



# United States Department of the Interior

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In Reply Refer to:  
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November 2, 2022

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Subject: Formal Consultation on the Eldorado National Forest Project Plan Phase 1,  
Amador, El Dorado, and Calaveras County, California

Dear Jeff Marsolais,

This letter is in response to the U.S. Forest Service's (Forest Service) August 12, 2022, request for initiation of consultation with the U.S. Fish and Wildlife Service (Service) on the proposed Eldorado National Forest Project Plan Phase 1 (proposed project) in Amador, El Dorado, and Calaveras Counties, California. At issue are the proposed project's effects on the federally threatened California red-legged frog (*Rana draytonii*), federally endangered Sierra Nevada yellow-legged frog (*Rana sierrae*), and Sierra Nevada yellow-legged frog critical habitat. Additionally, the Forest Service is requesting a conference opinion on the proposed endangered South Sierra Distinct Population Segment of the foothill yellow-legged frog (*Rana boylei*). This response is provided under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act), and in accordance with the implementing regulations pertaining to interagency cooperation (50 CFR 402).

The federal action on which we are consulting is the Eldorado National Forest Project Plan (Phase 1) which is a large landscape-level forest stand and wildlife habitat improvement project within the Upper Mokelumne River Watershed. The proposed project aims to prevent high-intensity, large-scale wildfires, improve forest conditions, and protect important wildlife habitat and other resources. Pursuant to 50 CFR 402.12(j), you submitted a biological assessment for our review and requested concurrence with the findings presented therein. These findings conclude that the proposed project may affect, and is not likely to adversely affect the California red-legged frog and may affect, and is likely to adversely affect the foothill yellow-legged frog and the Sierra Nevada yellow-legged frog and its critical habitat.

In considering your request, we based our evaluation on the following:

- 1) Your August 12, 2022, letter requesting initiation of formal consultation and conference opinion and the attached biological assessment; and

2) Other information available to the Service.

*California red-legged frog*

The proposed project involves mechanical fuels reduction, hand thinning brush and small trees, prescribed burning, aspen restoration, pruning, and hazard tree felling and removal within 25,671 acres of the Eldorado National Forest. The proposed project occurs within 1,708.1 acres of aquatic non-breeding, upland, and dispersal habitat of the California red-legged frog. There is no breeding habitat within the action area. To date, there are no known occurrences of California red-legged frog within the action area. However, in 2002 three individuals were observed on private land on Sopiago Creek approximately three miles southeast of the action area. The Forest Service has conducted multiple surveys for California red-legged frog in Sopiago Creek on Forest Service land adjacent to the private land and the species has not been detected (Jeff Mabe, 2017, Forest Service, personal communication). The nearest known breeding population of California red-legged frogs is at Spivey Pond, approximately 20 miles northwest of the action area.

While it is unlikely that the action area is occupied by California red-legged frogs due to the lack of detections, the Forest Service has proposed to implement conservation measures to avoid impacts to the species in the unlikely event that they occur in the proposed project area. For example, the Forest Service will implement a Limiting Operating Period (LOP) restricting all work activities from the first fall frontal weather system disposing a minimum of 0.25 inch of rain between October 15<sup>th</sup> through April 15<sup>th</sup>. Additionally, mechanical exclusion zones will be implemented to protect aquatic resources. A full list of conservation measures can be found on pages 18-20 of the biological assessment.

Overall, the proposed project will likely benefit the California red-legged frog by reducing the risk of high-intensity wildfire, promoting riparian habitat through prescribed fire, and creating additional basking habitat.

After reviewing all available information, the Service concurs with your determination that the proposed project may affect but is not likely to adversely affect the California red-legged frog. We base our concurrence on the following: 1) the lack of California red-legged frog occurrences within the action area; and 2) conservation measures will be implemented to avoid and minimize impacts to the frog in the unlikely event that California red-legged frogs are found within the action area. Therefore, the Service believes that any adverse effects to the California red-legged frog will be unlikely to occur and are discountable for the purposes of this consultation.

