ENPLAN

656-01
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SUBJECT: Wildlife Survey, Woodland Hills Drive Parcel, Red Bluff

In response to your request, ENPLAN completed a wildlife survey for a ±6.45-acre parcel near the City of Red Bluff. The study site consists of Tehama County Assessor's Parcel 022-520-063, which is located north of Highway 36 on the south side of Woodland Hills Drive. The objective of this study is to evaluate the presence/absence of special-status wildlife and their habitats, as well as to identify potential impacts to other on-site wildlife resources during and following construction activities.

The site is situated approximately 330 to 410 feet above mean sea level, with an upper terrace adjacent to the Woodland Hills Drive cul-de-sac and a lower terrace just above Dibble Creek. The lower terrace is currently under development and includes one structure, a pond, and a graded flat. Based on aerial photograph review, the building appears to have been constructed in 2005. The pond pre-dates the building but appears to have been recently excavated/modified and is devoid of vegetation. A welded wire fence was under construction at the time of the wildlife field survey; the fence appears to enclose the building and pond, and separates the developed site footprint from the Dibble Creek riparian corridor. A gap in the fencing allows vehicle access into and through the stream corridor, and the stream banks have been modified to allow vehicle passage. Plant communities present on the site are a blue oak woodland and a riparian scrub community. Other than Dibble Creek and the created pond, no streams, wetlands, or other waters were observed.

Records Review
Records reviewed for this evaluation consisted of the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consulting (IPaC) species list, National Marine Fisheries Service (NMFS) species list, and California Natural Diversity Database (CNDDB) records. The USFWS records search covered the general project area and surrounding vicinity. The NMFS records search covered the U.S. Geological Survey (USGS) Red Bluff West quadrangle. The CNDDB records search covered a five-mile radius surrounding the study site, including all or portions of the following USGS quadrangles: Bend, Red Bluff East, Red Bluff West, Balls Ferry, and Los Molinos.

The USFWS species list identified eight special-status animal species as having the potential to occur in the study area: giant garter snake (Federal Threatened (FT); State Threatened (ST)), California red-legged frog (FT, California State Species of Special Concern (SSSC)), delta smelt (FT, State Endangered (SE)), monarch butterfly (Federal Candidate (FC)), valley elderberry longhorn beetle (FT), conservancy fairy shrimp (Federal Endangered (FE)), vernal pool fairy shrimp (FT), and vernal pool tadpole shrimp (FE).

The NMFS species list identified the presence of three species in the Red Bluff West quadrangle: Central Valley spring-run (CVSR) chinook salmon distinct population segment (DPS) (FT, SE), Sacramento River winter-run (SRWR) chinook salmon DPS (FE, SE), and California Central Valley (CCV) steelhead evolutionary significant unit (ESU) (FT). Records also indicated that the Red Bluff West quadrangle contains critical habitat for CVSR chinook salmon.

CNDDB records showed that no special-status animal species have been previously reported on the site. Eight special-status animal species are reported to occur within the five-mile search radius: chinook salmon – SRWR ESU, steelhead – CCV DPS, valley elderberry longhorn beetle, vernal pool fairly shrimp, western red bat (SSSC), pallid bat (SSSC), burrowing owl (SSSC), and least Bell's vireo (FE, SE).

The potential for each of these 15 special-status animal species to occur on the site is addressed below under "Survey Results."

Field Reconnaissance

The field reconnaissance was conducted November 17, 2021, by ENPLAN wildlife biologist Allison Loveless. Ms. Loveless has a Master of Science degree in Zoology from Oklahoma State University and a Bachelor of Science degree in Geography (Environmental Studies) from UCLA. Field observations began at 10 AM and continued for approximately two hours. The weather was sunny and clear, and the temperature was approximately 60 degrees Fahrenheit. Not all of the species would have been evident in the field at the time of the survey; however, their potential presence or absence could readily be determined by habitat characteristics.

Survey Results/Discussion

Nine species of birds and one mammal were observed on the project site during the field survey: acorn woodpecker (*Melanerpes formicivorus*), mourning dove (*Zenaida macroura*), oak titmouse (*Baeolophus inornatus*), white-crowned sparrow (*Zonotrichia leucophrys*), golden-crowned sparrow (*Zonotrichia atricapilla*), northern flicker (*Colaptes auratus*), spotted towhee (*Pipilo maculatus*), California scrub-jay (*Aphelocoma californica*), turkey vulture (*Cathartes aura*), and California ground squirrel (*Otospermophilus beecheyi*).

Special-Status Wildlife Species

Fish

Dibble Creek is an intermittent stream that passes through the southwestern corner of the study site; this reach of the creek is just over three miles upstream of the Sacramento River. Dibble Creek was dry at the time of the field survey; based on review of available aerial imagery, it appears that Dibble Creek is generally dry or has discontinuous flow by mid-April, but may contain water as late as July or August in some years.

