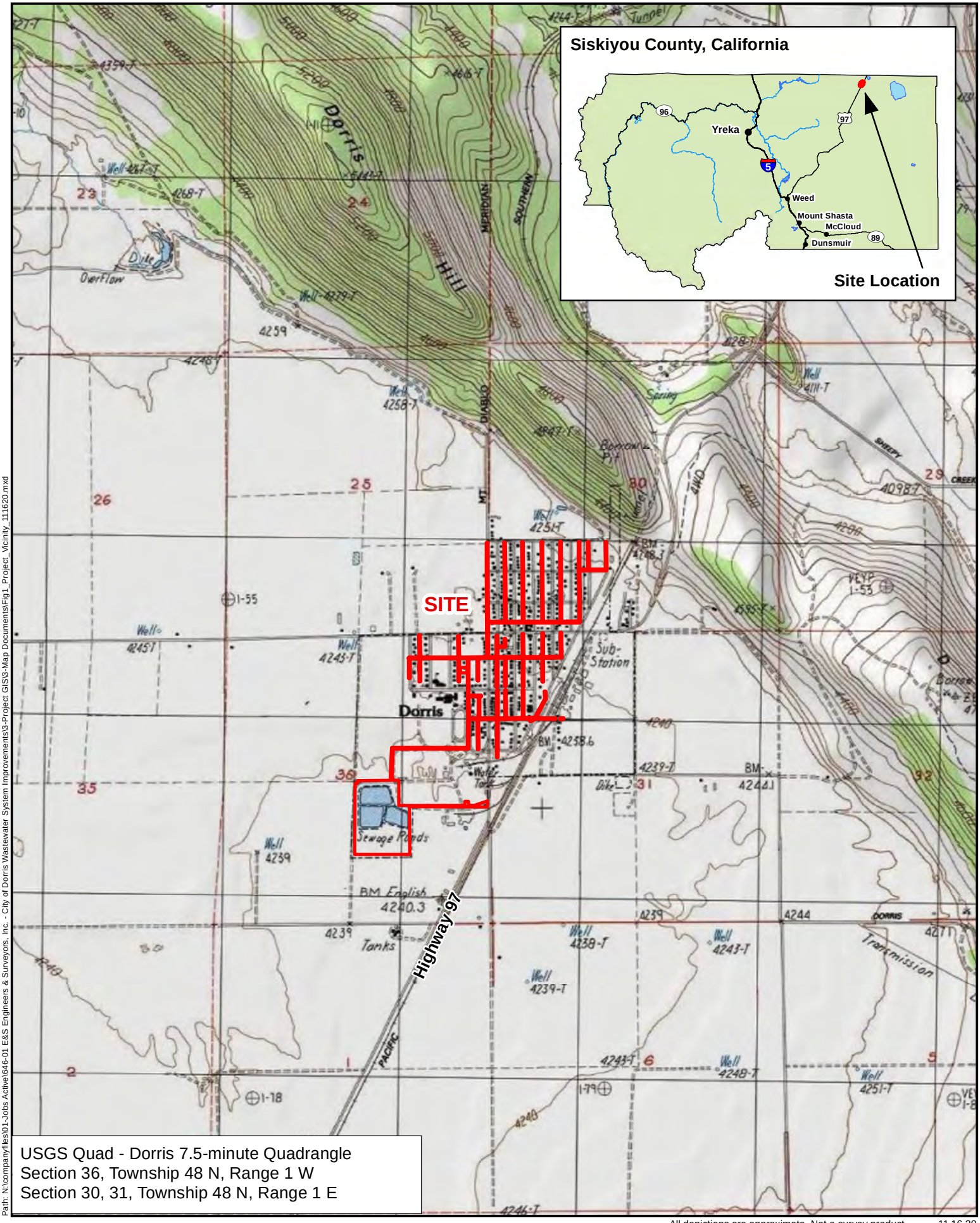
2. PROJECT LOCATION

Figure 1 shows the general locations of the WWTP, Seattle Street Lift Station, and collection system improvements. The WWTP is located within the southwestern portion of the City of Dorris in Siskiyou County in Section 36, Township 48 North, Range 1 West, of the Dorris 7.5-minute quadrangle; Latitude: 41° 57' 29" N, Longitude: 121°55' 43".

The Seattle Street Lift Station site is located on the west side of Seattle Street between West Second Street and West Third Street, in Section 36, Township 48 North, Range 1 West; Latitude 41° 57' 54" N, Longitude 121° 55' 22" W. The collection system improvements are located within the public road right-of-way (ROW) and public utility easements primarily on the west side of U.S. Route 97 in Section 36, Township 48 North, Range 1 West; and Sections 30 and 31, Township 48 North, Range 1 East.

Improvements would occur in the public road rights-of-way (ROWs) of Butte Street, Sly Street, Sage Street, 2nd Street, U.S. Highway 97, 4th Street, Seattle Street, Triangle Street, Oregon Street, and Railroad Avenue. Improvements would also occur in and near unpaved roads leading to the WWTP (both to the north and east of the ponds), as well as in unpaved alleyways between residences downtown. Lastly, improvements would occur at the WWTP facility itself (see **Figure 2**).

Temporary staging of construction materials and equipment would occur within the boundaries of the WWTP site and lift station site. Project staging would also occur in the affected street ROW throughout the project area. Representative photos of the project area are included in **Appendix B**.



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All depictions are approximate. Not a survey product. 11.16.20

0 3,000 Feet

Figure 1

Project Vicinity Map

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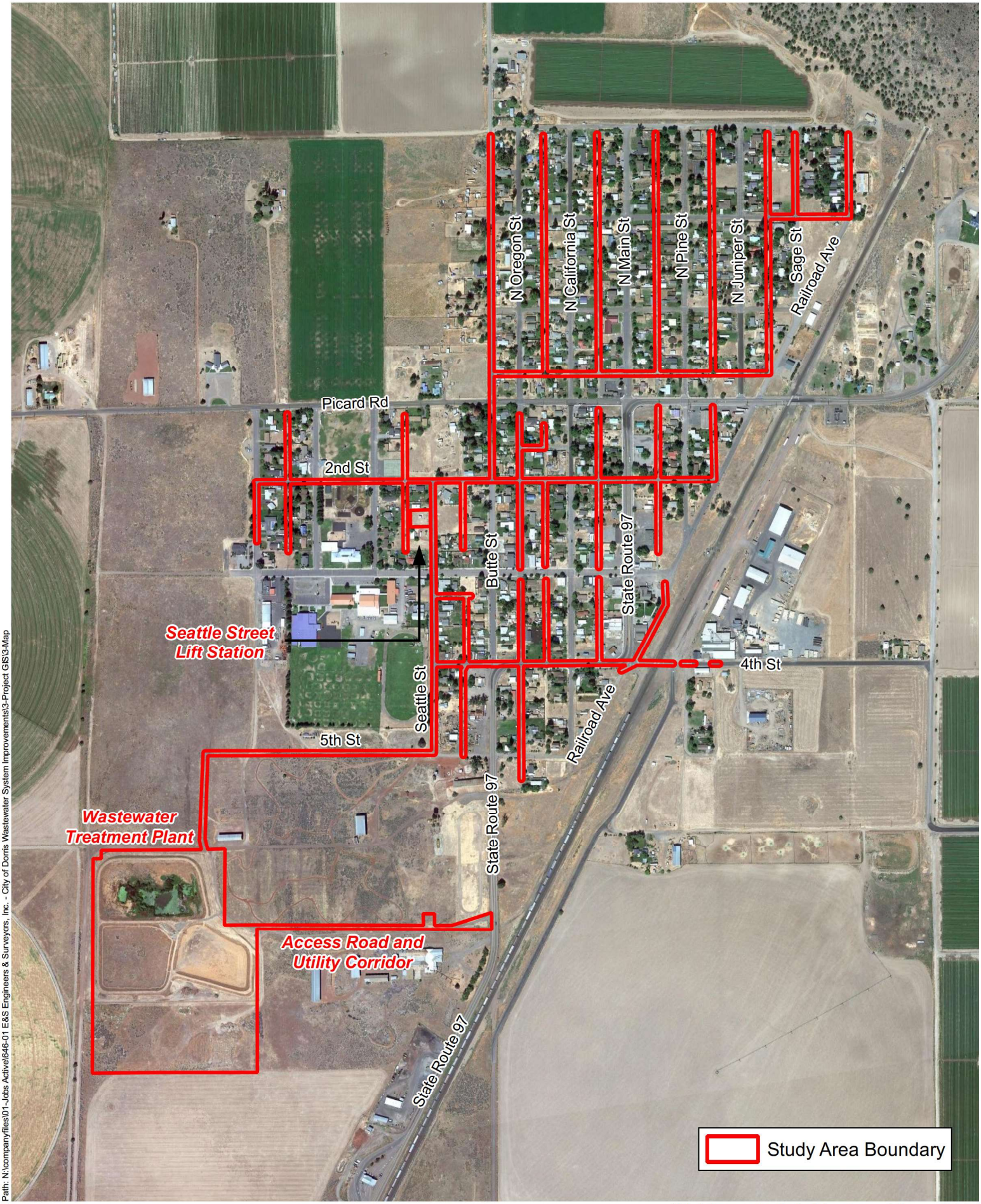

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0 500 1,000 Feet

All depictions are approximate. Not a survey product. 05.13.21

Figure 2

Project Site

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3. PROJECT DESCRIPTION

This section provides an overview of proposed improvements that are the subject of this BSR. As shown in **Figure 2**, the project includes the following components:

Sewer Collection System:

Approximately 3,120 linear feet of six-, eight-, and ten-inch vitrified clay pipe (VCP) would be replaced with polyvinyl chloride (PVC) pipe; approximately 2,024 linear feet of the replacement pipe would be installed in unpaved areas. No upsizing of the existing lines would occur. Cured-in-place pipe (CIPP) lining would be installed in approximately 27,400 linear feet of sewer pipe. Work would occur in the public road ROW and public utility easements.