The remainder of this document provides our biological opinion on the effects of the proposed project on the Sierra Nevada yellow-legged frog and its critical habitat and a conference opinion on the effects of the proposed project on the foothill yellow-legged frog.

### **Consultation History**

- August 12, 2022: The Service received a biological assessment from the Forest Service via electronic mail correspondence.
- August 18, 2022: The Service and the Forest Service met via telephone to discuss the effect determinations for the foothill yellow-legged frog, Sierra Nevada yellow-legged frog, and Sierra Nevada yellow-legged frog critical habitat.

August 18, 2022: The Service received an updated biological assessment via electronic mail correspondence with a change in determination from *May Affect, Not Likely to Adversely Affect* to *May Affect, Likely to Adversely Affect* for foothill yellow-legged frog and Sierra Nevada yellow-legged frog and its critical habitat.

## **BIOLOGICAL OPINION**

### **Description of the Proposed Action**

The proposed project includes six categories of treatment: 1) mechanical fuels reduction; 2) hand thinning; 3) prescribed burning; 4) aspen restoration; 5) pruning; and 6) hazard tree felling and removal. These activities aim to reduce understory ladder and surface fuels to reduce risk of high severity fire and facilitate the future application of prescribed fire. The proposed project will occur on approximately 25,671 acres and will occur over the next 15 years or more depending on fuel conditions. Hand treatments and mechanical fuels reduction treatments will occur on an annual basis over the next 5 to 6 years and repeated between year 10 and 15. Other activities will occur over the next 5 to 6 years.

#### Mechanical Fuels Reduction

Mechanical fuels reduction includes mastication, chipping, grinding, or crushing ladder and surface fuels typically live shrubs and small trees generally up to 10 inches diameter at breast height (dbh). Treatments will occur in areas where slopes are less than or equal to 40 percent, within 0.25 miles of road centerline, and where hand treatments are not required or specified. In areas adjacent to roads, a “reach-in and grab” mastication system may be utilized. This system keeps the masticator on the road while the arm reaches off the road to remove or masticate adjacent vegetation and ladder fuels. Proposed activities will be implemented on a maximum of 19,252 acres.

#### Hand Thinning

Hand thinning includes cutting, bucking, lopping, scattering, and/or piling of smaller trees and brush using chainsaws. These activities will occur wherever mechanical fuels reduction treatments are determined to not be suitable based on field reconnaissance. Hand thinning may be conducted prior to prescribed burning to promote a smaller flame length. These activities are expected to occur on 4,337 acres.

#### Prescribed Burning

Prescribed burning involves ground based or aerial ignition methods to reduce understory fuels. Fire lines will be constructed where needed to contain the fire and natural barriers and roads will be used wherever possible as fire containment lines. Prescribed burning will occur on approximately 6,625 acres. While prescribed fires will not be ignited near stream courses, they will be allowed to backburn into riparian habitat. If a prescribed fire burns too hot near stream courses, the Forest Service may need to set a backburn in a riparian area.

#### Aspen Restoration

Aspen restoration proposes to remove encroaching conifers and shrubs to reestablish historic aspen edge, enhance stand function, increase diversity of age classes, and promote aspen growth.

These activities will involve mechanical fuels reduction treatment (e.g., masticator, feller buncher, skidder), prescribed burning, and hand thinning as described above. Aspen restoration will occur on 194 acres.

### Pruning

Pruning tree limbs will occur in conjunction with mechanical fuels reduction and hand thinning. This involves severing all limbs on live trees up to a height of 8 to 12 feet on the bole to raise the base height to live crown. This reduces the risk of wildlife or prescribed fire moving into the crown.

### Hazard Tree Felling and Removal

Hazard tree felling and removal will identify and remove weak and high-risk trees of all sizes. Hazard trees will be identified and assessed using the 2012 Region 5 Hazard Tree Guidelines for the Forest Service.