SRWR chinook salmon are known to spawn in the upper reaches of the Sacramento River and rear in river reaches where water temperatures remain low throughout the summer. Due to the distance from the Sacramento River and the intermittent nature of Dibble Creek, there is no potential for SRWR chinook salmon to be present in the study site. Similarly, CVSR chinook salmon are known to spawn and rear in large,

cold-water tributaries of the Sacramento River. Critical rearing habitat for CVSR is present in Dibble Creek approximately 2.25 miles downstream of the project site. Although Dibble Creek would not support spawning by CVSR chinook salmon, it is possible that juveniles could migrate upstream to the project area for rearing.

California Central Valley steelhead are known to occur in the Sacramento River and its tributaries. Critical rearing habitat for CCV steelhead is present in Dibble Creek from its confluence with the Sacramento River to a point just over one mile upstream (±2.25 miles downstream of the project site). Due to the proximity of critical rearing habitat to the study site, there is potential for juvenile steelhead to be present in Dibble Creek in the study site when adequate water is available in the creek. Further, the reach of Dibble Creek on the study site provides suitable rearing habitat characteristics, including large woody debris and undercut banks.

The study area is outside of the known range of the delta smelt; therefore, there is no potential for delta smelt to be present.

Use of the access road into Dibble Creek during the wet season could potentially result in direct impacts to rearing juvenile salmonids, and could also increase turbidity affecting downstream fish habitat in Dibble Creek and the Sacramento River. Continued use of the road during the dry season would result in elevated erosion rates, and would prevent the banks from revegetating.

Bats

The western red bat roosts in riparian vegetation, particularly in extensive bands of riparian habitat adjacent to rivers or large streams. Less frequently, western red bats will roost in narrow bands of riparian vegetation, such as that present along Dibble Creek. The pallid bat roosts in rock crevices, hollow trees, or buildings. Therefore, there is some potential for the western red bat and the pallid bat to roost in and adjacent to the study site. Both species could also forage in the study area.

Birds

The project site is located outside of the known range of the least Bell's vireo; therefore, this species would not be present in the study site. The burrowing owl uses burrows in open, grassland habitats and would therefore not nest in the study area.

Invertebrates

Elderberry shrubs are the only host plant for the special-status valley elderberry longhorn beetle. No elderberry shrubs were observed on the subject site; however, two elderberry clusters were observed offsite. One is located in riparian habitat on the north bank of Dibble Creek about ten feet upstream of the study area boundary. The other is located in a grassland on the south side of Dibble Creek along a fence roughly 100 feet west of the southwestern property corner. Because the elderberries are off-site, no attempt was made to identify the number of stems present or stem diameters. Because no elderberries are located on the project site, the beetle is unlikely to be directly affected by site development. However, it is possible that the

Dibble Creek corridor, which supports patches of elderberries along its lower reaches, could be used as a dispersal corridor by the beetles, now or in the future.

The monarch butterfly is currently listed as a candidate species by the USFWS. This species lays its eggs exclusively on the milkweed plant and milkweed is a requirement for larval development. No milkweed plants were observed in the study site; therefore, no monarch caterpillars would be present in the project area. As adults, a variety of flowering plants are used as a source of nectar; however due to their volant ability it is unlikely that adult monarchs would be affected by construction activities should they be present in the project area.

Conservancy fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp are associated with vernal pool, vernal swale, and seasonal wetland habitats. No suitable habitat for these species is present on the project site; therefore, they have no potential to be present.

Amphibians and Reptiles

The study area is outside of the known ranges of the California red-legged frog and giant garter snake; therefore, there is no potential for these species to be present. No western pond turtles were observed on the site and the created pond currently does not possess habitat features that would make it suitable for turtles. However, as the pond matures, it may provide suitable basking sites and escape shelter for pond turtles.

General Wildlife Effects

The riparian and woodland habitat types in the project area provide suitable habitat characteristics for a variety of non-special status bird species that are protected under the Migratory Bird Treaty Act and California Fish and Game Code §3503 and §3503.5. There is a high potential for nesting birds to be present on and adjacent to the study site during the breeding season (February 1 through August 31). Vegetation removal could potentially result in direct impacts to nesting birds, while construction work or other activities producing loud noises or artificial lighting could potentially result in indirect adverse effects to nesting birds.

Increased human presence and activity on the project site is expected to include the placement of structures that may necessitate fuels management, including vegetation removal. Expanses of vegetation such as the riparian habitat along Dibble Creek provide a protective corridor for wildlife movement as well as habitat for resident species. In addition, the riparian vegetation provides soil stability along the banks of Dibble Creek, helps maintain water quality, and contributes to essential habitat for rearing fish. The removal of riparian vegetation could result in increased sedimentation and soil erosion, decreased water quality, and the restriction of wildlife movement and protection. Potentially negative impacts to wildlife species could also result from noise and artificial light pollution, the introduction of domestic animals into wildlife habitats, and modifications to drainage patterns within Dibble Creek. Such impacts may occur during and after construction activities are completed.

Streams, Wetlands, and Other Waters

Waters present in the study area are limited to Dibble Creek and the on-site pond. Dibble Creek is a Relatively Permanent Water, as defined by the Army Corps of Engineers, and is subject to the jurisdiction of the Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife. Field observations suggest that substrates in Dibble Creek have been recently moved by mechanical means; continued work in the stream may require issuance or re-issuance of permits by the resource agencies.

