



State of California – Natural Resources Agency
 DEPARTMENT OF FISH AND WILDLIFE
 Northern Region
 601 Locust Street
 Redding, CA 96001
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
 CHARLTON H. BONHAM, Director



March 4, 2022

Peter Bird, AICP
 City of Shasta Lake
 4477 Main Street
 Shasta Lake, CA 96019
pbird@cityofshastalake.org



SUBJECT: REVIEW OF THE MITIGATED NEGATIVE DECLARATION FOR THE CASCADE BOULEVARD BRIDGE OVER MOODY CREEK, BRIDGE REPLACEMENT PROJECT, STATE CLEARINGHOUSE NUMBER 2022020124, CITY OF SHASTA LAKE, SHASTA COUNTY

Dear Peter Bird:

The California Department of Fish and Wildlife (Department) has reviewed the Mitigated Negative Declaration (MND) dated January 2022 and the Natural Environment Study (NES) dated February 2022, for the above-referenced project (Project). As a trustee for the State's fish and wildlife resources, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and their habitat. As a responsible agency, the Department administers the California Endangered Species Act (CESA) and other provisions of the Fish and Game Code (FGC) that conserve the State's fish and wildlife public trust resources. The Department offers the following comments and recommendations on this Project in our role as a trustee and responsible agency pursuant to the California Environmental Quality Act (CEQA), California Public Resources Code section 21000 et seq. These comments are intended to reduce the Projects impacts on public trust resources.

Project Description

The Project as described in the MND is as follows:

"The City of Shasta Lake is proposing to replace the existing Cascade Boulevard Bridge over Moody Creek (Bridge No. 06C0060) with a new concrete bridge designed to current structural and geometric standards that would provide adequate, reliable, and safe service for traffic. The general land use in the project vicinity consists of commercial and low-density residential uses. The existing roadway at the bridge is classified as a "Major Collector" roadway and accommodates an Average Daily Traffic (ADT) of approximately 2,025 vehicle trips per day (City of Shasta Lake Traffic Counts Report, 2021)."

Peter Bird, AICP
March 4, 2022
Page 2

The Department has the following recommendations and comments as they pertain to biological resources:

Special-Status Plant Species

Mitigation measure BIO-1 states “*A qualified biologist shall conduct a preconstruction survey for special-status plant species within 30 days prior to construction. If special-status plant species are not found, then no further measures are necessary. If special-status plant species are found in the PIA, CDFW will be notified at least 10 days prior to dewatering or construction impacts in the vicinity of any special-status plant species in accordance with the California Native Plant Protection Act of 1977 (CFGF Section 1900-1913) to allow sufficient time to transplant the individuals to a suitable location.*”

The Department recommends modifying measure BIO-1 to state “*A qualified biologist shall conduct a preconstruction survey for special-status plant species ~~within 30 days prior to construction~~ during the appropriate blooming period for each special-status species”, not “within 30 days prior to construction” as stated in BIO-1. Given the extreme drought conditions occurring within the region, the qualified biologist should visit known reference sites of the special-status species in question to determine if the species can be detected this year given the low rainfall amounts that can result in impacts to the blooming period and annual success of many plant species. Botanical surveys should follow the Department’s March 20, 2018, *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*, available here: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959>. If reference sites have been visited and the special-status plants were present there but not at the Project site, then no further mitigation is warranted.*

The 10-day notification process mentioned in BIO-1 is taken from the Native Plant Protection Act but only applies to the 64 state-listed rare plants listed which does not include big-scale balsamroot (*Balsamorhiza macrolepis*), Sulphur Creek brodiaea (*Brodiaea matsonii*), silky Cryptantha (*Cryptantha crinita*), or oval-leaved viburnum (*Viburnum ellipticum*) ([see link](#) to Cal. Code Regs. Tit. 14, § 670.2). The only protections afforded to these species comes from the CEQA process (i.e., avoid, minimize, or mitigate impacts).

If special-status species are found during the botanical surveys, the plants should be marked by a qualified biologist familiar with the species. If the area can be avoided, exclusionary fencing will be placed around the plants and no pedestrian or vehicular entry shall be allowed. If the population cannot remain, the Project Applicant would (1) prepare a restoration plan and reseed with the locally collected seed of the special-status species or (2) purchase and place a conservation easement over a parcel of land that has this species present onsite. Prior to purchase, the Project Applicant should coordinate with the Department. Botanical survey results shall be emailed to the Department at R1CEQARedding@wildlife.ca.gov.

Peter Bird, AICP
March 4, 2022
Page 3

Oak Woodlands

Within Shasta County, oak woodlands continue to be removed resulting in a continuous regional loss of oak woodlands. Oak woodlands are important to a wide range of wildlife species and support higher levels of biodiversity than virtually any other terrestrial ecosystem in California¹. Oak woodlands provide habitat for nearly half of the 632 terrestrial vertebrates species found in the state. Acorns are a key resource for deer, squirrels, turkeys, jays, quail, and bear. Standing dead trees provide an important habitat resource for raptors, bats, salamanders, and lizards. Coarse woody tree material lying on the ground, particularly large logs, is a very important wildlife habitat element because they retain moisture in a seasonally dry ecosystem.

