



STATE OF CALIFORNIA • NATURAL RESOURCES AGENCY

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DEPARTMENT OF FISH AND WILDLIFE

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August 25, 2023

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Tuolumne County Resources Conservation District

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**Subject: Pine Mountain Lake Fuel Reduction Project (Project)
Initial Study (IS)/Mitigated Negative Declaration (MND)
SCH No. 2023070656**

Dear Lindsay Mattos:

The California Department of Fish and Wildlife (CDFW) received an Initial Study (IS) and Notice of Intent to Adopt a Mitigated Negative Declaration (MND) from the Tuolumne County Resources Conservation District for the Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines¹ § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code may be required.

Fully Protected Species: CDFW has jurisdiction over fully protected species of birds, mammals, amphibians and reptiles, and fish, pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Take of any fully protected species was previously prohibited and CDFW was not able authorize their incidental take. Senate Bill No. 147 (SB 147), which became effective on July 1, 2023, amended Fish and Game Code sections 3511, 4700, 5050, and 5515 to authorize CDFW to issue a permit under CESA that authorizes the take of a fully protected species resulting from impacts attributable to the implementation of specified projects, (such as water infrastructure, transportation, wind, and solar) if certain conditions are satisfied.

Unlisted Species: Species of plants and animals need not be officially listed as Endangered, Rare, or Threatened (E, R, or T) on any State or Federal list to be considered E, R, or T under CEQA. If a species can be shown to meet the criteria for E, R, or T, as specified in the CEQA Guidelines (Cal. Code of Regs. tit. 14, § 15380), CDFW recommends it be fully considered in the environmental analysis for the Project.

Nesting Birds: CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include, sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

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Water Pollution: Pursuant to Fish and Game Code Section 5650, it is unlawful to deposit in, permit to pass into, or place where it can pass into "Waters of the State" any substance or material deleterious to fish, plant life, or bird life, including non-native species. It is possible that without mitigation measures, Project activities could result in pollution of a "Waters of the State" from increased sediment in storm water runoff or construction related erosion. This could impact the fish and wildlife resources by causing increased sediment input and other Project-related activities. The Regional Water Quality Control Board and U.S. Army Corps of Engineers also has jurisdiction regarding discharge and pollution to "Waters of the State."

PROJECT DESCRIPTION SUMMARY

Proponent: Tuolumne County Resources Conservation District

Objective: The Project proposes to reduce fuel loading and remove ladder fuels to build a sustainable and defensible fuel break. Project activities will be conducted on approximately 640 acers of Wildland Urban Interface (WUI). Fuel reduction will be primarily conducted by mechanical mastication with a secondary method of herbivory. Project objectives include reducing the release of carbon dioxide during wildfire events and establishing a fire resilient and healthy forest.

Location: The Project is located direct east and adjacent to the Pine Mountain Lake community in Tuolumne County, California. The Project is north of Highway 120, southeast of the Pine Mountain Lake Airport. Elevation ranges from 2,500 to 3,100 feet. The Project is located in Sections 13, 23, 24, 25, and 26 of Township 13 south, Range 16 east, Mount Diablo Baseline and Meridian.

Timeframe: Beginning fall 2023

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist the Tuolumne County Resources Conservation District in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the CEQA document prepared for this Project.

There may be special status resources present in and adjacent to the Project area (CDFW 2023). These resources may need to be evaluated and addressed

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prior to any approvals that would allow ground disturbing activities. CDFW is concerned with potential impacts to special-status species including, but not limited to, the State endangered and federally proposed listed as endangered foothill yellow-legged frog (*Rana boylei*); State endangered and fully protected bald eagle (*Haliaeetus leucocephalus*); State Endangered great gray owl (*Strix nebulosa*); the State candidate endangered Crotch's bumble bee (*Bombus crotchii*), the State Species of Special Concern northern goshawk (*Accipiter gentilis*), California spotted owl (*Strix occidentalis occidentalis*), western pond turtle (*Actinemys marmorata*); special status plants, and water and riparian resources.

Please note that the California Natural Diversity Database (CNDDDB) is populated by and records voluntary submissions of species detections. As a result, species may be present in locations not depicted in the CNDDDB but where there is suitable habitat and features capable of supporting species. A lack of an occurrence record in the CNDDDB does not mean a species is not present. In order to adequately assess any potential Project-related impacts to biological resources, surveys conducted by a qualified wildlife biologist/botanist during the appropriate survey period(s) and using the appropriate protocol survey methodology are warranted in order to determine whether or not any special status species are present at or near the Project area.