Seattle Street Lift Station:

The existing dry well portion of the lift station would be converted to a wet well. Two new rail-mounted submersible pumps would replace the existing suction pumps. The new pumps would be about the same size as the existing pumps. The existing controls and other miscellaneous equipment would be removed, and new floats and controls would be installed. The existing SCADA system would be replaced. A temporary bypass pumping system would be installed to maintain pumping operations during construction.

Seattle Street Force Main:

The eight-inch A-C force main between the Seattle Street lift station and the WWTP would be replaced with eight-inch PVC pipe (±3,875 linear feet); approximately 2,615 linear feet of the replacement pipe would be installed in unpaved areas.

Wastewater Treatment Plant:

Improvements at the WWTP include the following:

- Construction of a new headworks. The headworks would be an open-channel design located in the pond dikes and would include a ±850-

square-foot subsurface enclosure, Parshall flume, level transducer, self- cleaning screen, and a screen support structure.

- Installation of a pipeline from the existing WWTP influent valve manifold, through the new headworks, and to the improved pond system.
- Construction of an aeration basin and separate disposal area in existing Pond 2 of the WWTP. This would include installation of a new berm in Pond 2. Imported fill to create the new berm is proposed to be from the southern berm wall in Pond 3 and/or the existing clay layer in Pond 2. It is estimated that the aeration basin finish grade would need to be approximately four feet below the existing pond bottom.
- Installation of aeration piping in the new aeration basin.
- Installation of pond interconnection piping and isolation valves or stop gates to allow for directing flow to each pond.
- Installation of overflow inlets to passively allow water to flow to an adjacent pond if a pond becomes overfilled.
- Installation of concrete energy dissipation pads in each pond.
- Construction of a ±62-square-foot control/blower building to house blowers and controls as well as miscellaneous heating and ventilation, mechanical, and electrical equipment.
- Extension of electrical service to the new control/blower building, including installation of utility poles, conduit, and/or conductors. Work would involve realignment/construction of an existing unpaved access road and installation of electrical lines. Work would occur in a utility easement immediately north of the southern property line of the Butte Valley Museum and Historical Society parcel (Siskiyou County APN 051-401-020) and in an access road easement immediately south of the property line. Installation of a new electrical transformer may be required at a location to be determined by the electrical provider.
- Installation of a SCADA system to allow the plant to be monitored remotely. A control panel would be installed inside the new control building to control the blower variable frequency drives and monitor the WWTP for alarm conditions.
- A new diesel emergency back-up generator and automatic transfer switch would be installed adjacent to the proposed control building.

The majority of the collection system improvements would occur in public road ROW and public utility easements. The majority of the pipe replacements would be installed using open-cut trenching. Access to the work areas would be from paved public roads and private driveways. Paved roads that are disturbed during installation of the sewer pipe and mains would be re-paved following construction.

Temporary staging of construction materials and equipment would occur within the boundaries of the WWTP site and the Seattle Street Lift Station property. No physical improvements would need to be completed to establish the staging areas. Therefore, the staging areas are not further discussed in this BSR.

4. AREA CHARACTERISTICS

The study area is approximately 4,250 feet above mean sea level in elevation, and is characterized by nearly flat terrain. The overall topographical gradient slopes gradually downward toward the south.

The WWTP facility contains two wastewater treatment ponds and an overflow pond. Wastewater is directed to each pond for an approximate three to five-year period, and then the flow is discharged to the other pond. The inactive pond is allowed to dry and then is scraped to remove the dried sludge. During its active use period, the treatment pond supports freshwater emergent vegetation; the dry ponds support weedy annual species. A plowed field that appears to be used for sludge disposal is located to the south of the ponds, along with a small amount of sagebrush scrub habitat. The WWTP is surrounded by agricultural activities to the west and south, with sagebrush scrub habitat intermixed with urban uses to the north and east.

The sewer collection system and Seattle Street improvements are located within the downtown area of the City of Dorris. As such, the project area is immediately surrounded by residential and commercial buildings. Land use surrounding the City is generally agricultural, with the exception of a hillside to the northeast, which supports an open forest habitat characterized by a mix of juniper, sagebrush, and rabbitbrush.

Representative photographs of the study area are provided in **Appendix B**.

5. RECORDS REVIEW AND FIELD RECONNAISSANCE

5.1. Records Review

Records reviewed for this evaluation consisted of California Natural Diversity Data Base (CNDDB) records for special-status plants, animals, and natural communities (**Table 1**); the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (**Table 2**); U.S. Fish and Wildlife Service (USFWS) records for federally listed,

proposed, and Candidate plant and animal species under jurisdiction of the USFWS (**Appendix C**); National Marine Fisheries Service (NMFS) records for anadromous fish species under the jurisdiction of the NMFS (**Appendix C**); bird observation data from the Cornell University Lab of Ornithology (CULO, 2020); soils records maintained by the U.S. Department of Agriculture's Natural Resources Conservation Service (USDA, 2020); and National Wetlands Inventory (NWI) maps (USFWS, 2020). The CNDDB records search covered a five-mile radius around the study area. The records review addressed portions of the U.S. Geological Survey Dorris, Lower Klamath Lake, Sams Neck, and Sheepy Lake quadrangles.

5.2. Field Reconnaissance

To determine the presence/absence of special-status plant and animal species and sensitive natural communities in the study area, biological screening evaluations were completed by an ENPLAN biologist on October 3, 2020, with a supplemental review on November 21, 2020. Most of the special- status species potentially occurring in the study area would not have been evident at the time the fieldwork was conducted. However, determination of the potential presence of such species could readily be made based on observed habitat characteristics.

6. NATURAL COMMUNITIES

According to the California Department of Fish and Wildlife (CDFW), since the inception of the Natural Heritage Program in 1979, natural communities have been considered for their conservation significance (CDFW, 2020a). Unique natural communities were recorded in the CNDDB until the mid-1990s; at that time, funding for the natural community portion of the program was eliminated. Although natural communities are no longer being added to the CNDDB, many of the natural community occurrences maintained in the CNDDB still have significance for conservation, and their existence should be considered in the environmental review process. CNDDB records do not identify any sensitive natural communities within a five-mile radius of the project site. Other records reviewed for sensitive natural communities included those maintained by the USFWS and

NMFS. Neither the USFWS nor NMFS identify any designated critical habitats for federally listed species within the study area (USFWS, 2020b).

Based on the field evaluation, the predominant community type present in the project study area is urban. The urban habitat is located throughout the study area except for the WWTP and a portion of the force main leading to the WWTP. The onsite urban habitat is characterized by shade trees, shrubs, and ruderal roadside vegetation. Characteristic vegetation includes elms, weeping willows, catalpas, lilacs, roses, and a wide variety of other horticultural species.

As noted above, the active discharge pond supports a freshwater emergent wetland habitat; this wetland habitat is represented by species such cattail, sticktight, creeping spikerush, and dock. The dry ponds support a weedy community dominated by rye; roaded areas support slender pigweed, mat amaranth, false mayweed, round- leaved peppergrass, cut-leaved nightshade, and other weedy species. To the south of the ponds, the WWTP site contains a plowed field and a small patch of sagebrush scrub community, which is characterized by big sagebrush, white-stemmed rabbitbrush, and yellow rabbitbrush, with an herbaceous layer comprised of native and non-native species, including downy brome, rye, tumble-mustard, and lupine.

The urban and sagebrush habitats are not considered sensitive natural communities (CDFW 2020b). The freshwater emergent vegetation present in the active wastewater treatment pond is capable of supporting wildlife species such as red-winged blackbirds. However, the treatment pond is not a “natural community” and the operational cycle of the WWTP results in removal of the freshwater emergent vegetation on a periodic basis. Therefore, loss or modification of the vegetation in the treatment ponds is not considered as a significant impact on a sensitive natural community.

Wetlands and Other Waters of the State and United States. According to the Natural Resources Conservation Service (USDA, 2020), two soil units have been mapped within the project site: Modoc loam, 0 to 2 percent slopes (149), and Poman loamy sand, 0 to 2 percent slopes (162). Neither of these soils are considered hydric; i.e., they are not likely to support wetlands.

The National Wetlands Inventory (USFWS, 2020a) identifies three wetland features within the project study area. All three features are ponds at the WWTP and are identified

as freshwater emergent wetlands. The northernmost wastewater treatment pond is designated as PEM1Kx (Palustrine, Emergent, Persistent, Artificially Flooded, Excavated). The remaining two treatment ponds are designated as PABKx (Palustrine, Aquatic Bed, Artificially Flooded, Excavated).

Field review confirmed the presence of water and freshwater emergent vegetation in the northwestern pond. The remaining two features were completely dry. Because the wastewater treatment ponds were constructed in upland habitats and remain in their intended use (i.e., have not been abandoned), they are not jurisdictional waters of the United States or State.

Field review confirmed that no wetlands or other waters are present elsewhere in the study area. Therefore, no further review with respect to jurisdictional waters is warranted.

7. SPECIAL-STATUS SPECIES

7.1. Special-Status Plant Species

Review of the USFWS species lists for the project area identified one federally listed plant species as potentially being affected by the proposed project: Gentner's fritillary.

CNDDB records show that two special-status plants have previously been recorded in the general project area: Newberry's cinquefoil and Western seablite. CNPS records also identified Newberry's cinquefoil as occurring in the Dorris quadrangle. Newberry's cinquefoil is an annual to short-lived perennial herb that occurs on the receding shorelines of freshwater emergent wetlands. Western seablite is an annual herb that occurs in wetlands. No other special-status species were identified in the records search area by the CNDDB or CNPS.

The potential for each special-status plant species to occur on the project site is evaluated in Table 3. As documented, none of these or any other special-status plant species were observed during the botanical field survey, nor are any expected to be present. Included as **Appendix D** is a list of vascular plants observed during the botanical survey.

7.2. Special-Status Wildlife Species

Review of the USFWS species list for the project area identified the following federally listed animal species as potentially being affected by the proposed project: gray wolf, North American wolverine, northern spotted owl, yellow-billed cuckoo, Oregon spotted frog, Lost River sucker, shortnose sucker, conservancy fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp. The USFWS does not identify any designated critical habitat in the study area for any federally listed animal species (USFWS, 2020b).

According to the NMFS, there are no anadromous fish in the project area because no habitat-bearing water features are located within the project footprint.