The Department recommends reducing the removal of oaks within the Project Impact Area (PIA) to the minimum necessary. The MND does not identify the quantity of oak trees that will be permanently removed to complete the Project, nor does it specify the species. The MND states black oak (*Quercus kelloggii*) is present but then lists the Vegetation Alliance as *Pinus sabiniana* – *Quercus chrysolepis/Arctostaphylos viscida*. The NES states Great Valley Valley Oak Riparian Forest which is dominated by valley oak (*Quercus lobata*) is present within the Project. The Department recommends confirming which oak species are present and which sensitive habitat types are present. A survey should be conducted to identify the species, number and diameter at breast height of oak trees to be permanently removed for their inclusion in the revegetation plan. Additionally, all Mitigation Measures in BIO-8 should be applied to oaks, including their use as a palette species in the onsite revegetation and monitoring plan.

Riparian Vegetation

Mitigation Measure BIO-8 states in part, “*Where avoidance of riparian vegetation is not shown on the project plans, a revegetation plan and monitoring plan to restore native riparian habitat in the Project vicinity to a self-sustaining, ecologically functioning plant community is required. This action will be sensitive to the habitat needs of CV steelhead and CVSR chinook salmon, and thus will require input from the CDFW. The revegetation plan will be approved during the permitting process.*” Since this is an MND, the revegetation plan and monitoring plan must be approved prior to the approval of the environmental document or at a minimum state the plan will include: (a) the location of the mitigation site; (b) the plant species to be used, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) planting schedule; (e) a description of the irrigation methodology; (f) measures to

¹ CalPIF (California Partners in Flight). 2002. Version 2.0. The oak woodland bird conservation plan: a strategy for protecting and managing oak woodland habitats and associated birds in California (S. Zack, lead author). Point Reyes Bird Observatory, Stinson Beach, CA. <http://www.prbo.org/calpif/plans.html>.

Peter Bird, AICP

March 4, 2022

Page 4

control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. The plan should receive Department approval prior to initiation/impacts. The Department recommends the addition of preserving existing riparian root structures to the maximum extent feasible in BIO-8. Riparian vegetation within areas of temporary disturbance such as the temporary detour should be cut to ground level and left intact in order to encourage natural resprouting post-construction. The Department recommends riparian vegetation be mitigated at a minimum 3:1 ratio and not 2:1 as provided in the MND for the permanent and temporal loss of sensitive riparian habitat.

Nesting Birds

If the Project has the potential to directly impact nesting bird habitat or indirectly disturb nesting birds through audio or visual disturbance, the Department recommends to following measures be implemented to protect nesting birds and raptors protected under FGC sections 3503 and 3503.5:

- a) Conduct vegetation removal and other ground-disturbance activities associated with construction from September 1 through January 31, when birds are not nesting; or
- b) Conduct pre-construction surveys for nesting birds if vegetation removal or ground disturbing activities are to take place during the nesting season (February 1 through August 31). These surveys shall be conducted by a qualified biologist no more than one week prior to vegetation removal or construction activities during the nesting season. If an active nest is located during the preconstruction surveys, a non-disturbance buffer shall be established around the nest by a qualified biologist in consultation with the Department. No vegetation removal or construction activities shall occur within this non-disturbance buffer until the young have fledged, as determined through additional monitoring by the qualified biologist. The results of the pre-construction surveys shall be sent electronically to the Department at R1CEQARedding@wildlife.ca.gov.

Bats

Mitigation measure BIO-6 states “*pre-construction surveys for bat activity shall be conducted within 30 days prior to the start of Project activity within the Project work area by a qualified biologist. If no roosting bats are found, no further mitigation would be necessary. If bats are found roosting in trees within 50 feet of construction activities, CDFW will be consulted and at a minimum, a qualified bat biologist will monitor the bats during initial ground disturbing activities.*”

Peter Bird, AICP

March 4, 2022

Page 5

The NES states that no bats were observed during the surveys conducted in May 2019; however, there was no description of how the bat surveys were conducted (time of day, type of equipment used to detect bats, what habitat was surveyed, etc.). The Department recommends pre-construction surveys occur within one week prior to the start of construction and include the existing bridge structure. If roosting bats or evidence of their use of the structure are observed, the species should be determined by a qualified bat biologist and a humane exclusion plan submitted for approval by the Department.

Trees and structures that contain cavities, crevices and/or exfoliated bark have high potential to be used by various bat species including pallid bat (*Antrozous pallidus*), a California Species of Special Concern. A thorough survey of large trees and the existing bridge structure should be conducted by a qualified biologist familiar with these features to determine if suitable habitat elements are present and being utilized by bats within the Project area. Trees with features potentially suitable for bat roosting should be clearly marked prior to removal.