Project Description Shortcomings

Issue: Project specific details are not included in the IS/MND, including but not limited to: where mastication will occur; best management practices for mastication Project activities (e.g. use of equipment, storage, refueling, cleaning, etc.); species, stocking rates and timing of prescribed herbivory; if/how herbivory species will be confined (i.e. will fences be installed, if so, where), and for how long; best management practices for prescribed herbivory Project activities; additional details on what vegetation is targeted for removal and what vegetation will be retained; if other prescription methods would be utilized, and if so, the details of those prescription methods. The IS/MND Greenhouse Gas Emissions section includes some information regarding targeted understory species, however, based on the information in the IS/MND it appears any vegetation that is considered a ladder fuel can, or will be, removed by mastication and/or herbivory across the entirety of the 640 acre Project area, (excluding the watercourse and lake protection zones (WLPZ) where default understory and overstory retention standards are included, and the retention of oak trees over 12-inches in diameter). Further, information in the IS/MND indicates that live trees and snags may be removed, and the IS/MND includes tribal cultural mitigation measures for the

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installation of fire control lines and prescribed burning. It is therefore assumed Project activities will include the removal of live trees and snags, and prescribed fire will be utilized, however details of which are not included in the IS/MND.

An intent of CEQA is to make sure relevant information is not only disclosed but written in a manner that will be meaningful and useful to decision makers and to the public (Pub. Resources Code, § 21003). Currently, the IS/MND indicates that the Project's impacts would be less than significant with the implementation of mitigation measures. However, as currently drafted, the IS/MND is not sufficiently clear and detailed to permit CDFW to conduct an adequate and effective review of the potentially significant impacts to biological resources. CDFW recommends the CEQA document prepared for this Project includes a clear and detailed Project description.

The CEQA Guidelines (Cal. Code Regs. tit. 14, §15370) requires mitigation measures to "avoid, minimize, rectify, reduce or eliminate" those project impacts that are potentially significant. It is the responsibility of the Project proponent and the Lead Agency to ensure that mitigation measures listed in the IS/MND are feasible, measurable, and implemented and enforced. Absent the measures in the IS/MND meeting the CEQA Guidelines, CDFW does not concur that the impacts to biological resources and the species listed in this letter can be reduced to less than significant. If significant environmental impacts will occur as a result of Project implementation and cannot be mitigated to less than significant levels, an MND would not be appropriate. When an Environmental Impact Report (EIR) is prepared, the specifics of mitigation measures may be deferred, provided the lead agency commits to mitigation and establishes performance standards for implementation. CDFW recommends that the CEQA document provide quantifiable and enforceable measures as needed that will reduce impacts to less than significant levels.

Environmental Setting and Mitigation Measures: Related Impact Shortcoming

Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS?

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Comment 1: Great Gray Owl (GGO)

Section: Mitigation Measures (page 22), Biological Resources (pages 34 & 38)

Issues and Impacts: The IS/MND does not adequately analyze Project impacts to GGO, which are known to occur in the Project area (CDFW 2023). GGO in California are primarily restricted to the Sierra Nevada mountains. Although it is difficult to estimate population sizes, surveys suggest that populations of GGOs in California have declined (Wu et al. 2016). The GGO population in California is extremely small and is isolated from other GGO populations putting the species in danger of extinction within the State. Hull et. al (2010) indicates that the Sierra Nevada population is a distinct lineage with respect to the larger species range in North America and should be designated as a separate subspecies based on molecular data and life history differences. GGO generally nest in closed canopy forested areas, usually within 0.25 miles of a meadow or meadow complex totaling 10 acres where they forage for pocket mice and voles. Meadows and meadow complexes and adjacent timber stands in the Project area may be highly suitable GGO foraging, roosting and nesting habitat. Maintaining and enhancing these areas in a condition that can support the foraging and roosting needs of GGO breeding pairs and in a condition that provides potential future nesting sites for expanding local populations is an important component of statewide GGO conservation.

The IS/MND indicates that an adult GGO was seen on the Project area and a "roost/nest tree" was located. The IS/MND indicates that GGO surveys were conducted, however, survey results are not included in the IS/MND, and it is unclear if a qualified biologist conducted protocol level surveys, where surveys were conducted, the location of the roost/nest tree in relation to Project activities, and if a roost tree or nest tree was found. It is also unclear where suitable nesting habitat for the species is located in the Project area and surrounding habitat, and past usage of the Project area by GGO.

IS/MND Mitigation Measure Biological Resources 2 (MM – BIO 2) and Mitigation Measure Biological Resources 3 (MM – BIO 3)

Surveys: IS/MND MM – BIO 2 (which includes measures for several species, including the GGO) states in part, that a Registered Professional Forester (RPF) or RPF designee will determine occupancy status for all GGO nests known to occur within a 0.25 mile of proposed Project activities prior to the start of Project activities during the year of disturbance. It is unclear where previously known GGO nest sites are located, and as stated above, if protocol level surveys have been conducted by a qualified biologist. It is

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also unclear when known nest sites will be assessed prior to Project activities, if a qualified biologist will conduct the assessment, and how occupancy will be determined.