CNDDB records indicate that no special-status wildlife species have been previously reported from the project site. Seven special-status wildlife species have been reported within a five-mile radius of the project site: American white pelican, bald eagle, bank swallow, Lost River sucker, shortnose sucker, Swainson's hawk, and western snowy plover. Additionally, four non-status wildlife species have been reported within the five-mile search radius: California gull, ferruginous hawk, Great Basin rams- horn, and white-faced ibis.

The potential for each of the above special-status animal species to occur on the project site is evaluated in **Table 3**. As documented in **Table 3**, bald eagles and Swainson's hawks have the potential to forage and nest in the project vicinity. Therefore, additional information regarding these species and the potential for them to be subject to adverse effects as a result of the proposed project is provided below.

Bald Eagle: Bald eagles generally nest in large, old-growth trees or snags in mixed stands near open bodies of water (CDFW 1999). Adults tend to use the same breeding areas year after year and often use the same nest, though a breeding area may include one or more alternate nests. Individual bald eagles have been documented in the project area (CULO, 2020a); and nesting pairs have been observed outside the City of Dorris. Although no suitable nest trees are present in the project area, and no bald eagles or raptor nests were observed during the wildlife survey, bald eagles could potentially nest nearby. The *National Bald Eagle Management Guidelines* (USFWS, 2007) suggest that if work is undertaken within 660 feet of a bald eagle nest, monitoring, work restrictions, or

other protective measures may be warranted. With the implementation of **Mitigation Measure 1**, impacts to nesting bald eagles would be avoided/minimized.

Swainson's Hawk: Swainson's hawks nest in riparian areas, oak savannahs, and juniper-sage flats (CDFW 2006). Individual Swainson's hawks and nesting pairs have been documented in the project vicinity (CULO, 2020b). Although no Swainson's hawks or raptor nests were observed during the wildlife survey, and no potential nest trees would be removed as a result of the project, there is some potential that Swainson's hawks could nest in the project vicinity and be indirectly affected by project construction. With the implementation of **Mitigation Measure 1**, impacts to nesting Swainson's hawks would be avoided/minimized.

8. NESTING MIGRATORY BIRDS

Under the Migratory Bird Treaty Act (MBTA) of 1918, migratory bird species, their nests, and their eggs are protected from injury or death, and any project-related disturbances during the nesting period. In addition, California Fish and Game Code §3503 and §3503.5 provide regulatory protection to resident and migratory birds and all birds of prey within the State.

The USFWS identified the following Birds of Conservation Concern as potentially affected by the proposed project: bald eagle, Brewer's sparrow, Clark's grebe, golden eagle, lesser yellowlegs, olive-sided flycatcher, sage thrasher, tricolored blackbird, willet, and willow flycatcher. The potential for each of these species to utilize the project site is evaluated in **Table 4**. As noted in the table, Brewer's sparrow, olive-sided flycatcher, sage thrasher, tricolored blackbird, and willet have some potential to nest on the project site, and bald eagles could potentially nest in the vicinity.

During construction, nesting birds, if present, could be directly or indirectly affected by construction activities. Direct effects could include mortality resulting from construction equipment operating in an area containing an active nest with eggs or chicks. Indirect effects could include nest abandonment by adults in response to loud noise levels or human encroachment, or a reduction in the amount of food available to young birds due to changes in feeding behavior by adults.

Construction activities that occur in surfaced roadways and alleys are not expected to directly affect nesting migratory birds because no vegetation would be removed; indirect effects in these areas, such as nest abandonment by adults in response to loud noise levels, are likewise not expected given the urban character of the work area. Any birds that may nest adjacent to roadways would be accustomed to periodic loud noises and other human-induced disturbances.

Construction activities at the WWTP and along the force main corridor leading to the WWTP have a somewhat higher potential to directly and indirectly impact nesting birds, if present. In the local area, most birds nest between February 1 and August 31, and the potential for adversely affecting nesting birds can be greatly minimized by conducting vegetation removal and construction activities either before February 1 or after August 31. If this is not possible, a nesting survey should be conducted prior to commencement of construction. If active nests are found, the City would consult with CDFW staff and implement measures as needed to ensure that construction activities do not adversely affect nesting birds, as called for in **Mitigation Measure 1**.

9. NOXIOUS WEEDS

The introduction and spread of noxious weeds during construction activities has the potential to impact natural habitats. A noxious weed is a plant that has been defined as a pest by federal or state law. The California Department of Food and Agriculture (CDFA) maintains a list of plants that are considered threats to the well-being of the state (CDFA, 2020). Each noxious weed identified by the CDFA receives a rating that reflects the importance of the pest, the likelihood that eradication or control efforts would be successful and the present distribution of the pest within the state. Below is a description of ratings categories that apply to the study area:

> **Category A.** A pest of known economic or environmental detriment and is either not known to be established in California or it is present in a limited distribution that allows for the possibility of eradication or successful containment. A-rated pests are prohibited from entering the state because they have been determined to be detrimental to agriculture.
>
> **Category B.** A pest of known economic or environmental detriment and, if present in California, it is of limited distribution. B-rated pests are eligible to enter the state if the receiving county has agreed to accept them.

Category C. A pest of known economic or environmental detriment and, if present in California, it is usually widespread. C-rated organisms are eligible to enter the state as long as the commodities with which they are associated conform to pest cleanliness standards when found in nursery stock shipments.

One Category A noxious weed (Scotch thistle), two Category B noxious weeds (Canada thistle, broadleaved peppercress), and two Category C noxious weeds (bindweed, Russian thistle) were observed in the study area during the botanical survey. A number of other weeds rated as invasive by the California Invasive Plant Council were also observed in the study area, including herb sophia, summer-cypress, Canada thistle, downy brome, red-stemmed filaree, prickly lettuce, white sweetclover, yellow sweetclover, goat's-beard, woolly mullein, and puncture vine. As required by **Mitigation Measure 2**, the potential for introduction and spread of noxious and invasive weeds would be avoided/minimized by using only certified weed-free erosion control materials, mulch, and seed; by limiting any import or export of fill material to material that is known to be weed free; and by requiring the construction contractor to thoroughly wash all equipment at a commercial wash facility prior to entering and upon leaving the work site.

10. CONCLUSIONS AND RECOMMENDATIONS

Based on the records search results, field observations, and the above analyses, we make the following findings:

1. Project implementation would not adversely affect sensitive natural communities or regulated wetlands.
2. No special-status plant species would be directly or indirectly affected by project.
3. Potential effects to special-status animal species would be limited to possible indirect effects to nesting bald eagles and Swainson's hawks.
4. Implementation of the following measure will avoid the potential for adverse effects to nesting bald eagles, Swainson's hawks, Brewer's sparrows, olive-sided flycatchers, sage thrashers, tricolored blackbirds, willets, and other birds:

Mitigation Measure 1: Avoid Effects to Nesting Birds and Raptors.

In order to avoid impacts to nesting birds and raptors protected under the federal Migratory Bird Treaty Act and California Fish and Game Code §3503 and §3503.5, including their nests and eggs, one of the following shall be implemented:

a. Vegetation removal and other ground-disturbance activities associated with construction shall occur between September 1 and January 31, when birds are not nesting; or

b. If vegetation removal or ground disturbance activities occur during the nesting season, a pre-construction nesting survey shall be conducted by a qualified biologist to identify active nests in and adjacent to the work area.

   Surveys shall begin prior to sunrise and continue until vegetation and nests have been sufficiently observed. The survey shall take into account acoustic impacts and line-of-sight disturbances occurring as a result of the project in order to determine a sufficient survey radius to avoid nesting birds. At a minimum, the survey report shall include a description of the area surveyed, date and time of the survey, ambient conditions, bird species observed in the area, a description of any active nests observed, any evidence of breeding behaviors (e.g., courtship, carrying nest materials or food, etc.), and a description of any outstanding conditions that may have impacted the survey results (e.g., weather conditions, excess noise, the presence of predators, etc.).

   The results of the survey shall be submitted to the California Department of Fish and Wildlife upon completion. The survey shall be conducted no more than one week prior to the initiation of construction. If construction activities are delayed or suspended for more than one week after the pre-construction survey, the site shall be resurveyed.

   If active nests are found, appropriate actions shall be implemented to ensure compliance with the Migratory Bird Treaty Act and California Fish and Game Code. Compliance measures may include, but are not limited to, exclusion buffers, sound-attenuation measures, seasonal work closures based on the known biology and life history of the species identified in the survey, as well as ongoing monitoring by biologists.

5. Implementation of the following measures will adequately minimize the potential for the introduction and spread of noxious weeds in the study area:

Mitigation Measure 2: Minimize the Introduction and Spread of Noxious Weeds.

The potential for introduction and spread of noxious weeds shall be avoided/minimized by:

- Using only certified weed-free erosion control materials, mulch, and seed, and
- Limiting any import or export of fill material to material that is known to be weed free, and

- Requiring the construction contractor to thoroughly wash all equipment at a commercial wash facility prior to entering and upon leaving the job site.

11. REFERENCES CITED

California Department of Fish and Wildlife (CDFW). 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. <https://www.wildlife.ca.gov/Conservation/Survey-Protocols#377281280-plants>.

_____. 2020a. Natural Communities. <https://wildlife.ca.gov/Data/VegCAMP/Natural- Communities>.

_____. 2020b. California Natural Community List. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline>.

_____. 2006. California Wildlife Habitat Relationships System. Swainson's Hawk. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=1673&inline=1>.

_____. 1999. California Wildlife Habitat Relationships System. Bald Eagle. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=1661&inline=1>.

California Department of Food and Agriculture (CDFA). 2020. California Noxious Weeds Data Sheets. <https://www.cdfa.ca.gov/plant/IPC/encycloweedia/weedinfo/winfo_table-sciname.html>.

Cornell University Lab of Ornithology (CULO). 2020a. eBird. Bald Eagle. <https://ebird.org/map/baleag?env.minX=-179.99999999291&env.minY=18.838083769349&env.maxX=179.326113654898&env.maxY=71.9081724700314>.