### *Conservation Measures*

1. All applicable standards and guidelines described in the Eldorado National Forest Land and Resource Management Plan (Forest Service 1989), as amended by the 2004 Sierra Nevada Forest Plan Amendment (SNFPA) (Forest Service 2004) will be followed during project implementation.
2. All proposed actions will be consistent with Riparian Conservation Objectives described in the SNFPA and the U.S Fish and Wildlife Service Conservation Measures from the programmatic Biological Opinion on three federally listed amphibian species, the Sierra Nevada yellow-legged frog, the Northern Distinct Population Segment of the mountain yellow-legged frog, and the Yosemite toad (USFWS 2014).
3. If federally listed Threatened, Endangered, or Forest Service Sensitive (TES) botanical, aquatic, or terrestrial species are detected during work, operations will cease in that area and the appropriate biologist will be informed immediately to determine appropriate actions to take.
4. Temporary erosion control products (blankets, mats, rolls, etc.) that contain exposed netting will use wildlife friendly loose weave netting or similar materials when netting is left exposed. See Metz (2016), Wildlife-Friendly Plastic-Free Netting in Erosion and Sediment Control Products, for details.
5. Storage of fuel or other toxic materials and maintenance of equipment will not occur in Riparian Conservation Areas (RCAs).
6. Table 1 below defines boundaries where mechanical operations are prohibited for the protection of aquatic resources. Unmapped features will be treated as Special Aquatic Features.

Table 1. Aquatic Feature Protection

Aquatic Feature Type	Require Exclusion Zone/Other Criteria
Perennial and Intermittent Streams	No ground-based equipment within 50 feet of the edge of the stream channel. Equipment is allowed to reach into the equipment exclusion zone to masticate vegetation.
Ephemeral Streams and Draws	No ground-based equipment within 15 feet of the edge of the stream channel or bottom of the draw.
Special Aquatic Features	No ground-based equipment within 50 feet of the edge of the wet area or riparian vegetation, whichever is greater.
Dufrene Pond	<ul style="list-style-type: none"> <li>• No ground-based equipment within 50 feet of the exclusion fencing around Dufrene Pond.</li> <li>• Mechanical equipment operations will not occur along the north side of Road 08N18 in front of Dufrene Pond (from where the outlet stream meets the roadside ditch to approximately Latitude 38.576155 Longitude -120.252513). Hand thinning, pruning, and hazard tree falling are allowed.</li> </ul>

7. Hand-felling of trees is allowed within the mechanical exclusion zone. Any trees should be felled away from the stream and left in place, bucked and scattered, or removed by reach in and full suspension.
8. If mechanical falling/skidding equipment is used:
  - a. No new landings will be created in the RCA. Reuse of existing landings within the RCA will be allowed where creation of a new landing is likely to result in more resource damage than use of the existing landing within the RCA.
  - b. Any skid trails or landings within RCAs will be repaired to restore soil infiltration capacity and soil cover to reduce erosion and may include practices such as, reshaping to restore natural surface flow patterns, installation of drainage control features, decompaction, placement of organic material, and seeding on disturbed soil surfaces. Slash would be added to any skid trails while operations are occurring to facilitate incorporation into the substrate and help stabilize soil.
9. Ground cover will be maintained at least at 70 percent in the zone of 50 to 100 feet from the edge of the stream channel. If the existing ground cover is less than 70 percent, then the existing ground cover will be maintained. Tops, limbs, and small trees within the mechanical exclusion zone can be lopped and scattered to meet ground cover criteria.
10. At a minimum, an annual review of burning treatment plans will occur with a Forest Aquatic Biologist, Terrestrial Biologist, and Botanist to ensure conditions for TES species has not changed and to ensure consistency with this Biological Opinion.
11. Ignition of prescribed fires will not occur within 50 feet of any perennial or intermittent stream or Special Aquatic Feature. The ignition exclusion zone will be measured from the edge of the channel or high-water mark of the Special Aquatic Feature or the adjacent riparian vegetation if present.
  - a. No fire ignition within 50 feet of the exclusion fence around Dufrene Pond.