Avoidance: IS/MND MM – BIO 2 states if a nest is found to be occupied by brooding GGOs then a “disturbance” buffer will be established around the nest, and in the following bullet states 0.25-mile radius circle for GGO for the period of March 1 to August 15th, or until the chicks have fledged the nest. MM – BIO 3 (which is specific to GGO) states a 0.25 mile no work buffer will be placed around the GGO nest tree until chicks have fledged. These mitigation measures are confusing and conflicting. For example, MM – BIO 2, as written, indicates a disturbance buffer would be established around the nest, rather than a no disturbance buffer. CDFW assumes that a no disturbance buffer is what is intended by the measure. It is also unclear who will determine when chicks have fledged and when the buffer would be removed.

MM – BIO 2 also indicates that if unoccupied nests are found, a protection zone will be established around the current activity center. It is unclear what will or will not occur within this protection zone, the size of the protection zone, and who will determine the location, size, and mitigation measures for the protection zone.

The IS/MND, as written, and in the context of the proposed Project's activities and declining population trend, impacts of the Project on local and regional populations of GGO may be significant including the possibility of take (pursuant to Fish and Game Code § 86). Potentially significant impacts associated with the Project's activities include destruction of eggs, reduced reproductive success, nest abandonment, reduction in health and vigor of eggs or young, and direct mortality of individuals. Primary threats to GGOs include livestock grazing, timber harvest, fires, climate change, disease, human activities (vehicles, land development and rodent-control), as well as risks associated with small population sizes (Williams 2012, Wu et al. 2016). Vegetation removal may impact GGOs as they require perches for foraging and roosting cover (Zeiner et al. 1990). The removal of herbaceous vegetation can impact the suitability of habitat for the owls' prey species (i.e., small mammals). Mortality from road use has been well documented in owls (Loos and Kerlinger 1993, Varland et al. 1993, Newton et al. 1997). Noise from road use, generators, and other equipment may disrupt GGO foraging, which primarily use hearing to hunt. Also, exposure to vehicle noise has been shown to increase stress hormone levels in some owl species (Hayward et al. 2011).

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Recommended Potentially Feasible Mitigation Measure(s)

To reduce potential impacts to GGO, CDFW recommends incorporating the following measures. CDFW recommends that these measures be made a condition of Project approval.

Mitigation Measure 1a: GGO Surveys

CDFW recommends that focused GGO surveys be conducted by qualified biologists familiar with GGO prior to disturbing activities, and adherence to the protocol prepared by Beck and Winter (2000) for the United States Forest Service. A copy of the great gray owl protocol can be downloaded at: <https://wildlife.ca.gov/Conservation/Survey-Protocols#377281284-birds>. If variances to this protocol are proposed, CDFW recommends the Project proponent consult with CDFW to determine if proposed changes to this protocol are appropriate. Submission of survey results to CDFW is recommended. Information submitted may include, but is not limited to, a full habitat assessment and survey results.

Mitigation Measure 1b: GGO Avoidance

CDFW recommends a 0.5 mile no disturbance buffer around any active GGO nest if disturbing activities are to occur during the GGO nesting season (approximately March 1 through August 15) and fledging season (approximately until September 30th) which would encompass the time that young disperse from nest stands. CDFW recommends that no disturbance buffer be maintained until young have fledged, and only lifted after a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.

Mitigation Measure 1c: GGO Take Authorization

If take cannot be avoided, acquisition of an Incidental Take Permit (ITP) for GGO is necessary prior to Project implementation, pursuant to Fish and Game Code § 2081 (b) to comply with CESA. Take authorization is issued only when take is incidental to an otherwise lawful activity, the impacts of the take are minimized and fully mitigated, the applicant ensures there is adequate funding to implement any required measures, and take is not likely to jeopardize the continued existence of the species.

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Comment 2: Bald Eagle (BAEA)

Section: Mitigation Measures (page 22), Biological Resources (pages 34 & 38)

Issue and Impacts: The IS/MND does not adequately analyze Project impacts to the BAEA, and there is a known bald eagle nest adjacent to Pine Mountain Lake, approximately 0.75 miles from the Project boundary (CDFW 2023). Bald eagles were near extinction in California in the 1970s when it was first listed as endangered primarily as a result of the pesticide DDT. The species numbers in California have grown since that time, and breeding pairs in California has been growing gradually (CDFW 2023a). BAEAs generally build nests on trees (preferring mature/old-growth trees), snags, cliffs, and rock promontories, usually with a dominant view of the surrounding landscape. In forested areas BAEA generally select the tallest trees that can support a nest, and breeding habitats are mainly near reservoirs, lakes, and rivers. It is unclear if there is suitable nesting habitat for the bald eagle within the Project area, and if nesting BAEA are present, could be impacted by Project activities.