_____. 2020b. eBird. Swainson's Hawk. <https://ebird.org/map/swahaw?neg=true&env.minX=-121.97433378366783&env.minY=41.92977706956056&env.maxX=-121.83151151804283&env.maxY=41.98428590690928&zh=true&gp=false&ev=Z&mr=1-12&bmo=1&emo=12&yr=all&byr=1900&eyr=2020>.

U.S. Department of Agriculture (USDA), Natural Resources Conservation Service. 2020. Web Soil Survey, last updated July 31, 2019. <http://websoilsurvey.nrcs.usda.gov/app/>.

United States Fish and Wildlife Service (USFWS). 2020a. National Wetlands Inventory, Wetlands Mapper. <https://www.fws.gov/wetlands/data/Mapper.html>.

_____. 2020b. Critical Habitat Mapper. <http://criticalhabitat.fws.gov/crithab/flex/crithabMapper.jsp>.

TABLES

TABLE 1
Rarefind (CNDDB) Report Summary

Five-Mile Radius around Project Area
May 2021

Listed Element	Quadrangle[1]				Status[2]
	D	LKL	SN	SL	
ANIMALS					
American white pelican		•			SSSC
Bald eagle	•				FD, SE, SFP
Bank swallow	•				ST
California gull		•			WL
Ferruginous hawk	•		•		WL
Great Basin rams-horn				•	None
Lost River sucker		•			FE, SE, SFP
Shortnose sucker		•			FE, SE, SFP
Swainson's hawk	•		•	•	ST
Western snowy plover		•			FT, SSSC
White-faced ibis		•			WL
PLANTS					
Newberry's cinquefoil		•			2B.3
Western seablite				•	2B.3

Highlighting denotes the quadrangle in which the project site is located

[1]QUADRANGLE CODE

D = Dorris SN = Sams Neck
LKL = Lower Klamath Lake SL = Sheepy Lake

[2]STATUS CODES

Federal

FE Federally Listed – Endangered
FT Federally Listed – Threatened
FC Federal Candidate Species
FP Federal Proposed Species
FD Federally Delisted
FSC Federal Species of Concern

State

SFP State Fully Protected
SR State Rare
SE State Listed – Endangered
ST State Listed – Threatened
SC State Candidate Species
SD State Delisted
SSSC State Species of Special Concern
WL Watch List

Rare Plant Rank

1A Plants Presumed Extinct in California
1B Plants Rare, Threatened or Endangered in California and Elsewhere
2 Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere
3 Plants About Which We Need More Information *(A Review List)*
(generally not considered special-status, unless unusual circumstances warrant)
4 Plants of Limited Distribution *(A Watch List)*
(generally not considered special-status, unless unusual circumstances warrant)

Rare Plant Threat Ranks

1.1 Seriously Threatened in California
1.2 Fairly Threatened in California
1.3 Not Very Threatened in California

TABLE 2
California Native Plant Society
Inventory of Rare and Endangered Plants

U.S. Geological Survey's Dorris 7.5-minute Quadrangle

Common Name	Scientific Name	CA Rare Plant Rank	Blooming Period	State Listing Status	Federal Listing Status
Newberry's cinquefoil	*Potentilla newberryi*	2B.3	May-Aug	None	None

Rare Plant Rank	
1A	Plants presumed extinct in California and either rare or extinct elsewhere
1B	Plants rare, threatened or endangered in California and elsewhere
2A	Plants presumed extinct in California but common elsewhere
2B	Plants rare, threatened, or endangered in California but common elsewhere
3	Review List: Plants about which more information is needed (generally not considered special-status, unless unusual circumstances warrant)
4	Watch List: Plants of limited distribution (generally not considered special-status, unless unusual circumstances warrant)
Rare Plant Threat Rank	
0.1	Seriously threatened in California
0.2	Moderately threatened in California
0.3	Not very threatened in California

Source: *California Native Plant Society, Rare Plant Program. 2019. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). http://www.rareplants.cnps.org. Accessed May 6, 2021.*

TABLE 3
Potential for Special-Status Species Identified by the National Marine Fisheries Service, USFWS, and CNDDB to Occur on the Project Site

May 2021

COMMON NAME/ SCIENTIFIC NAME	STATUS[1]	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
PLANTS						
Gentner's fritillary *Fritillaria gentneri*	FE, 1B.1	Gentner's fritillary is a perennial bulbiferous herb that occurs in chaparral and cismontane woodland habitats, sometimes in serpentine soils. The species is found between 3,200 and 3,700 feet in elevation. The flowering period is April through May.	N	N	N	No potentially suitable habitat for Gentner's fritillary is present on the project site. The species was not observed during the botanical survey and is not expected to be present.
Newberry's cinquefoil *Potentilla newberryi*	1B.3	Newberry's cinquefoil occurs in marshes and swamps within the Modoc Plateau bioregion, generally between 4,000 and 7,500 feet in elevation. The flowering period is May through August.	N	N	N	According to CNDDB records, Newberry's cinquefoil was reported "along highway near Dorris" in July 1967. The species was not observed during the botanical survey and is not expected to be present.
Western seablite *Suaeda occidentalis Wats.*	2B.3	Western seablite occurs in wetlands and occasionally in non-wetlands, generally less than 7,200 feet in elevation. The flowering period is July through September.	N	N	N	No potentially suitable habitat for Western seablite is present on the project site. The species was not observed during the botanical survey and is not expected to be present.
BIRDS						
American white pelican *Pelecanus erythrorhynchos*	SSSC	American white pelicans are colonial nesters on large interior lakes, which provide safe roosting and breeding places in the form of well-sequestered islets. Nest sites are generally flat and lack shrubs and other obstructions to taking flight. American white pelicans feed almost entirely on fish, but occasionally eat amphibians or crustaceans.	N	N	N	No suitable nesting habitat for the American white pelican is present on the project site and the species was not observed during the wildlife survey. Thus, American white pelicans would not nest on the project site.

COMMON NAME/ SCIENTIFIC NAME	STATUS[1]	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Bald eagle *Haliaeetus leucocephalus*	FD, SE, SFP	Bald eagles nest in large, old-growth trees or snags in mixed stands near open bodies of water. Adults tend to use the same breeding areas year after year and often use the same nest, though a breeding area may include one or more alternate nests. Bald eagles usually do not begin nesting if human disturbance is evident. In California, the bald eagle nesting season is from February through July.	Y	N	POT.	CNDDB records show that a bald eagle nest was located ±1.0 miles NW of the project site in 1985. According to ebird.org, there have been numerous bald eagle sightings in the project vicinity, the most recent being in February 2020. No eagles or eagle nests were observed during the field survey, and no potential nest trees would be removed. However, it is possible that eagles could nest near the work area and be indirectly affected by construction. To ensure that nesting bald eagles are not adversely affected by the proposed project, the City shall comply with the nesting bird survey requirement described in the Biological Study Report.
Bank swallow *Riparia riparia*	ST	Bank swallows require vertical banks and cliffs with fine-textured or sandy soils near streams, rivers, ponds, lakes, or the ocean for nesting.	N	N	N	No suitable habitat for the bank swallow is present on the project site or in the vicinity. Thus, the bank swallow would not nest on the project site.
Northern spotted owl *Strix occidentalis caurina*	FT, ST, SSSC	Northern spotted owls inhabit dense, old-growth coniferous forest stands with large trees and a complex array of vegetation types, sizes, and ages. Nesting occurs in dense forests, well protected from open sky. The species may use a broken-off treetop or tree-trunk hollow, a mistletoe tangle, or an old nest left behind by a squirrel or a bird of prey. The species is reported from sea level to approximately 7,600 feet in elevation.	N	N	N	No old-growth forest or potentially suitable nesting trees/snags are present on the project site or vicinity; thus, the species would not nest on-site.

COMMON NAME/ SCIENTIFIC NAME	STATUS[1]	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Swainson's hawk *Buteo swainsoni*	ST	Swainson's hawks nest in riparian areas or in oak savannah on the floor and in the foothills of the Central Valley, as far north as southern Tehama County. The species also nests in northeastern California in similar communities as well as in juniper-sage flats.	Y	N	POT.	According to CNDDB records, an active Swainson's hawk nest was reported approximately 0.25 miles east of the project site in July 2010. According to ebird.org, there have been numerous sightings of Swainson's hawk in the project vicinity, the most recent being in July 2020. Swainson's hawks have a high potential to nest in the project vicinity. Although no potential nest trees would be removed, nesting hawks could be indirectly affected by construction activities. To ensure that nesting Swainson's hawks are not adversely affected by the proposed project, the City shall comply with the nesting bird survey requirement described in the Biological Study Report.
Western snowy plover *Charadrius alexandrinus nivosus*	FT, SSSC	Western snowy plovers inhabit sandy coastal beaches, salt pans, coastal dredged spoils sites, dry salt ponds, gravel bars, and interior alkaline lakes. Only the coastal population is federally listed. Nests are typically placed in barren to sparsely vegetated flats with sandy or saline substrates.	N	N	N	No suitable habitat for the western snowy plover is present on the project site or vicinity. Thus, the western snowy plover would not be present on the project site.
Yellow-billed cuckoo *Coccyzus americanus*	FT	Yellow-billed cuckoos inhabit and nest in extensive deciduous riparian thickets or forests with dense, low-level or understory foliage, and which abut slow-moving watercourses, backwaters, or seeps. Willows are almost always a dominant component of the vegetation. In the Sacramento Valley, the yellow-billed cuckoo also utilizes adjacent orchards, especially of walnut, for nesting.	N	N	N	No suitable habitat for the yellow-billed cuckoo is present on the project site or vicinity. Thus, the yellow-billed cuckoo would not be present on the project site.