The on-site pond is a created feature. Arial imagery prior to 1983 does not show any signature of a wetland or pond on the project site. Therefore, as confirmed with Army Corps of Engineers staff, this artificial pond is not subject to federal jurisdiction, as discussed in the preamble of the November 13, 1986, regulations (33 CFR 328). However, the pond would be subject to state jurisdiction under the Porter-Cologne Act. Under this act, the state has jurisdiction over "all surface waters;" thus, further work within the pond may be subject to regulation by the Regional Water Quality Control Board. Work within the pond may also be regulated by CDFW, particularly if the pond matures into habitat for fish and wildlife resources.

Recommendations

Based on habitat characteristics, four special-status wildlife species currently have the potential to be present in the study site: Central Valley spring-run chinook salmon, steelhead, western red bat, and pallid bat. In addition, there is a potential for nesting birds to be present on the project site during the breeding season. The following mitigation measures (MM) are recommended to avoid impacts to special-status species and other wildlife resources that may be present on the project site:

Fish

To avoid impacts to rearing chinook salmon and steelhead in Dibble Creek, we recommend the following:

MM-1. Eliminate the existing vehicle crossing through Dibble Creek by extending the welded-wire fencing across the current access route.

Implementation of this measure would allow the Dibble Creek riparian corridor to return to natural conditions, which would enhance fish rearing habitat and improve water quality. If the crossing cannot be eliminated, maintenance of access through the stream would likely need to be authorized/reauthorized through a Nationwide Permit from the Army Corps of Engineers, Water Quality Certification from the Regional Water Quality Control Board, and a Lake or Streambed Alteration Agreement from California Department of Fish and Wildlife.

Bats

To prevent impacts to special-status bats, we recommend implementation of the following measure:

MM-2. If trees or snags greater than 12 inches in diameter must be removed, they should be removed between March 1 (or after evening temperatures rise above 45°F, and/or no more than ½" of rainfall within 24 hours occurs) and April 15, or

between September 1 and October 15 (or before evening temperatures fall below 45°F, and/or more than ½" of rainfall within 24 hours occurs), or as otherwise approved by a qualified bat biologist;

If trees or snags greater than 12 inches in diameter must be removed outside of these recommended time frames, a two-step process should be employed to allow bats the opportunity to abandon their roost prior to tree removal:

Day 1: Remove small-diameter trees, brush, and non-habitat features of large trees (branches without cavities, crevices, or exfoliating bark), using chainsaws for cutting, and chippers wherever possible to cause a level of noise and vibration disturbance sufficient to cause bats to choose not to return to the tree for a few days after they emerge to forage.

Day 2: Remove the remainder of the trimmed trees.

Birds

In order to avoid impacts to nesting birds, implementation of the following measure is recommended:

MM-3. Construction, ground disturbance, and vegetation removal activities should be conducted between September 1 and March 31, outside of the nesting bird season. If work occurs during the nesting season (February 1 – August 31), a nesting bird survey shall be conducted by a qualified biologist within seven days of initiation of the planned activity. If active nest(s) are observed on or adjacent to the work site, the biologist shall consult with California Department of Fish and Wildlife staff to determine the necessity for and type of further mitigation, and shall conduct or monitor the implementation of such mitigation.

General Wildlife

To prevent impacts to general wildlife resources, the following mitigation measures are recommended:

MM-4. The partially constructed welded-wire fence separating the building envelope from the Dibble Creek riparian zone shall be completed.

MM-5. No structures other than the recommended fence shall be constructed within 25 feet of the Dibble Creek riparian corridor (the current fence location is representative of the outer limit of the riparian corridor).

A fence between human activities and the riparian habitat surrounding Dibble Creek would further reduce the potential for impacts to aquatic and riparian resources, provide a wildlife movement corridor, protect wildlife from free-roaming domestic animals, and provide for continued growth of riparian vegetation that will buffer wildlife from noise and artificial light. In addition, a building setback of at least 25 feet from the riparian habitat would reduce the need for fuels management within the riparian zone.

Streams, Wetlands, and Other Waters

Implementation of mitigation measures **MM-1, MM-4,** and **MM-5** would protect Dibble Creek, which is a water subject to both state and federal jurisdiction. As noted under **MM-1**, issuance/reissuance of permits by regulatory agencies may be needed if vehicle access through Dibble Creek is maintained. Likewise, regulatory agency permits may be required if subsequent work is undertaken in the created pond. Therefore, we recommend the following:

MM-6. If construction, fuels management, or earth-moving activities are proposed within 25 feet of the pond or Dibble Creek riparian zone, subsequent consultation shall be undertaken to determine if the proposed activity would necessitate review or issuance of permits by state or federal resource agencies (e.g., Army Corps of Engineers, Regional Water Quality Control Board, California Department of Fish and Wildlife).

Please contact me if you have any questions regarding our findings or recommendations.

Sincerely,

Donald Burk
Environmental Services Manager