IS/MND Mitigation Measure Biological Resources 2 (MM – BIO 2)

Surveys: IS/MND MM – BIO 2 states in part that a RPF or RPF designee will determine occupancy status for all BAEA known to occur within a 0.25 mile of proposed Project activities prior to the start of Project activities during the year of disturbance. This appears to indicate that there are known BAEA nest sites within 0.25 miles of the Project area. It is unclear if a habitat assessment has been conducted, where suitable nesting habitat exists within the Project area, if nesting surveys have been or will be conducted, and where current known nest sites occur in relation to Project activities. It is also unclear when known nest sites will be assessed prior to Project activities, if a qualified biologist will conduct the assessment, and how occupancy will be determined.

Avoidance: IS/MND MM – BIO 2 states in part that if a nest is found to be occupied by brooding BAEA then a “disturbance” buffer will be established around the nest, and in the following bullet states 0.25-mile radius circle for these species for the period of March 1 to August 15th, or until the chicks have fledged the nest. MM – BIO 2, as written, indicates a “disturbance” buffer would be established around the nest (again, CDFW assumes a no disturbance buffer is the intended meaning). It is also unclear who will determine when chicks have fledged and when a buffer would be removed.

MM – BIO 2 also indicates that if unoccupied nests are found, a protection zone will be established around the current activity center. It is unclear what will or will not occur within this protection zone, the size of the protection zone, and who will determine the location, size, and mitigation measures for the protection zone.

The IS/MND, as written and in the context of the proposed Project's activities impacts of the Project on local and regional populations of BAEA may be significant if the species is present. Potentially significant impacts associated with the Project's activities include inadvertent entrapment, destruction of eggs, reduced reproductive success, nest abandonment, reduction in health and vigor of eggs or young, and direct mortality of individuals. Current threats to the species include habitat loss and modification from development and roads, timber harvest, electrocutions, shootings (poaching), collision with infrastructure (e.g., vehicle and wind), human disturbance, and environmental contaminants (pesticides and lead poisoning) (CDFW 2023a). Vegetation removal may impact BAEA that use large trees for nesting and cover (Zeiner et al. 1990). Roads can be a source of mortality for raptors, and they have also been shown to decrease reproductive success of eagles (Anthony and Isaacs 1989, Varland et al. 1993, Trombulak and Frissell 2000). Noise from road use, generators, and other equipment may disruptive bald eagle foraging, and exposure to vehicle noise has been shown to increase stress hormone levels in some raptor species (Hayward et al. 2011). The level of impact depends on how close the road is to nest site, how much use it gets, and how accustomed to road noise any particular pair is.

Recommended Potentially Feasible Mitigation Measure(s)

To reduce potential impacts to BAEA, CDFW recommends incorporating the following measures. CDFW recommends that these measures be made a condition of Project approval.

Mitigation Measure 2a: BAEA Habitat Assessment and Surveys

CDFW recommends a qualified biologist conduct a habitat assessment to determine if there is suitable nesting habitat for the BAEA, and if suitable habitat is found, a qualified biologist conduct protocol level nesting surveys for the species. CDFW recommends following the Protocol for Golden Eagle Occupancy, Reproduction, and Prey Population Assessment (Driscoll 2010), and the Protocol for Evaluating Bald Eagle Habitat and Populations in California (Jackman and Jenkins 2004). Submission of survey results to CDFW is recommended. Information submitted may include, but is not limited to, a full habitat assessment and survey results.

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Mitigation Measure 2b: BAEA Avoidance

CDFW recommends a 0.5 mile no disturbance buffer around any active BAEA nest if disturbing activities are to occur during the nesting season (approximately January through August). CDFW recommends that no disturbance buffer be maintained until young have fledged, and only lifted after a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. Please note that BAEA is a State fully protected species and CDFW can only authorize the take of fully protected species for specified projects pursuant to SB 147 (2023). If nesting BAEA are detected and the 0.5 mile no-disturbance buffer is not feasible, consultation with CDFW is warranted to determine if the Project can avoid take.

COMMENT 3: Foothill Yellow-Legged Frog (FYLF)

Section: Mitigation Measures (page 22), Biological Resources (pages 33 & 38)

Issues and Impacts: The Project area is within the range of FYLF and, based on the IS/MND, it appears there is potential habitat for the species present within the Project area. As a result, there is potential for FYLF to occupy or colonize the Project area. In the Sierra Nevada, FYLF have disappeared from approximately 66% of locations historically documented as occupied (Thomson et al. 2016). Throughout the species' range, population declines, and local disappearances are most pronounced in the southern half of the Sierra slope (Jennings 1995, Jennings 1996 in USDA 2016). Land use changes that result in degradation or destruction of riparian habitat; road development and use; urbanization, and water diversion are among proximate factors contributing to local declines of FYLF (Thomson et al. 2016, USDA 2016).

