State of California
Department of Fish and Wildlife

Memorandum

Date: August 27, 2021

To: Ms. Terry Ash
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From: Ms. Stacy Sherman, Acting Regional Manager
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Subject: Rector Reservoir Bypass Valve Project, Draft Environmental Impact Report, SCH No. 2020070017, Napa County

In a memorandum dated August 5, 2020, the California Department of Fish and Wildlife (CDFW) provided comments on the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the Rector Reservoir Bypass Valve Project (Project). Since then, CDFW personnel have reviewed the DEIR for the Project. CDFW is submitting comments on the DEIR to inform the California Department of General Services, the Lead Agency, of our concerns regarding potentially significant impacts to sensitive resources associated with the proposed Project.

CDFW is a Trustee Agency pursuant to the California Environmental Quality Act (CEQA) and is responsible for the conservation, protection, and management of the State's biological resources (Pub. Resources Code, § 21000 et seq.; Cal. Code Regs., tit. 14, § 15386). CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as permits under the California Endangered Species Act (CESA) or Native Plant Protection Act, Lake and Streambed Alteration (LSA) Program, and other provisions of the Fish and Game Code that afford protection to the State's fish and wildlife trust resources.

PROJECT LOCATION AND ENVIRONMENTAL SETTING

The Project is located at the Rector Creek Dam (Dam) and Reservoir approximately 2.5 miles northeast of the Town of Yountville, Napa County, State of California; Latitude 38.44109º, Longitude -122.34629º. The property address is 7300 Silverado Trail, Napa, CA 94558.

Three main tributaries contribute to Rector Creek Reservoir storage: North Fork Rector Creek; mainstem Rector Creek; and South Fork Rector Creek. The drainage area contributing to the Rector Creek Reservoir is approximately 6,971 acres and extends upstream easterly to Atlas Peak Mountain. Rector Creek downstream of the Dam runs west to its confluence with Conn Creek, a direct tributary to the Napa River. The Project area is bounded by disturbed/ruderal areas to the north, including the CalFire Training

Facility and California Department of Veterans Affairs (CalVet) Water Treatment Plant; open space to the south; Rector Reservoir to the east; and Silverado Trail and other developments to the west, including CDFW's Silverado Fisheries Base, located approximately 0.35 miles downstream of the Dam. Vegetation communities at the Project site are predominantly degraded riparian scrub, dispersed with existing rock boulders on the northern creek bank. Species include willows (*Salix* sp.), Fremont cottonwood (*Populus fremontii*), California wild grape (*Vitis californica*), two coast live oak trees (*Quercus agrifolia*), and invasive weeds such as Italian thistle (*Cardus pycnocephalus*).

PROJECT DESCRIPTION

The Project is in response to a complaint filed against CalVet for failing to allow sufficient water to pass through the Dam to keep fish below the Dam in good condition, as required by Fish and Game Code section 5937. The Project includes the following components: (1) construction of a 12-inch diameter diversion pipeline to convey water from the existing 30-inch diameter water line at the base of the Dam to a discharge point in Rector Creek approximately 350 feet downstream of the Dam, (2) installation of a bypass valve to control the rate of water discharged to Rector Creek, (3) the installation of rock riprap at the outfall of the diversion pipeline and upstream along the right bank to prevent channel incision and further bank erosion; (4) installation of an underground electrical conduit between the bypass valve and CalVet Water Treatment Plant, (5) implementation of interim flow releases as shown in Table 4-1 of the *Rector Creek Preliminary Instream Flow and Stream Habitat Assessment*, prepared by Stillwater Sciences, dated July 2019; and (6) eventual adoption and implementation of a long-term minimum flow release schedule.