12. Prescribed fire containment lines will be rehabilitated to prevent transport of water and sediment to nearby aquatic systems prior to the onset of winter weather or large summer storms.
13. Large reservoirs will be used for water drafting. If it is necessary to use waterholes, ponds, rivers, and streams for water drafting, the Forest Service biology staff will be consulted to determine whether surveys for aquatic threatened, endangered and sensitive species are required prior to use. In the event that TES species are found or are known to occur at drafting sites, sites will not be used. Dufrene Pond will NOT be used for water drafting.
14. Downed logs greater than 16 inches in diameter will be retained during mechanical fuels treatments (i.e., mastication) to the extent practicable.

### **Action Area**

The action area is defined in 50 CFR § 402.02, as “all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action.” For the proposed project, the action area encompasses a 25,671-acre treatment area.

### **Analytical Framework for the Jeopardy Determination**

Section 7(a)(2) of the Act requires that federal agencies ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of listed species. “Jeopardize the continued existence of” means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species (50 CFR § 402.02).

The jeopardy analysis in this biological opinion considers the effects of the proposed federal action, and any cumulative effects, on the rangewide survival and recovery of the listed species. It relies on four components: (1) the *Status of the Species*, which describes the current rangewide condition of the species, the factors responsible for that condition, and its survival and recovery needs; (2) the *Environmental Baseline*, which analyzes the current condition of the species in the action area without the consequences to the listed species caused by the proposed action, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of the species; (3) the *Effects of the Action*, which determines all consequences to listed species that are caused by the proposed federal action; and (4) the *Cumulative Effects*, which evaluates the effects of future, non-federal activities in the action area on the species. The *Effects of the Action* and *Cumulative Effects* are added to the *Environmental Baseline* and in light of the status of the species, the Service formulates its opinion as to whether the proposed action is likely to jeopardize the continued existence of the listed species.

### **Analytical Framework for the Adverse Modification Determination**

Section 7(a)(2) of the Act requires that federal agencies ensure that any action they authorize, fund, or carry out is not likely to destroy or to adversely modify designated critical habitat. A final rule revising the regulatory definition of “destruction or adverse modification” (DAM) was published on August 27, 2019 (84 FR 44976). The final rule became effective on October 28, 2019. The revised definition states:

“*Destruction or adverse modification* means a direct or indirect alteration that appreciably diminishes the value of critical habitat as a whole for the conservation of a listed species.”

The DAM analysis in this biological opinion relies on four components: (1) the *Status of Critical Habitat*, which describes the current rangewide condition of the critical habitat in terms of the key components (i.e., essential habitat features, primary constituent elements, or physical and biological features) that provide for the conservation of the listed species, the factors responsible for that condition, and the intended value of the critical habitat overall for the conservation/recovery of the listed species; (2) the *Environmental Baseline*, which analyzes the current condition of the critical habitat in the action area without the consequences to designated critical habitat caused by the proposed action, the factors responsible for that condition, and the value of the critical habitat in the action area for the conservation/recovery of the listed species; (3) the *Effects of the Action*, which determines all consequences to designated critical habitat that are caused by the proposed federal action on the key components of critical habitat that provide for the conservation of the listed species, and how those impacts are likely to influence the conservation value of the affected critical habitat; and (4) *Cumulative Effects*, which evaluate the effects of future non-federal activities that are reasonably certain to occur in the action area on the key components of critical habitat that provide for the conservation of the listed species and how those impacts are likely to influence the conservation value of the affected critical habitat. The *Effects of the Action* and *Cumulative Effects* are added to the *Environmental Baseline* and in light of the status of critical habitat, the Service formulates its opinion as to whether the action is likely to destroy or adversely modify designated critical habitat. The Service’s opinion evaluates whether the action is likely to impair or preclude the capacity of critical habitat in the action area to serve its intended conservation function to an extent that appreciably diminishes the rangewide value of critical habitat for the conservation of the listed species. The key to making that finding is understanding the value (i.e., the role) of the critical habitat in the action area for the conservation/recovery of the listed species based on the *Environmental Baseline* analysis.