FYLFs are found in diverse habitats, and different life stages use different habitat types for development, foraging, and overwintering. Nonbreeding active-season habitat for postmetamorphic FYLFs include aquatic and adjacent riparian habitats, permanent and intermittent streams, isolated pools, and slow moving streams with mud substrates (Hayes et al, 2016). FYLF have been found overwintering in woody debris, undercut banks, and hollows on the stream edge, and have been observed overwintering in terrestrial sites hundreds of feet from potential aquatic habitats (Hayes et al, 2016).

IS/MND Mitigation Measure Biological Resources 1 (MM – BIO 1)

The IS/MND MM – BIO 1 indicates that riparian habitats of class II watercourses will have a 50-foot equipment elimination zone (EEZ), and if FYLF are found near or in the Project area a 300-foot no work zone will be

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established. A 50-foot EEZ and 300-foot no work buffer may not be sufficient to avoid take if the species is present. A 50-foot EEZ would still allow for Project activities within the buffer, and it is unclear how the 300-foot buffer would be established (i.e., is the buffer only around the occurrence, or will the buffer also be established around suitable habitat) and if/when the buffer would be removed.

It is unclear why MM – BIO 1 only includes class II watercourses, when class I and class III watercourses within the Project area (IS/MND PMLFR Watercourse Map, page 21) may also have potential habitat for the species. Only including buffers for class II watercourses may not be sufficient to avoid take if the species is present. The IS/MND indicates that general biological surveys were conducted, and that no FYLF were found, however, it is unclear if focused protocol level surveys have been or will be conducted by a qualified biologist.

In the context of the proposed Project's activities and declining population trend within this portion of the FYLF range, impacts of the Project on local and regional populations of FYLF, if present, may be significant including the possibility of take (pursuant to Fish and Game Code § 86). Potentially significant impacts associated with the Project's activities include inadvertent entrapment, destruction of eggs and oviposition sites, degradation of water quality, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals. Many post-metamorphic FYLFs move among a variety of stream habitats throughout the year, including perennial mainstem reaches to highly ephemeral headwater streams, and been documented as far as 40 meters from the stream (Bourque 2008). Instream travel rates vary from tens to hundreds of meters per day, with the longest recorded distance being 1,386 meters per day (Bourque 2008). Frogs are sensitive to delivery of sediment and pollutants into streams, and degrade the water quality and increase turbidity (Welsh and Ollivier 1998, Welsh and Hodgson 2008). Project(s) involving the alteration of the bed and/or banks of any stream or adjacent upland habitats could have potentially significant impacts on the species or its habitat.

Recommended Potentially Feasible Mitigation Measure(s)

To reduce potential impacts to FYLF, CDFW recommends incorporating the following measures. CDFW recommends that these measures be made a condition of Project approval.

Mitigation Measure 3a: FYLF Habitat Assessment and Surveys

CDFW recommends a qualified biologist conduct a habitat assessment to determine if there is suitable nesting habitat for the FYLF, and if suitable habitat is found, a qualified biologist conduct protocol level surveys for the species. CDFW recommends that focused visual encounter surveys be conducted by a qualified biologist during appropriate survey period(s) (April – October) in areas where suitable habitat exists. CDFW advises that these surveys generally follow the methodology described in pages 16–22 of *A Standardized Protocol for Surveying Aquatic Amphibians* (Fellers and Freel 1995), however, please note that dip-netting would constitute take as defined by Fish and Game Code section 86, so it is recommended this survey technique be avoided. In addition, CDFW advises surveyors adhere to *The Declining Amphibian Task Force Fieldwork Code of Practice* (DAPTF 1998).

Mitigation Measure 3b: FYLF Avoidance

If any life stage of the FYLF (adult, metamorph, larvae, egg mass) is found during surveys or at any time during Project activities, CDFW recommends that adjacent suitable habitat is buffered by a minimum 40-foot no disturbance buffer during the seasonal dry period (May 1 to October 15) and minimum 130 foot buffer during the seasonal wet period (October 15 to May 1), and that CDFW is immediately notified.

Mitigation Measure 3c: Take Authorization

If take cannot be avoided, acquisition of an ITP for FYLF is necessary prior to Project implementation, pursuant to Fish and Game Code § 2081(b) to comply with CESA. Take authorization is issued only when take is incidental to an otherwise lawful activity, the impacts of the take are minimized and fully mitigated, the applicant ensures there is adequate funding to implement any required measures, and take is not likely to jeopardize the continued existence of the species.

Comment 4: Crotch's Bumble Bee (CBB)

Section: Mitigation Measures (page 22), Biological Resources (pages 34 & 38)

Issue and Impact: The Project is within the range of the CBB, and the Project area may contain suitable habitat for the species. Suitable habitat for the CBB includes areas of grasslands and upland scrub that contain requisite habitat elements, such as small mammal burrows. The CBB primarily nest in late February through late October underground in abandoned small mammal burrows but may also nest under perennial bunch grasses or thatched annual grasses, underneath brush piles, in old bird nests, and in dead trees or hollow

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logs (Williams et al. 2014, Hatfield et al. 2015). Overwintering sites utilized by mated queens include soft, disturbed soil (Goulson 2010), or under leaf litter or other debris (Williams et al. 2014).