COMMON NAME/ SCIENTIFIC NAME	STATUS[1]	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
AMPHIBIANS						
Oregon spotted frog *Rana pretiosa*	FT	Oregon spotted frogs are typically found in or near a perennial body of water that includes zones of shallow water and abundant emergent or floating aquatic plants, which the frogs use as basking sites and for escape cover. The frog prefers large, warm marshes (approximate minimum size of 9 acres), and is thought to be extirpated from California.	N	N	N	No suitable habitat occurs on the project site for Oregon spotted frog. The Oregon spotted frog would thus not be present.
CRUSTACEANS						
Conservancy fairy shrimp *Branchinecta conservatio*	FE	Conservancy fairy shrimp inhabit large, cool-water vernal pools with moderately turbid water.	N	N	N	No vernal pools or other potentially suitable habitats for Conservancy fairy shrimp are present on the project site. Conservancy fairy shrimp would thus not be present.
Vernal pool fairy shrimp *Branchinecta lynchi*	FT	Vernal pool fairy shrimp inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump or basalt-flow depression pools.	N	N	N	No vernal pools or other potentially suitable habitats for vernal pool fairy shrimp are present on the project site. Vernal pool fairy shrimp would thus not be present.
Vernal pool tadpole shrimp *Lepidurus packardi*	FE	Vernal pool tadpole shrimp occur in vernal pools in California's Central Valley and in the surrounding foothills.	N	N	N	No vernal pools or other potentially suitable habitats for vernal pool tadpole shrimp are present on the project site. Vernal pool tadpole shrimp would thus not be present.
FISH						
Lost River sucker *Deltistes luxatus*	FE, SE, SFP	The Lost River sucker is native to the Lost River and Upper Klamath River, and is adapted to lakes within these watersheds. In lakes and reservoirs, adult suckers prefer shallow water with vegetation. Spawning occurs from late February to early May. Lake populations spawn in tributary streams, or around springs near the shoreline. River populations spawn in riffles or runs with gravel or cobble substrate, moderate flow, and at depths less than four feet.	N	N	N	No suitable habitat occurs on the project site for Lost River sucker. The Lost River sucker would thus not be present.

COMMON NAME/ SCIENTIFIC NAME	STATUS[1]	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Shortnose sucker *Chasmistes brevirostris*	FE, SE, SFP	The shortnose sucker is known to inhabit Upper Klamath Lake and its tributaries, the Lost River, Clear Lake, Gerber Reservoir, the Tule Lake sump, and the Klamath River upstream of Keno. Spawning occurs from early April to early May. Lake populations spawn in tributary streams, or around springs near the shoreline. River populations spawn in riffles or runs with gravel or cobble substrate, moderate flow, and at depths less than four feet.	N	N	N	No suitable habitat occurs on the project site for shortnose sucker. The shortnose sucker would thus not be present.

[1] **Status Codes**

Federal:

FE Federally Listed – Endangered
Protected FT
Threatened
FC Federal Candidate Species
FP Federal Proposed Species
FD Federal Delisted
FPT Federally Proposed Threatened

State:

SFP State Fully
Federally Listed –
SR State Rare
SE State Listed - Endangered
ST State Listed - Threatened
SC State Candidate Species
SSSC State Species of Special Concern

Rare Plant Rank

1A Plants Presumed Extinct in California
1B Plants Rare, Threatened or Endangered in California and
Elsewhere 2A Presumed extirpated in California, but more common
elsewhere
2B Rare or Endangered in California, but more common elsewhere

Rare Plant Threat Rank

1.1 Seriously Threatened in California
1.2 Fairly Threatened in California
1.3 Not Very Threatened in California

TABLE 4
Potential for Birds of Conservation Concern to Occur on the Project Site

Common Name/ Scientific Name	General Habitat Description	Habitat Present (Y/N)	Species Present (Y/N/POT.)	Rationale/Comments
Bald eagle *Haliaeetus leucocephalus*	Bald eagles nest in large, old-growth trees or snags in mixed stands near open bodies of water. Adults tend to use the same breeding areas year after year and often use the same nest, though a breeding area may include one or more alternate nests. Bald eagles usually do not begin nesting if human disturbance is evident. In California, the bald eagle nesting season is from February through July.	Y	POT.	According to the *Birds of Siskiyou County* checklist, bald eagles are normally present during the summer months but uncommon during the winter months. According to ebird.org, there have been numerous bald eagle sightings in the area (the most recent being in February 2020), indicating that suitable habitat is present in the vicinity. However, no bald eagles or bald eagle nests were observed during the wildlife survey, and no potentially suitable nesting habitat is present in the project area.
Brewer's sparrow *Spizella breweri*	Breeding habitat for the Brewer's sparrow typically consists of sagebrush scrub, but may also include large clearings in pinyon-juniper woodlands with a vegetative composition similar to sagebrush scrub. Winter habitat for Brewer's sparrow consists of sagebrush scrub, as well as desert scrub habitats dominated by saltbush and creosote. The breeding season is May 15 to August 10.	Y	POT.	According to the *Birds of Siskiyou County* checklist, Brewer's sparrows are normally present during the summer months in the Klamath Basin, but uncommon during the winter months. According to ebird.org, Brewer's sparrow was reported in the project area in June 1988. Potentially suitable breeding habitat for Brewer's sparrow is present near the wastewater treatment ponds. To ensure that nesting Brewer's sparrows are not adversely affected by the proposed project, the City shall comply with the nesting bird survey requirement described in the Biological
Clark's grebe *Aechmophorus clarkii*	Clark's grebes inhabit lakes, marshes and bays. During the winter, they also occur along seacoasts. Clark's grebes nest on large inland lakes over shallow water on floating platforms of vegetation. The breeding season is January 1 to December 31.	N	N	According to the *Birds of Siskiyou County* checklist, Clark's grebes are rare migrants in Siskiyou County. Although Clark's grebes may migrate through the area, no suitable nesting habitat is present for Clark's grebes. Thus, Clark's grebes would not be adversely affected by project implementation.

Common Name/ Scientific Name	General Habitat Description	Habitat Present (Y/N)	Species Present (Y/N/POT.)	Rationale/Comments
Golden eagle *Aquila chrysaetos*	Golden eagles inhabit open and semi-open habitats, including oak woodlands, shrublands, grasslands, and deserts. Nesting habitat consists of large trees in open areas, cliff-walled canyons, and, occasionally, structures such as transmission towers. The breeding season is December through August.	N	N	According to the *Birds of Siskiyou County* checklist, golden eagles are fairly common residents in Siskiyou County. CNDDB records identify two golden eagle nest sites in Siskiyou County. The closest reported occurrence is in the Shasta Valley. No suitable nesting habitat for golden eagles is present on the project site. Thus, the golden eagle is not expected to nest in the project area and would not be adversely affected by project implementation.
Lesser yellowlegs *Tringa flavipes*	Lesser yellowlegs breed in Alaska and northern Canada in open woodland clearings or burned-over areas, usually close to grassy wetlands. During migration, the species travels to the outer California coast and adjacent coastal lowlands, the Central Valley, Great Basin, and Salton Sea. The species forages along shallow lacustrine, wet meadows, and estuarine mudflat habitats.	N	N	According to the *Birds of Siskiyou County* checklist, lesser yellowlegs are known only as uncommon migrants in Siskiyou County. The project area is well outside the breeding range for lesser yellowlegs. Thus, the species would not be adversely affected by project implementation.
Olive-sided flycatcher *Contopus cooperi*	Olive-sided flycatchers breed in montane and northern coniferous forests, at forest edges and openings, such as meadows and ponds. They require large, tall trees for nesting and roosting. The nest is an open cup of twigs, rootlets, and lichens, placed out near the tip of a horizontal branch of a tree. The species breeds May 20 to August 31.	Y	POT.	According to the *Birds of Siskiyou County* checklist, olive-sided flycatchers are a fairly common resident in Siskiyou County during the summer months. According to ebird.org, olive-sided flycatcher was reported in the project area in September 2011, outside of their typical nesting season. Although olive-sided flycatchers may forage in the project area, no suitable nesting habitat is present. Olive-sided flycatchers would not be adversely affected by project implementation.

Common Name/ Scientific Name	General Habitat Description	Habitat Present (Y/N)	Species Present (Y/N/POT.)	Rationale/Comments
Sage thrasher *Oreoscoptes montanus*	The sage thrasher breeds exclusively in shrub-steppe habitats. Expanses of dense sagebrush provide concealment, while bare ground provides foraging opportunities. During migration and winter, sage thrashers utilize grasslands with scattered shrubs and open pinyon-juniper woodlands. Sage thrashers build nests on or near the ground, and pick dense, tall shrubs with overhead cover. The breeding season is April 15 August 10.	Y	POT.	According to the *Birds of Siskiyou County* checklist, sage thrashers are a fairly common resident in Siskiyou County during the summer months, but rare during the winter months. According to ebird.org, sage thrasher was reported in the project area in September 2011. Sage thrashers could potentially nest in the sagebrush community near the wastewater treatment plant. To ensure that sage thrashers are not adversely affected by the proposed project, the City shall comply with the nesting bird survey requirement described in the Biological Study Report.
Tricolored blackbird *Agelaius tricolor*	Tricolored blackbirds are colonial nesters and generally nest near open water. Nesting areas must be large enough to support a minimum colony of about 50 pairs. Tricolored blackbirds generally construct nests in dense cattails or tules, although they can also nest in thickets of willow, blackberry, wild rose and tall herbs. The breeding season is March 15 to August 10.	Y	POT.	According to the *Birds of Siskiyou County* checklist, tricolored blackbirds are a common resident in Siskiyou County all year. The wastewater treatment ponds provide suitable nesting habitat for tricolored blackbird. To ensure that tricolored blackbirds are not adversely affected by the proposed project, the City shall comply with the nesting bird survey requirement described in the Biological Study Report.
Willet *Tringa semipalmata*	Habitats for the willet include marshes, wet meadows, mudflats, and beaches. In California, willets nest inland, around freshwater marshes in open country, especially in native grasslands. Nesting occurs on islands and edges of alkali lakes in the Great Basin, including Siskiyou County. In migration and winter, willets may be found on mudflats, tidal estuaries, and sandy beaches. The breeding season is April 20 to August 5.	Y	POT.	According to the *Birds of Siskiyou County* checklist, willets are a common resident in Siskiyou County during the summer months. According to ebird.org, willet was reported in the project area in June 1985 and May 2017. Potentially suitable nesting habitat for the willet is present at the wastewater treatment ponds. To ensure that willets are not adversely affected by the proposed project, the City shall comply with the nesting bird survey requirement described in the Biological Study Report.