COMMENTS AND RECOMMENDATIONS

Notice of Preparation Comments

The DEIR does not appear to address all of the comments in our August 5, 2020 memorandum responding to the Notice of Preparation. Specifically, the DEIR does not answer the following questions: (1) *How will adequate flows be maintained to CDFW's Silverado Fisheries Base to avoid interruptions?* (i.e., after completion of the Project, how will 2.5 cubic feet per second, the base flow needed to allow the Silverado Fisheries Base to operate without interruptions, be provided in perpetuity?), and (2) *How will fish and wildlife and their habitat between the dam and Silverado Fisheries Base be affected by the Project?* the Project could have a significant impact on potentially critical tailwater habitat for juvenile steelhead (*Oncorhynchus mykiss*) summer rearing between the Dam and the Silverado Fisheries Base discharge point into Rector Creek, approximately 0.35 miles downstream of the Dam. The *Rector Creek Preliminary Instream Flow and Stream Habitat Assessment* (Stillwater Sciences 2019) states: "Adult *O. mykiss* have been observed in the reach, and juveniles have been observed near the dam, indicating some limited successful spawning has occurred in the past." The Interim Environmental Flow Release Schedule references discharges from the Silverado Fisheries Base to Rector Creek; however, this may result in

insufficient flow releases to sustain summer steelhead habitat between the Dam and the Silverado Fisheries Base. CDFW recommends that the DEIR address question (2) above in detail and that the interim environmental flow release schedule include sufficient release from the Dam to keep steelhead habitat between the Dam and the Silverado Fisheries Base discharge point into Rector Creek in good condition.

Long-Term Environmental Flow Releases

The DEIR does not adequately address the timing by which the development of a long-term minimum flow release schedule will be prepared and implemented. Section 2.7.3 of the *Rector Creek Preliminary Instream Flow and Stream Habitat Assessment* states:

"Following additional data collection and synthesis, the timing, magnitude, and conditions of the Rector Creek environmental flow release schedule will be reassessed based on the condition of the fishery and updated hydrology of Rector Creek."

CDFW recommends that the DEIR include a timeline with target dates by which specific studies will be completed, and when the long-term minimum flow release schedule will be prepared for CDFW review and approval under an LSA Agreement for the Project. CalVet should consider using the recently developed California Environmental Flows Framework (CEFF) approach for re-evaluating and refining the interim environmental flow schedule. The CEFF is a management approach that provides technical guidance to help managers efficiently develop scientifically defensible environmental flow recommendations. Environmental flow recommendations consist of instream flow criteria that balance human and ecological needs for water. For more information, see the CEFF website: https://ceff.sf.ucdavis.edu.

As additional data is collected to evaluate the effectiveness of the interim bypass flow schedule in providing suitable habitat downstream of the Dam, CDFW would like to work in coordination with CalVet on an adaptive management strategy where we can collaborate and discuss monitoring results and determine what changes, if any, need to be made to the flow release schedule. This coordination will ensure that field monitoring results are informing future stream flow release operations.

Fish Populations and Conditions

The *Rector Creek Preliminary Instream Flow and Stream Habitat Assessment* recommends additional data collection to re-evaluate and refine the timing, magnitude, and conditions of Rector Creek environmental flow release. CDFW recommends the inclusion of wet/dry mapping coupled with water quality monitoring (i.e., temperature and dissolved oxygen) in pools during the summer/fall months to determine the extent and quality of juvenile summer rearing habitat.

California Red-Legged Frog (*Rana draytonii*)

The Project is within the range[1] of the California red-legged frog, a species listed as threatened under the Federal Endangered Species Act (ESA) and a California Species of Special Concern (SSC). California red-legged frogs require a variety of habitats, including aquatic breeding habitats and upland dispersal habitats. Breeding sites of the species are in aquatic habitats including pools and backwaters within streams and creeks, ponds, marshes, springs, sag ponds, dune ponds and lagoons. Additionally, California red-legged frogs frequently breed in artificial impoundments such as stock ponds (U.S. Fish and Wildlife Service (USFWS) 2002). Breeding sites are generally found in deep, still, or slow-moving water (>2.5 feet) and can have a wide range of edge and emergent cover amounts. California red-legged frogs can breed at sites with dense shrubby riparian or emergent vegetation, such as cattails or overhanging willows, or can proliferate in ponds devoid of emergent vegetation (i.e., stock ponds). Habitat includes nearly any area within one to two miles of a breeding site that stays moist and cool through the summer; this includes non-breeding aquatic habitat in pools of slow-moving streams, perennial or ephemeral ponds, and upland sheltering habitat such as rocks, small mammal burrows, logs, densely vegetated areas, and even man-made structures (i.e., culverts, livestock troughs, spring-boxes, and abandoned sheds) (USFWS$_b$ 2017).