IS/MND Mitigation Measure Biological Resources 4 (MM – BIO 4)

The IS/MND MM – BIO 4 indicates that if an active CBB nest is found a 25-foot EEZ and a 5-foot no work buffer will be established around the nest. A 25-foot EEZ and 5-foot no work buffer may not be sufficient to avoid take if an active nest is present. Further, it is unclear how active nest will be identified and if surveys will be conducted.

CBB have experienced range-wide declines in abundance and range restrictions, including historic areas of California's Central Valley (Xerces Society et al. 2018). Without appropriate avoidance and minimization measures, potentially significant impacts associated with ground- and vegetation-disturbing activities associated with the Project include loss of foraging plants, changes in foraging behavior, burrow collapse, nest abandonment, reduced nest success, reduced health and vigor of eggs, young and/or queens, in addition to direct mortality.

Recommended Potentially Feasible Mitigation Measure(s)

To reduce potential impacts to CBB, CDFW recommends incorporating the following measure. CDFW recommends that these measures be made a condition of Project approval.

Mitigation Measure 4a: CBB Habitat Assessment and Surveys

CDFW recommends a qualified biologist conduct a habitat assessment to determine where suitable CBB habitat occurs within the Project area. If suitable habitat is present on the Project area, CDFW recommends those areas be surveyed for the species and their nests during the optimal flight period of April 1 through July 31 during the peak blooming period of preferred plant species prior to Project implementation. CDFW recommends following the formal protocol survey for CBB, *Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species* (CDFW 2023b).

Mitigation Measure 4b: CBB Avoidance

CDFW recommends avoidance of detected queens and workers, and to allow CBB and WBB to leave the Project area of their own volition. Avoidance and protection of detected nests prior to or during Project implementation is recommended with delineation and observance of a 50-foot no-disturbance buffer.

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Mitigation Measure 4c: CBB Take Authorization

Any detection of CBB prior to or during Project implementation warrants consultation with CDFW to discuss how to avoid take. If take cannot be avoided, take authorization would be warranted through issuance of an ITP, pursuant to Fish and Game Code section 2081, subdivision (b).

Comment 5: California spotted owl (CSO) and Northern Goshawk (NOGO)

Section: Mitigation Measures (page 22), Biological Resources (pages 34 & 38)

Issue and Impact: The IS/MND does not adequately analyze Project impacts to the CSO or NOGO. CSO are known to occur in the Project area (CDFW 2023), the Project is within the range of the NOGO, and there may be suitable nesting habitat for these species in the Project area.

IS/MND Mitigation Measure Biological Resources 2 (MM – BIO 2)

Surveys: IS/MND MM – BIO 2 states in part that a RPF or RPF designee will determine occupancy status for all CSO and NOGO nests known to occur within a 0.25 mile of proposed Project activities prior to the start of Project activities during the year of disturbance. This appears to indicate that there are known CSO and NOGO nest sites within 0.25 miles of the Project area. It is unclear if a habitat assessment has been conducted, where suitable nesting habitat exist within the Project area, if nesting surveys have been or will be conducted, and where current known nest sites occur in relation to Project activities. It is also unclear when known nest sites will be assessed prior to Project activities, if a qualified biologist will conduct the assessment, and how occupancy will be determined.

Avoidance: IS/MND MM – BIO 2 states in part that if a nest is found to be occupied by brooding CSO or NOGO then a “disturbance” buffer will be established around the nest, and in the following bullet states 0.25 mile radius circle for these species for the period of March 1 to August 15th, or until the chicks have fledged the nest. MM – BIO 2, as written, indicates a disturbance buffer would be established around the nest (again, CDFW assumes a no disturbance buffer is the intended meaning). As stated above, it is also unclear who will determine when chicks have fledged and when a no disturbance buffer would be removed.

MM – BIO 2 also indicates that if unoccupied nests are found a protection zone will be established around the current activity center. It is unclear what will or will not occur within this protection zone, the size of the protection

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zone, and who will determine the location, size, and mitigation measures for the protection zone.

Habitat for these species has been significantly reduced in the Sierra Nevada. Approximately 95% to 99% of the original Ponderosa Pine old-growth forest has been lost in the Sierra Nevada, and habitat loss and degradation are the primary threats to both these species (Shuford, W. D., and Gardali, T., 2008). NOGOs are known to be sensitive to disturbance, and anthropogenic disturbance can cause them to abandon territories even with suitable forest structure (Morrison et al. 2011). There are multiple potential threats to CSO population viability, including the invasion of the barred owl, secondary ingestion of rodenticides used in marijuana cultivation, timber harvest and forest management, wildfire, disease, and a reduction in genetic diversity (Keane 2017). Without appropriate avoidance and minimization measures for these species, potentially significant impacts associated with Project activities could include nest reduction, reduced reproductive success, reduction in health or vigor of eggs and/or young, and direct mortality.