Common Name/ Scientific Name	General Habitat Description	Habitat Present (Y/N)	Species Present (Y/N/POT.)	Rationale/Comments
Willow flycatcher *Empidonax traillii*	Willow flycatchers breed in willow thickets and other brushy areas near streams, marshes, and other wetlands, and in clear-cuts and other open areas with nearby trees or brush between 2,000 and 8,000 feet in elevation. The breeding season is May 20 to August 31.	N	N	According to the *Birds of Siskiyou County* checklist, willow flycatchers are known only as uncommon migrants in Siskiyou County. No suitable nesting habitat for willow flycatcher is present on the project site. Thus, the species would not be adversely affected by project implementation.

Sources:

Cornell University Lab of Ornithology. eBird Species Maps. 2021. http://ebird.org/ebird/map/

California Department of Fish and Wildlife. n.d. California Wildlife Habitat Relationships. https://www.wildlife.ca.gov/Data/CWHR/Life-History-and-Range

_____. 2021. California Natural Diversity Database (CNDDB). https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data

Cornell Lab of Ornithology. 2019. *All About Birds*. https://www.allaboutbirds.org/guide/search/

Mt. Shasta Area Audubon Society. 2014. Birds of Siskiyou County. http://mtshastaaudubon.com/wp-content/uploads/2013/08/Bird-Check-List.pdf

U.S. Fish and Wildlife Service. 2021. Environmental Conservation Online System (ECOS). https://ecos.fws.gov/ecp/

APPENDIX A

RESUMES

Donald Burk, Environmental Services Manager

Jacob Ewald, Wildlife Biologist

DONALD M. BURK

Environmental Services Manager

Education

M.S. Botany
California State University, Chico

B.A. Chemistry and Biological Sciences
California State University, Chico

Professional Affiliations and Certifications

Society of Wetland Scientists
California Botanical Society
California Native Plant Society
Association of Environmental Professionals

Donald Burk has an in-depth background in a broad spectrum of environmental studies. His academic background includes graduate studies in environmental analysis methodology, biological sciences, and community planning. He has continued his professional development through completion of specialized courses in wetland delineation; wetland impacts and mitigations; vernal pool restoration and creation; noise assessments; Surface Mining and Reclamation Act regulations; erosion control practices; and hazardous materials evaluation and remediation. As environmental services manager with ENPLAN, Mr. Burk is instrumental in the preparation of environmental documents such as site assessment reports, environmental impact reports, biological studies, and noise evaluations. His responsibilities include project team management, key decision-making, coordination with applicable agencies, and final review of environmental documents. Having worked in the environmental consulting field since 1981, Mr. Burk has the skills and experience to manage studies to achieve reliable data and concise, effective documentation in a timely and cost-efficient manner.

While attending CSU, Chico, Mr. Burk was recognized as “Outstanding Organic Chemist of the Year,” received an award of merit from the American Botanical Society, and delivered the valedictory address for the School of Natural Sciences. His Master’s thesis was granted the first annual “Outstanding Thesis Award” by CSU, Chico.

Representative Experience

- *CEQA/NEPA Compliance.* Prepared environmental impact reports, environmental impact statements, and other environmental compliance documentation for a multitude of projects, including 516- and 1,244-acre industrial parks; public facilities projects including several sewage treatment plants, a 90-foot-high earthen dam and 15-acre reservoir, a 6-mile-long, 8-lane roadway, other new road corridors, and water supply projects; shopping centers and highway commercial developments; a 10,000-seat church; a 475-acre recreation ranch; ski areas; a softball park; four new schools; a 1-million cubic yard reservoir dredging project; numerous residential developments and many other projects.

- *Environmental Site Assessments.* Managed preparation of Phase I, II and III site investigations for a number of commercial and industrial facilities. Investigations have addressed wood-products manufacturing facilities, a major clothing manufacturing operation, dry cleaners, a medical clinic, ranches, a regional transmission transformer site, automotive shops and service stations, abandoned sewage treatment ponds, office buildings, shopping centers, and other uses.
- *Biological Studies.* Managed preparation of technical field studies, including wildlife and botanical studies for a 1,016-acre site in Sacramento County; fisheries, aquatic macroinvertebrate, and riparian vegetation studies for a 38-mile reach of the North Fork Feather River; botanical surveys for 175-mile and 265-mile underground telephone cable corridors; botanical surveys for over 2,400 acres on Mount Shasta proposed for ski area development; biological surveys for a 200-acre park site; spotted owl surveys; vernal pool fairy/tadpole shrimp and valley elderberry longhorn beetle assessments; and numerous other projects.
- *Wetland Delineations.* Managed preparation of wetland delineations and/or U.S. Army Corps of Engineers permit applications for a 1,016-acre site east of Sacramento, a 200-acre site in north Redding, a 580-acre site in the City of Weed, a 100-acre site near the Redding Municipal Airport, a transmission corridor project in east Redding, a 78-acre industrial parcel in the City of Benicia, and many other parcels throughout northern California.
- *Noise Studies.* Prepared noise studies for a variety of projects, including numerous traffic corridors; large industrial facilities such as a co-generation plant, food processing plant, and a regional scrap metal recycling facility; recreation facilities such as a new ski area and a community sports complex; many new residential developments; schools; and other facilities. Testified as an expert witness in a court case involving noise generated by electric- and diesel-powered water well pumps.
- *Reclamation Plans/Stream Restoration Projects.* Prepared mine reclamation plans and/or technical studies for projects including an aggregate pit adjacent to Cow Creek in Shasta County, a pumice quarry in Napa County, and underground gold mines in Shasta and Trinity Counties. Managed preparation of a stream restoration project for a reach of the Susan River, which involved hydraulic analysis, preparation of an earth-work plan, supervision of all on-site construction activities, preparation of a revegetation/erosion control plan and supervision of its implementation, and preparation of a monitoring program. Developed a plan, and obtained all agency approvals, for creation of 10 acres of riparian forest habitat along the Sacramento River to mitigate losses on a nearby parcel.

Publications

Burk, Donald et al. (29 contributing authors). Technical Editors Gary Nakamura, UC Cooperative Extension Service and Julie Kierstead Nelson, USDA Forest Service, Shasta-Trinity National Forest. 2001. *Illustrated Field Guide to Selected Rare Plants of Northern California.* University of California, Agriculture and Natural Resources. Publication 3395.

Luper, J. and D. Burk. 2014. Noteworthy collections: *Froelichia gracilis* (Amaranthaceae). Madrono 61(4):413-413.

JACOB EWALD

Environmental Scientist/Wildlife Biologist

Education

B.S. Biology (Wildlife, Fish & Conservation Biology)
University of California, Davis

Professional Affiliations and Certifications

GIS Certificate—University of California, San Diego
The Wildlife Society

Jacob Ewald has over four years of experience working as an environmental scientist throughout California. His experience includes endangered species surveys, nesting bird surveys, and stream surveys. In addition to working in the private sector, he has extensive experience conducting research and handling wildlife working as a field biologist for federal and state agencies in California.

Representative Experience

- *Endangered Species Surveys*. Expertise in conducting focused surveys for various threatened and endangered species, including spotted owls, northern goshawks, and giant garter snakes.
- *Nesting Bird Surveys.* Performed pre-construction nesting bird surveys to determine the presence or absence of nesting migratory birds on project sites.
- *General Wildlife Surveys.* Performed habitat assessments and general wildlife surveys, with an emphasis on species of concern. Such work has typically included pre-field review of available records including the California Natural Diversity Data Base, National Marine Fisheries Service records, the U.S. Fish and Wildlife Service IPAC reports, and other available data.
- *Stream Surveys*. Performed surveys of streams and rivers throughout Northern California to assess presence of and habitat suitability for the Sierra Nevada yellow-legged frog. Knowledgeable in the identification of aquatic vertebrates, including threatened and endangered species.
- *GIS Mapping and Data Collection*. Skilled in creating maps as well as importing, georeferencing, managing, and analyzing data within ArcGIS.
- *CEQA/NEPA Documentation*. Responsible for drafting environmental compliance documentation including biological study reports, Natural Environment Studies, and biological evaluations for CEQA Initial Studies.
- *Wood Duck Research*: Participated in a long-term research study analyzing nest box utilization by California wood ducks. Duties included monitoring nest boxes, weighing/marking eggs, and weighing/tagging hatchlings.
- *Thermal Niche Partitioning Analysis*: Analyzed the temperature-related activity levels of multiple Mojave Desert lizard species. Walked transects at multiple sites and times of day, capturing and identifying active lizards as they were found.

APPENDIX B

Representative Photographs

Ruderal roadside vegetation near 1st Street and Railroad Avenue, Dorris, CA, facing northeast.

Residential vegetation along a residential alleyway, facing north.

Pine tree and ruderal roadside vegetation on Sly Street, near Sage Street, facing east.

Active disposal pond at the wastewater treatment plant, facing west.

Inactive disposal pond at the wastewater treatment plant, facing northwest.

Plowed land immediately south of wastewater ponds, view to west.

Remnant sagebrush/juniper community, facing south near western boundary of WWTP site.

Rabbitbrush along force main corridor, facing east.

APPENDIX C

U.S. Fish and Wildlife Service List of Threatened and Endangered Species and Birds of Conservation Concern

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Klamath Falls Fish And Wildlife Office
1936 California Avenue
Klamath Falls, OR 97601
Phone: (541) 885-8481 Fax: (541) 885-7837

In Reply Refer To: May 06, 2021
Consultation Code: 08EKLA00-2021-SLI-0067
Event Code: 08EKLA00-2021-E-00166
Project Name: City of Dorris Wastewater System Improvements

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 designated and proposed 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.*). For anadromous fish species (i.e., salmon), please contact the National Marine Fisheries Service at http://www.westcoast.fisheries.noaa.gov/protected_species/species_list/species_lists.html.

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. These provisions apply to non-Federal lands when there is a Federal nexus (e.g., funding or permits).

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 threatened, endangered, proposed, 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 ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.;* http://www.fws.gov/midwest/eagle/protect/laws.html). The Service developed the National Bald Eagle Management Guidelines (http://www.fws.gov/northeast/ecologicalservices/eaglenationalguide.html) to provide guidance on measures that may be used to avoid and minimize adverse impacts to bald eagles. Projects affecting bald or golden eagles may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds, including bald and golden eagles, and bats.