California red-legged frog populations throughout the State have experienced ongoing and drastic declines and many have been extirpated (Thomson et al. 2016). Habitat loss from growth of cities and suburbs, mining, overgrazing by cattle, invasion of nonnative plants, impoundments, water diversions, stream maintenance for flood control, degraded water quality, and introduced predators, such as bullfrogs are the primary threats to the species (Thomson et al. 2016, USFWS 2017$_b$). The Project could injure or kill California red-legged frogs if they occur on-site, resulting in a substantial reduction of the population. Therefore, pursuant to CEQA Guidelines section 15065, subdivision (a)(1) Mandatory Findings of Significance, Project activities have the potential to significantly impact California red-legged frog, a species considered threatened pursuant to CEQA Guidelines section 15380, subdivision (c)(2). To reduce impacts to less than significant, CDFW recommends that Mitigation Measure BIO-5 be revised to include the following:

- After the qualified biologist has completed a California red-legged frog habitat assessment in accordance with the *Revised Guidance on Site Assessments and Field Surveys for the California red-legged frog* (U.S. Fish and Wildlife Service 2005) (survey protocol), the results of the habitat assessment shall be submitted to USFWS and CDFW for review and written acceptance prior to starting Project activities. If after review of the results of the habitat assessment, USFWS or CDFW determines that surveys are warranted, then surveys shall be conducted in accordance with the USFWS survey protocol prior to starting Project activities. Results of surveys shall also be submitted to CDFW for review and approval in writing.

[1] The California red-legged frog range map is available at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=7104&inline=1

- If the Project may impact California red-legged frog based on the results of the habitat assessment and any surveys, the Project shall obtain authorization from USFWS for impacts to the species prior to project start.

- If a California red-legged frog is discovered during the habitat assessment, surveys, or during Project construction, CalVet and its contractors shall delay/cease work immediately and contact CDFW and USFWS within 24 hours. In this event, Project work shall not resume/proceed until the frog, through its own volition, moves out of harm's way and CDFW and USFWS have provided permission in writing to proceed with the Project.

Foothill Yellow-Legged Frog (*Rana boylii*)

The Project is within the range[2] of the Northwest/North Coast clade of foothill yellow-legged frog, an SSC, and California Natural Diversity Database (CNDDB) occurrences exist in upper Rector Creek, upstream of the reservoir. Different life stages of the species use a variety of habitat types for development, foraging, and overwintering (Thompson et al. 2016). The species utilizes upland habitats adjacent to streams and have been observed 164 feet away from streams under rocks or other refugia (Nussbaum et al. 1983; Thompson et al. 2016; Zweifel 1955). Little information is known about foothill yellow-legged frog terrestrial movements and the species may travel farther from streams. The species also occur in swales or other moist areas.

The Northwest/North Coast genetic clade of foothill yellow-legged frog has been extirpated from much of the southern segment of its range in the San Francisco Bay Area and is at risk from urbanization, severe wildland fires, and climate change (*ibid.*). The Project may result in injury or mortality to foothill yellow-legged frog through crushing, killing, or injuring individuals from vehicles, equipment, and workers during Project activities. Therefore, Project impacts to foothill yellow-legged frog would be potentially significant. To reduce impacts to less than significant, CDFW recommends that Mitigation Measure BIO-6 be replaced with the following measure:

A qualified biologist shall conduct a habitat suitability assessment in the vicinity of the Project to determine where foothill yellow-legged frogs may occur in or adjacent to the Project area, including 500 feet upstream and downstream of the Project area and 50 feet from the streambed. If suitable habitat is identified, the biologist shall provide a foothill yellow-legged frog survey methodology to CDFW for review and approval a minimum of 30 days prior to Project construction. No Project activities shall begin until foothill yellow-legged frog surveys have been completed using a method approved by CDFW in writing. The survey methodology shall target all life stages and include wet and dry stream surveys as possible. Surveys within the Project area shall include searching cavities under rocks and logs, within vegetation such as sedges and other clumped vegetation, and under undercut banks. Surveys should be conducted at different times of day and under variable weather conditions if possible. The qualified

[2] The foothill-yellow-legged frog range map is available at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=1501&inline=1

biologist shall also conduct a preconstruction survey for the species within 24 hours prior to construction activities before construction equipment mobilizes to the Project area. The qualified biologist shall have a minimum of two years conducting habitat assessments and surveys for foothill yellow-legged frog, with detections. If any foothill yellow-legged frogs are found, the biologist shall prepare an avoidance, minimization, and relocation plan and submit it to CDFW for written acceptance, and implement the plan prior to and during Project activities as applicable.

Western Pond Turtle (*Actinemys marmorata*)

The Project is within the range[3] of western pond turtle, an SSC, and the Project site contains suitable habitat for the species. Western pond turtle has been observed in Conn Creek, approximately 1.4 miles downstream of the Project site. The Project may result in loss of western pond turtle adults, young, or their nests, or disturbance to this species from construction activities. Western pond turtle is declining throughout its range, primarily due to loss of habitat from urbanization and conversion to agriculture (Spinks et al. 2003). Additionally, bouts of prolonged drought have exacerbated species decline (Purcell et al. 2017). Based on the above, the Project would potentially substantially adversely affect western pond turtle. Therefore, Project impacts to western pond turtle would be potentially significant. To reduce impacts to less-than-significant, CDFW recommends that Mitigation Measure BIO-6 be replaced with the following:

A qualified biologist shall conduct a habitat suitability assessment of the Project site to determine where western pond turtles may occur in or adjacent to the Project, prior to starting Project activities. In areas of suitable habitat, the qualified biologist shall conduct a preconstruction survey for the species within 48 hours prior to construction activities before construction equipment mobilizes to the project area. If any pond turtles or their nests are found, the biologist shall prepare a relocation plan and submit it to CDFW for written acceptance prior to starting Project activities, and then implement the plan. A pond turtle habitat improvement plan shall also be prepared and implemented if required by CDFW. Construction activities shall avoid all pond turtles and their nests including an appropriate buffer as determined by the qualified biologist.

Nesting Birds

Mitigation Measure BIO-7 requires that a qualified biologist perform a nesting bird survey within 14 days prior to the start of Project activities, if Project activities need to occur during the nesting season. While CDFW generally agrees with implementation of this measure, we recommend that the survey be conducted within 7 days of starting Project activities, so that nesting birds are less likely to begin nesting on the Project site between the time of the survey and the start of Project work, thus causing Project delays. If there is a lapse in construction of 7 days or more during the nesting season, a

[3] The western pond turtle range map is available at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2658&inline=1

qualified biologist shall conduct an additional survey and follow the measures outlined in Mitigation Measure BIO-7, if applicable, prior to resuming work.

The LSA Agreement issued by CDFW will likely include the above recommended mitigation measures, as applicable.

ENVIRONMENTAL DATA

CEQA requires that information developed in EIRs and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special-status species and natural communities detected during Project surveys to CNDDB. The CNNDB online field survey form and other methods for submitting data can be found at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

FILING FEES

CDFW anticipates that the Project will have an impact on fish and/or wildlife, and assessment of filing fees is necessary (Fish & G. Code, § 711.4; Pub. Resources Code, § 21089). Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW.

CDFW appreciates the opportunity to provide comments on the DEIR for the proposed Project and is available to meet with you to further discuss our concerns. If you have any questions, please contact Mr. Garrett Allen, Environmental Scientist, at Garrett.Allen@wildlife.ca.gov; or Ms. Melanie Day, Senior Environmental Scientist (Supervisory), at Melanie.Day@wildlife.ca.gov.

cc: State Clearinghouse (SCH No. 2020070017)

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