Recommended Potentially Feasible Mitigation Measure(s)

To reduce potential impacts to CSO and NOGO, CDFW recommends incorporating the following measures. CDFW recommends that these measures be made a condition of Project approval.

Mitigation Measure 5a: CSO and NOGO Habitat Assessment and Surveys

CDFW recommends a qualified biologist conduct a habitat assessment to determine if there is suitable nesting habitat for the CSO and NOGO. If suitable nesting habitat is found, CDFW recommends a qualified biologist conduct protocol level nesting surveys for the species. Submission of survey results to CDFW is recommended. Information submitted may include, but is not limited to, a full habitat assessment and survey results.

Mitigation Measure 5b: CSO and NOGO Avoidance

CDFW recommends a 0.25 mile no disturbance buffer around any active nests of CSO and NOGO if disturbing activities are to occur during the nesting season (approximately February 1 through September 15). CDFW recommends that a no disturbance buffer be maintained until young have fledged, and only lifted after a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.

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COMMENT 6: Western Pond Turtle (WPT)

Section: Mitigation Measures (page 22), Biological Resources (pages 36 – 38)

Issues and Impacts: WPT have been documented approximately 0.5 miles east of the Project boundary along Big Creek, which traverses the Project area (CDFW 2023), and a review of aerial imagery shows requisite habitat features that WPT utilize for nesting, overwintering, dispersal, and basking occur in the Project area. These features include aquatic and terrestrial habitats such as rivers, lakes, reservoirs, ponded areas, irrigation canals, riparian and upland habitat. WPT are known to nest in the spring or early summer within 100 meters of a water body, although nest sites as far away as 500 meters have also been reported (Thomson et al. 2016).

The IS/MND prepared for this Project indicates that general biological surveys were conducted and the WPT was not detected, but survey results are not included in the IS/MND and it is unclear where and when surveys were conducted, what survey protocol(s) was used, and if a qualified biologist conducted the surveys. The IS/MND includes WPT measures in the Biological Resources section (page 36), which includes that the Project will utilize the standard watercourse and lake protection zones (WLPZ) for watercourse classifications found in the Forest Practice Rules (Cal. Code Regs. tit. 14, § 956.5), and if WPT populations are detected a 50-foot no disturbance buffer will be implemented. The IS/MND Mitigation Measure Biological Resources 6 (MM – BIO 6) states in part that if populations of special status reptiles are detected, a 50-foot no disturbance buffer will be delineated around the location. It is unclear how “populations” is defined in regard to the MM – BIO-6. For example, it is unclear if “populations” includes just more than one individual, including an individual WPT nest site.

Noise, vegetation removal, movement of workers, and ground disturbance as a result of Project activities have the potential to significantly impact WPT populations. Without appropriate avoidance and minimization measures for WPT, potentially significant impacts associated with Project activities could include nest reduction, inadvertent entrapment, reduced reproductive success, reduction in health or vigor of eggs and/or young, and direct mortality.

Mitigation Measure 6a: WPT Habitat Assessment and Surveys

CDFW recommends that a qualified biologist conduct a habitat assessment to determine if there is suitable habitat (both aquatic and upland) for the WPT, and if suitable habitat is present that a qualified biologist conduct

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focused surveys for WPT within 10 days prior to Project implementation. In addition, CDFW recommends that focused surveys for nests occur during the egg-laying season of March through August.

Mitigation Measure 6b: WPT Avoidance and Minimization

CDFW recommends that any WPT nests that are discovered remain undisturbed with a 50 foot no-disturbance buffer maintained around the nest until the eggs have hatched and neonates are no longer in the nest or Project areas. If WPT individuals are discovered at the site during surveys or Project activities, CDFW recommends that they be allowed to move out of the area of their own volition without disturbance.

Editorial Comments

Special Status Plants: There is the potential for multiple special-status plant species to occur in the Project area. The IS/MND indicates that general biological surveys were conducted, and that no special status botanical species were found, however, it is unclear if focused botanical surveys have been or will be conducted. CDFW recommends the Project area be surveyed for special-status plants by a qualified botanist following the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018). This protocol, which is intended to maximize detectability, includes the identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. In the absence of protocol-level surveys being performed, additional surveys may be necessary. The IS/MND Mitigation Measure Biological Resources 5 indicates that if special status plants are found a 50-foot no disturbance buffer will be delineated around the population. CDFW recommends the 50-foot no disturbance buffer not only be from the outer edge of the plant population(s) but also the specific habitat type(s) required by special-status plant species. If buffers cannot be maintained, then consultation with CDFW is warranted to determine appropriate minimization and mitigation measures for impacts to special-status plant species.