The Migratory Bird Treaty Act (16 U.S.C. 703-712; http://www.fws.gov/midwest/eagle/protect/laws.html) implements protections for migratory birds. Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

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 Tracking Number in the header of this letter with any correspondence about your project that you submit to our office.

For projects in California, the office shown in the letterhead may not be the lead office for your project. Table 1 below provides lead Service field offices by county and land ownership/project type for northern California. Please refer to this table when you are ready to contact the field office corresponding to your project; a map and contact information for the Pacific Southwest Region field offices is located here: http://www.fws.gov/cno/es/.

Table 1: Lead Service offices by County and Ownership/Program in Northern California

County	Ownership/Program	Office Lead*
Lassen	Modoc National Forest	KFFWO
	Lassen National Forest	SFWO
	Toiyabe National Forest	RFWO
	BLM Surprise and Eagle Lake Resource Areas	RFWO
	BLM Alturas Resource Area	KFFWO
	Lassen Volcanic National Park	SFWO
	All other ownerships	By jurisdiction (see map)
Modoc	Modoc National Forest	KFFWO

	BLM Alturas Resource Area	KFFWO
	Klamath Basin National Wildlife Refuge Complex	KFFWO
	BLM Surprise and Eagle Lake Resource Areas	RFWO
	All other ownerships	By jurisdiction (see map)
Shasta	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	YFWO
	Hat Creek Ranger District	SFWO
	Whiskeytown National Recreation Area	YFWO
	BLM Alturas Resource Area	KFFWO
	Caltrans	SFWO/ AFWO
	Ahjumawi Lava Springs State Park	SFWO
	All other ownerships	By jurisdiction (see map)
Siskiyou	Klamath National Forest (except Ukonom District)	YFWO
	Six Rivers National Forest and Ukonom District of Klamath National Forest	AFWO
	Shasta Trinity National Forest	YFWO
	Lassen National Forest	SFWO
	Modoc National Forest	KFFWO
	Lava Beds National Volcanic Monument	KFFWO
	BLM Alturas Resource Area	KFFWO
	Klamath Basin National Wildlife Refuge Complex	KFFWO
	All other ownerships	By jurisdiction (see map)

All	FERC-ESA	By jurisdiction (see map)

*Office Leads:

AFWO=Arcata Fish and Wildlife Office

BDFWO=Bay Delta Fish and Wildlife Office

KFFWO=Klamath Falls Fish and Wildlife Office

RFWO=Reno Fish and Wildlife Office

YFWO=Yreka Fish and Wildlife Office

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

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:

Klamath Falls Fish And Wildlife Office
1936 California Avenue
Klamath Falls, OR 97601
(541) 885-8481

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office, and expect that the species and critical habitats in each document reflect only those that fall in the office's jurisdiction:

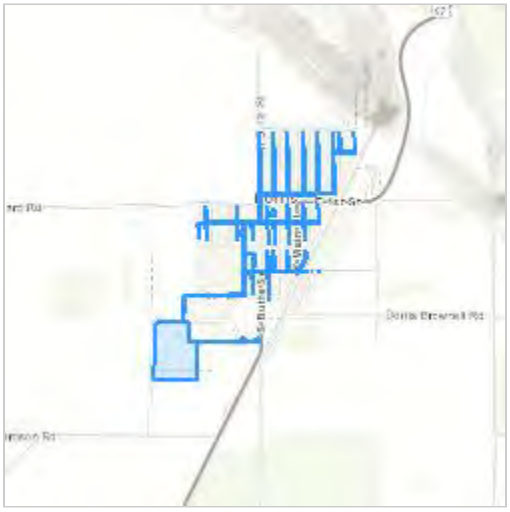
Yreka Fish And Wildlife Office
1829 South Oregon Street
Yreka, CA 96097-3446
(530) 842-5763

Project Summary

Consultation Code: 08EKLA00-2021-SLI-0067
Event Code: 08EKLA00-2021-E-00166
Project Name: City of Dorris Wastewater System Improvements
Project Type: WASTEWATER PIPELINE
Project Description: The purpose of the proposed project is to repair/replace aging infrastructure and improve efficiency in the wastewater treatment process.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@41.96511745,-121.92294898718137,14z



Counties: Siskiyou County, California

Endangered Species Act Species

There is a total of 1 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 Fisheries[1], 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.

Birds

NAME	STATUS
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

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 OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

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, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
Golden Eagle *Aquila chrysaetos* 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/1680	Breeds Dec 1 to Aug 31

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 and understand the FAQ "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.

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 (|)

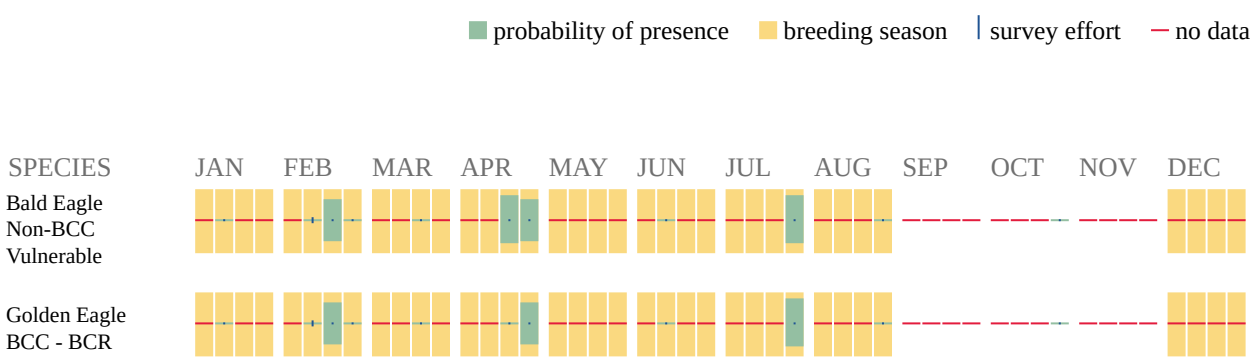
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

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.



Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

Migratory Birds FAQ

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 migratory birds potentially occurring 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 AKN Phenology 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, migrating or present year-round in my project 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 refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. 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.

Wetlands

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.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

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: May 06, 2021
Consultation Code: 08EYRE00-2021-SLI-0084
Event Code: 08EYRE00-2021-E-00316
Project Name: City of Dorris Wastewater System Improvements

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 federally threatened, endangered, and proposed species, designated critical habitat, and candidate species 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.). Please note that this list does not reflect State listed species or fulfill requirements related to any California Department of Fish and Wildlife consultation. Additionally, this list does not include species covered by the National Marine Fisheries Service (NMFS). For NMFS species please see the related website at the following link:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

If your project does not involve Federal funding or permits and does not occur on Federal land, we recommend you review this list and determine if any of these species or critical habitat may be affected. If you determine that there will be no effects to federally listed or proposed species or critical habitat, there is no need to coordinate with the Service. If you think or know that there will be effects, please contact our office for further guidance. We can assist you in incorporating measures to avoid or minimize impacts, and discuss whether permits are needed.

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 effects 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 ECOS-IPaC website at regular intervals during project planning and

implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system 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:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

If wetlands, springs, or streams are known to occur in the project area or are present in the vicinity of the project area, we ask that you be aware of potential impacts project activities may have on these habitats. Discharge of fill material into wetlands or waters of the United States is regulated by the U.S. Army Corps of Engineers (ACOE) pursuant to section 404 of the Clean Water Act of 1972, as amended. We recommend you contact the ACOE's Regulatory Section regarding the possible need for a permit.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html).

Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

The table below outlines lead Service field offices by county and land ownership/project type. Please refer to this table when you are ready to coordinate (including requests for section 7 consultation) with the field office corresponding to your project. Please send any documentation regarding your project to that office. Please note that the lead Service field office for your consultation may not be the office listed above in the letterhead. Please visit the following link to view a map of Service field office jurisdictional boundaries:

http://www.fws.gov/yreka/specieslist/JurisdictionalBoundaryES_R8_20150313.pdf

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of the letter you submit to our office along with any request for consultation or correspondence about your project.

Lead FWS offices by County and Ownership/Program

County	Ownership/Program	Species	Office Lead*
Alameda	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Alameda	All ownerships but tidal/estuarine	All	SFWO
Alpine	Humboldt Toiyabe National Forest	All	RFWO
Alpine	Lake Tahoe Basin Management Unit	All	RFWO
Alpine	Stanislaus National Forest	All	SFWO
Alpine	El Dorado National Forest	All	SFWO
Colusa	Mendocino National Forest	All	AFWO
Colusa	Other	All	By jurisdiction (see map)
Contra Costa	Legal Delta (Excluding ECCHCP)	All	BDFWO
Contra Costa	Antioch Dunes NWR	All	BDFWO
Contra Costa	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Contra Costa	All ownerships but tidal/estuarine	All	SFWO
Del Norte	All	All	AFWO
El Dorado	El Dorado National Forest	All	SFWO

El Dorado	LakeTahoe Basin Management Unit		RFWO
Glenn	Mendocino National Forest	All	AFWO
Glenn	Other	All	By jurisdiction (see map)
Humboldt	All except Shasta Trinity National Forest	All	AFWO
Humboldt	Shasta Trinity National Forest	All	YFWO
Lake	Mendocino National Forest	All	AFWO
Lake	Other	All	By jurisdiction (see map)
Lassen	Modoc National Forest	All	KFWO
Lassen	Lassen National Forest	All	SFWO
Lassen	Toiyabe National Forest	All	RFWO
Lassen	BLM Surprise and Eagle Lake Resource Areas	All	RFWO
Lassen	BLM Alturas Resource Area	All	KFWO
Lassen	Lassen Volcanic National Park	All (includes Eagle Lake trout on all ownerships)	SFWO
Lassen	All other ownerships	All	By jurisdiction (see map)
Marin	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Marin	All ownerships but tidal/estuarine	All	SFWO
Mendocino	Russian River watershed	All	SFWO
Mendocino	All except Russian River watershed	All	AFWO
Modoc	Modoc National Forest	All	KFWO
Modoc	BLM Alturas Resource Area	All	KFWO