If removal or disturbance of suitable structures identified to have roosting habitat will occur during the bat maternity season, when young are non-volant (March 1 – Aug 31), or during the bat hibernacula (November 1 – March 1), when bats have limited ability to safely relocate roosts, it could result in significant impacts to bats, species listed as special-status or not, through direct mortality during the roost removal. Impacts to roosts are usually accompanied by high mortality of bats and it is a significant impact because a single colony could consist of the entire local population. The availability of suitable roosting habitat is considered a limiting factor in almost all bat species. Roost site suitability is often based on a narrow range of suitable temperatures, relative humidity, physical dimensions, etc., and many species exhibit high roost site fidelity. Depending on the impact, if any, to the roosting habitat, additional mitigation may be necessary and could include providing replacement or alternate roost habitat such as bat boxes attached to the new bridge structure or designing the bridge with bat roosting habitat. If necessary, humane evictions should be conducted during seasonal periods of bat activity, which may vary by year, location, or species and must be conducted by or under the supervision of a biologist with specific experience conducting exclusions. Humane exclusions for tree roosting bats could consist of a two-day tree removal process whereby the non-habitat trees and understory are removed along with certain tree limbs on the first day and the remainder of the tree on the second day. This two-step process changes the microhabitat of the area causing the bats to vacate the area under their own volition, therefore minimizing mortality and other impacts to bat species. Humane exclusion for bats utilizing bridges would need to be developed by a qualified bat biologist in coordination with the Department.

Peter Bird, AICP
March 4, 2022
Page 6

Lighting

The Department recognizes the adverse effects that artificial lighting has on birds and other nocturnal species. The effects are numerous and include impacts to singing and foraging behavior, reproductive behavior, navigation, and altered migration patterns. To minimize adverse effects of artificial light on wildlife, the Department recommends that lighting fixtures associated with the Project be downward facing, fully shielded, and designed and installed to minimize photo-pollution and spillover of light onto adjacent wildlife habitat. This includes construction lighting and any permanent light fixtures.

Central Valley Steelhead and Central Valley Spring-Run Chinook Salmon

Mitigation Measure BIO-2 states in part *“If surface water is present, the city will retain qualified biologists with expertise in the areas of anadromous salmonid biology, including relocating salmonids; salmonid/habitat relationships; and biological monitoring of salmonids. The biologists will monitor the construction site during placement and removal of diversion dams, and channel diversions to ensure that any adverse effects to salmonids are minimized. In the event a salmonid is found within the work area prior to dewatering, a qualified biologist(s) will be on site to capture, handle, and safely relocate salmonids.”*

Central Valley Spring-Run Chinook Salmon are designated as threatened under CESA and require authorization for take pursuant to section 2081(b) of FGC as long as the take is incidental to otherwise lawful activities and if certain conditions are met. Take is defined in FGC section 86 as, *“hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.”* Based on the Project description and mitigation measures, it is the Department’s assessment take of CESA-listed species may occur if work is done while water is present.

Issuance of a CESA Permit is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will result in take of a CESA-listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required to obtain a CESA Permit. Information on how to obtain a CESA permit is available here: <https://wildlife.ca.gov/Conservation/CESA/Permitting>.

Trenching

If trenching will occur as a result of Project activities, trenches should be covered securely, or a ramp should be provided in the trench to prevent wildlife entrapment. If pipes are left out onsite, they should be inspected for animals prior to burying, capping, moving, or filling. The Department recommends a mitigation measure be developed and included in the final environmental document or project approval.

Peter Bird, AICP
March 4, 2022
Page 7

Lake or Streambed Alteration Agreement

For any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (which includes associated riparian resources) of a river or stream, or use material from a streambed, the Department will require a Lake and Streambed Alteration (LSA) Notification, pursuant to FGC section 1600 et seq., from the applicant. Project activities, which would be subject to LSA Notification requirements, include construction of stormwater features that discharge on or over the streambank and modification of associated riparian resources growing on the bank. Issuance of an LSA Agreement is subject to CEQA. The Department, as a responsible agency under CEQA, will consider the CEQA document for the Project. The CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for completion of the agreement. To obtain information about the LSA notification process, please access our website at <https://www.wildlife.ca.gov/Conservation/LSA>.

Survey Results

The results of the pre-construction surveys shall be sent electronically to the Department at R1CEQARedding@wildlife.ca.gov. If any special-status species are found during surveys, the Department requests that California Natural Diversity Database (CNDDDB) forms be filled out and sent to Sacramento and a copy of the form be sent to the regional office at the above address. Instructions for providing data to the CNDDDB can be found at: <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>.

If you have any questions, please contact Amy Henderson, Senior Environmental Scientist (Specialist), at (530) 598-7194, or by e-mail at R1CEQARedding@wildlife.ca.gov.

Sincerely,

DocuSigned by:

1D82ADE7303A474...

Tina Bartlett, Regional Manager
Northern Region

Peter Bird, AICP

March 4, 2022

Page 8

ec: Matthew Roberts, Senior Project Manager
US Army Corps of Engineers
Matthew.J.Roberts@usace.army.mil

Lynn Coster
Central Valley Regional Water Quality Control Board
Lynn.Coster@waterboards.ca.gov

State Clearinghouse
State.Clearinghouse@opr.ca.gov

Habitat Conservation Planning Branch