Nesting birds: CDFW encourages that Project implementation occur outside of the bird nesting season (February 1 through September 15); however, if ground-disturbing or vegetation-disturbing activities must occur during the nesting season, the Project proponent is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Codes as referenced above.

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To evaluate Project-related impacts on nesting birds, CDFW recommends that a habitat assessment for nesting birds be conducted by a qualified biologist. If nesting birds or suitable habitat are identified, CDFW further recommends that focused surveys be conducted at biologically appropriate times during the nesting season. CDFW also recommends that a qualified biologist conduct pre-activity surveys for active nests within 10 days prior to the start of vegetation disturbing activities to maximize the probability that nests that could potentially be impacted are detected. CDFW also recommends that surveys cover a sufficient area around the Project to identify nests and determine their status. A sufficient area means any area potentially affected by the Project. In addition to direct impacts (i.e. nest destruction), noise, vibration, and movement of workers or equipment could also affect nests. Prior to initiation of vegetation removal activities, CDFW recommends that a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once vegetation disturbance begins, CDFW recommends having a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends halting the work causing that change and consulting with CDFW for additional avoidance and minimization measures.

If continuous monitoring of identified nests by a qualified biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or on-site parental care for survival. Variance from these no-disturbance buffers is possible when there is compelling biological or ecological reason to do so, such as when the construction area would be concealed from a nest site by topography. CDFW recommends that a qualified biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance.

Lake and Streambed Alteration (LSA): The IS/MND indicates that the standard Forest Practice Rules WLPZs are incorporated into the Project criteria. The Forest Practice Rules WLPZ (Cal. Code Regs. tit. 14, § 956.5) includes standard WLPZ widths based on watercourse classification and slope, and includes overstory and understory retention standards. The WLPZ is not a hard buffer, and vegetation removal can occur within the WLPZ up to the retention standards, as such, deepening on the site-specific conditions of each watercourse and proposed activities vegetation removal activities within the WLPZ may warrant LSA notification. Project activities that have the potential to substantially change the bed, bank, and channel of streams and associated riparian and wetland

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habitat that are subject to CDFW's regulatory authority pursuant Fish and Game Code section 1600 et seq. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake (including the removal of riparian vegetation); (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. "Any river, stream, or lake" includes those that are ephemeral or intermittent as well as those that are perennial. CDFW is required to comply with CEQA in the issuance of a Lake or Streambed Alteration (LSA) Agreement; therefore, if the CEQA document approved for the Project does not adequately describe the Project and its impacts, a subsequent CEQA analysis may be necessary for LSA Agreement issuance. Additional information on notification requirements is available through the Central Region LSA Program at R4LSA@wildlife.ca.gov and the CDFW website: <https://wildlife.ca.gov/Conservation/LSA>.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database that 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 the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be obtained at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. 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. Payment of the fee is required in order for the underlying Project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

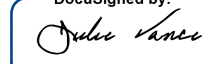
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CONCLUSION

CDFW appreciates the opportunity to comment on the IS/MND to assist the Tuolumne County Resources Conservation District in identifying and mitigating Project impacts on biological resources.

More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (<https://www.wildlife.ca.gov/Conservation/Survey-Protocols>). Questions regarding this letter or further coordination should be directed to Margarita Gordus, Senior Environmental Scientist (Specialist), at the address provided on this letterhead, by telephone at (559) 207-6681, or by electronic email at Margarita.Gordus@wildlife.ca.gov.

Sincerely,

DocuSigned by:

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Attachment 1

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM
(MMRP)**

PROJECT: Pine Mountain Lake Fuel Reduction Project

SCH No.: 2023070656

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
<i>Before Disturbing Soil or Vegetation</i>	
Mitigation Measure 1a: GGO Surveys	
Mitigation Measure 1c: GGO Take Authorization	
Mitigation Measure 2a: BAEA Habitat Assessment and Surveys	
Mitigation Measure 3a: FYLF Habitat Assessment and Surveys	
Mitigation Measure 3c: Take Authorization	
Mitigation Measure 4a: CBB Habitat Assessment and Surveys	
Mitigation Measure 4c: CBB Take Authorization	
Mitigation Measure 5a: CSO and NOGO Habitat Assessment and Surveys	
Mitigation Measure 6a: WPT Habitat Assessment and Surveys	
<i>During Project Activities</i>	
Mitigation Measure 1b: GGO Avoidance	
Mitigation Measure 2b: BAEA Avoidance	
Mitigation Measure 3b: FYLF Avoidance	
Mitigation Measure 4b: CBB Avoidance	
Mitigation Measure 5b: CSO and NOGO Avoidance	
Mitigation Measure 6b: WPT Avoidance and Minimization	