Modoc	Klamath Basin National Wildlife Refuge Complex	All	KFWO
Modoc	BLM Surprise and Eagle Lake Resource Areas	All	RFWO
Modoc	All other ownerships	All	By jurisdiction (See map)
Mono	Inyo National Forest	All	RFWO
Mono	Humboldt Toiyabe National Forest	All	RFWO
Napa	All ownerships but tidal/estuarine	All	SFWO
Napa	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Nevada	Humboldt Toiyabe National Forest	All	RFWO
Nevada	All other ownerships	All	By jurisdiction (See map)
Placer	Lake Tahoe Basin Management Unit	All	RFWO
Placer	All other ownerships	All	SFWO
Sacramento	Legal Delta	Delta Smelt	BDFWO
Sacramento	Other	All	By jurisdiction (see map)
San Francisco	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
San Francisco	All ownerships but tidal/estuarine	All	SFWO
San Mateo	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO

San Mateo	All ownerships but tidal/estuarine	All	SFWO
San Joaquin	Legal Delta excluding San Joaquin HCP	All	BDFWO
San Joaquin	Other	All	SFWO
Santa Clara	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
Santa Clara	All ownerships but tidal/estuarine	All	SFWO
Shasta	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Shasta	Hat Creek Ranger District	All	SFWO
Shasta	Bureau of Reclamation (Central Valley Project)	All	BDFWO
Shasta	Whiskeytown National Recreation Area	All	YFWO
Shasta	BLM Alturas Resource Area	All	KFWO
Shasta	Caltrans	By jurisdiction	SFWO/AFWO
Shasta	Ahjumawi Lava Springs State Park	Shasta crayfish	SFWO
Shasta	All other ownerships	All	By jurisdiction (see map)
Shasta	Natural Resource Damage Assessment, all lands	All	SFWO/BDFWO
Sierra	Humboldt Toiyabe National Forest	All	RFWO
Sierra	All other ownerships	All	SFWO
Siskiyou	Klamath National Forest (except Ukonom District)	All	YFWO
Siskiyou	Six Rivers National Forest and Ukonom District	All	AFWO

Siskiyou	Shasta Trinity National Forest	All	YFWO
Siskiyou	Lassen National Forest	All	SFWO
Siskiyou	Modoc National Forest	All	KFWO
Siskiyou	Lava Beds National Volcanic Monument	All	KFWO
Siskiyou	BLM Alturas Resource Area	All	KFWO
Siskiyou	Klamath Basin National Wildlife Refuge Complex	All	KFWO
Siskiyou	All other ownerships	All	By jurisdiction (see map)
Solano	Suisun Marsh	All	BDFWO
Solano	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Solano	All ownerships but tidal/estuarine	All	SFWO
Solano	Other	All	By jurisdiction (see map)
Sonoma	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Sonoma	All ownerships but tidal/estuarine	All	SFWO
Tehama	Mendocino National Forest	All	AFWO
Tehama	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Tehama	All other ownerships	All	By jurisdiction (see map)
Trinity	BLM	All	AFWO
Trinity	Six Rivers National Forest	All	AFWO
Trinity	Shasta Trinity National Forest	All	YFWO

Trinity	Mendocino National Forest	All	AFWO
Trinity	BIA (Tribal Trust Lands)	All	AFWO
Trinity	County Government	All	AFWO
Trinity	All other ownerships	All	By jurisdiction (See map)
Yolo	Yolo Bypass	All	BDFWO
Yolo	Other	All	By jurisdiction (see map)
All	FERC-ESA	All	By jurisdiction (see map)
All	FERC-ESA	Shasta crayfish	SFWO
All	FERC-Relicensing (non-ESA)	All	BDFWO

***Office Leads:**

AFWO=Arcata Fish and Wildlife Office

BDFWO=Bay Delta Fish and Wildlife Office

KFWO=Klamath Falls Fish and Wildlife Office

RFWO=Reno Fish and Wildlife Office

YFWO=Yreka Fish and Wildlife 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

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office, and expect that the species and critical habitats in each document reflect only those that fall in the office's jurisdiction:

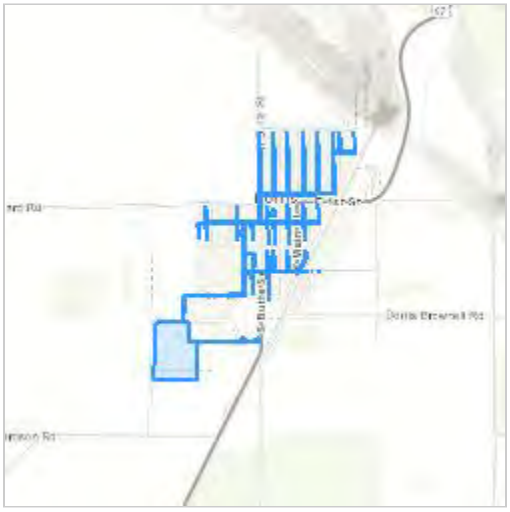
Klamath Falls Fish And Wildlife Office
1936 California Avenue
Klamath Falls, OR 97601
(541) 885-8481

Project Summary

Consultation Code: 08EYRE00-2021-SLI-0084
Event Code: 08EYRE00-2021-E-00316
Project Name: City of Dorris Wastewater System Improvements
Project Type: WASTEWATER PIPELINE
Project Description: The purpose of the proposed project is to repair/replace aging infrastructure and improve efficiency in the wastewater treatment process.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@41.96511745,-121.92294898718137,14z



Counties: Siskiyou County, California

Endangered Species Act Species

There is a total of 9 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 Fisheries[1], 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.

Birds

NAME	STATUS
Northern Spotted Owl *Strix occidentalis caurina* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1123	Threatened
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Amphibians

NAME	STATUS
Oregon Spotted Frog *Rana pretiosa* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6633	Threatened

Fishes

NAME	STATUS
Lost River Sucker *Deltistes luxatus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5604	Endangered
Shortnose Sucker *Chasmistes brevirostris* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/7160	Endangered

Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp *Branchinecta conservatio* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp *Lepidurus packardi* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

Flowering Plants

NAME	STATUS
Gentner's Fritillary *Fritillaria gentneri* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8120	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

APPENDIX D

List of Vascular Plants Observed during the Botanical Survey

CHECKLIST OF VASCULAR PLANT SPECIES OBSERVED

City of Dorris Wastewater System Improvements

October 3, 2020

Amaranthaceae	**Amaranth Family**
Amaranthus blitoides	Mat amaranth
Amaranthus hybridus	Slender pigweed
Asteraceae	**Sunflower Family**
Achillea millefolium	Common yarrow
Ambrosia artemisiifolia	Annual ragweed
Artemisia tridentata	Big sagebrush
Bidens sp.	Sticktight
Centaurea cyanus	Bachelor's button
Chrysothamnus viscidiflorus ssp. *viscidiflorus*	Yellow rabbitbrush
Cirsium sp.	Thistle
Cirsium arvense	Canadian thistle
Dieteria canescens	Hoary tansy-aster
Ericameria nauseosa	White-stemmed rabbitbrush
Erigeron canadensis	Canadian horseweed
Lactuca serriola	Prickly lettuce
Lagophylla ramosissima	Common hareleaf
Onopodum acanthium ssp. *acanthium*	Scotch thistle
Taraxacum officinale	Dandelion
Tragopogon dubius	Goat's beard
Tripleurospermum inodorum	False mayweed
Brassicaceae	**Mustard Family**
Lepidium latifolium	Broadleaved peppergrass
Lepidium perfoliatum	Round-leaved peppergrass
Sisymbrium altissimum	Tumble-mustard
Chenopodiaceae	**Goosefoot Family**
Atriplex rosea	Tumbling oracle
Kochia scoparia	Summer-cypress
Salsola tragus	Russian thistle
Convolvulaceae	**Morning Glory Family**
Convolvulus arvensis	Bindweed
Cupressaceae	**Cypress Family**
Juniperus occidentalis	Western juniper
Cyperaceae	**Sedge Family**
Eleocharis macrostachya	Creeping spikerush
Euphorbiaceae	**Spurge Family**
Euphorbia sp.	Spurge

CHECKLIST OF VASCULAR PLANT SPECIES OBSERVED

City of Dorris Wastewater System Improvements

Fabaceae		**Legume Family**
	Lathyrus sp.	Pea
	Lupinus argenteus var. *heteranthus*	Silvery lupine
	Lupinus lepidus	Dwarf lupine
	Medicago lupulina	Black medick
	Medicago sativa	Alfalfa
	Melilotus albus	White sweetclover
	Melilotus officinalis	Yellow sweetclover
	Trifolium repens	White clover
Geraniaceae		**Geranium Family**
	Erodium cicutarium	Red-stemmed filaree
Malvaceae		**Mallow Family**
	Malva neglecta	Common mallow
Onagraceae		**Evening-Primrose Family**
	Epilobium brachycarpum	Tall annual willowherb
	Epilobium ciliatum	Fringed willowherb
Pinaceae		**Pine Family**
	Pinus jeffreyi	Jeffrey pine
Poaceae		**Grass Family**
	Alopecurus sp.	Foxtail
	Bromus tectorum	Downy brome
	Elymus elymoides	Squirreltail
	Elymus hispidus	Intermediate wheatgrass
	Elymus triticoides	Alkali ryegrass
	Eragrostis cilianensis	Stinkgrass
	Poa compressa	Canadian bluegrass
	Secale cereale	Rye
Polygonaceae		**Buckwheat Family**
	Polygonum aviculare	Common knotweed
	Rumex sp.	Dock
Portulacaceae		**Purslane Family**
	Portulaca oleracea	Common purslane
Sapindaceae		**Soapberry Family**
	Acer negundo	Box elder
Scrophulariaceae		**Snapdragon Family**
	Verbascum thapsus	Woolly mullein
Solanaceae		**Nightshade Family**
	Solanum triflorum	Cut-leaved nightshade
Typhaceae		**Cattail Family**
	Typha sp.	Cattail

CHECKLIST OF VASCULAR PLANT SPECIES OBSERVED

City of Dorris Wastewater System Improvements

Ulmaceae	**Elm Family**
Ulmus sp.	Elm
Zygophyllaceae	**Caltrop Family**
Tribulus terrestris	Puncture vine