### **Status of the Species**

#### *Foothill yellow-legged frog*

For the most recent comprehensive assessment of the species’ rangewide status, please refer to the *Endangered and Threatened Wildlife and Plants; Threatened Status with Section 4(d) Rule for Two Distinct Population Segments and Endangered Status for Two Distinct Population Segments; Proposed Rule* (Service 2021) (Proposed Rule). The Service recommended listing the Central Coast and North Feather distinct population segments as threatened and South Coast and South Sierra distinct population segments as endangered in the Proposed Rule. Threats evaluated and discussed in the Proposed Rule have continued to act on the species since the Service issued the document, with loss of habitat (altered hydrology), competition with nonnative species, and effects of climate change having the most significant effects. While there have been continued losses of foothill yellow-legged frog habitat throughout the range of the species, to date no project has proposed a level of effects for which the Service has issued a conference opinion of jeopardy for the species.

#### *Sierra Nevada yellow-legged frog*

For the most recent comprehensive assessment of the species’ rangewide status, please refer to the *Endangered and Threatened Wildlife and Plants; Endangered Species Status for Sierra*

Nevada Yellow-legged Frog and Northern Distinct Population Segment of the Mountain Yellow-legged Frog, and Threatened Species Status for Yosemite Toad; Final Rule (Service 2014a) (Final Rule) and the Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Sierra Nevada Yellow-legged Frog, the Northern Distinct Population Segment of the Mountain Yellow-legged Frog, and the Yosemite Toad; Final Rule (Service 2016). The Service listed the Sierra Nevada yellow-legged frog as endangered in the Final Rule. Threats evaluated and discussed in the final document have continued to act on the species since the Final Rule was issued, with habitat in some areas no longer available due to non-native trout introductions and the increase of chytrid fungus (*Batrachochytrium dendrobatidis*) being the most significant effects. While there have been continued losses of Sierra Nevada yellow-legged frog habitat throughout the range of the species, to date no project has proposed a level of effects for which the Service has issued a biological opinion of jeopardy for the species.

### **Status of Critical Habitat**

The Service designated approximately 1,082,147 acres of critical habitat for the Sierra Nevada yellow-legged frog in Plumas, Lassen, Sierra, Nevada, Placer, El Dorado, Amador, Calaveras, Alpine, Mariposa, Mono, Madera, Tuolumne, Fresno, and Inyo Counties, California (Service 2016). Critical habitat for this species was designated as three units encompassing 24 subunits. The critical habitat units and subunits constitute the Service's current best assessment of areas that meet the definition of critical habitat for the Sierra Nevada yellow-legged frog. The 24 subunits were known to be occupied when critical habitat was designated, and the Service assumes these sub-units are currently occupied. Critical habitat occurs on the following forests: Lassen, Plumas, Tahoe, Lake Tahoe Basin Management Unit, Eldorado, Stanislaus, Sierra, and Inyo.

In the 2016 *Designation of Critical Habitat for the Sierra Nevada Yellow-Legged Frog, the Northern DPS of the Mountains Yellow-Legged Frog, and the Yosemite Toad*, the Service determined that the Sierra Nevada yellow-legged frog requires the following physical or biological features: (1) space for individual and population growth and for normal behavior; (2) food, water, air, light, minerals, or other nutritional or physiological requirements; (3) cover or shelter; (4) sites for breeding, reproduction, or rearing (or development) of offspring; (5) habitats protected from disturbance or representative of the historical, geographic, and ecological distributions of the species (Service 2016).

Based on our current knowledge of the physical or biological features and habitat characteristics required to sustain the species' life-history processes, the Service determined that the primary constituent elements specific to the Sierra Nevada yellow-legged frog are (Service 2016):

- (1) Aquatic habitat for breeding and rearing. Habitat that consists of permanent water bodies, or those that are either hydrologically connected with, or close to, permanent water bodies, including, but not limited to, lakes, streams, rivers, tarns, perennial creeks (or permanent plunge pools within intermittent creeks), pools (such as a body of impounded water contained above a natural dam), and other forms of aquatic habitat. This habitat must:
  - (a) For lakes, be of sufficient depth not to freeze solid (to the bottom) during the winter 5.6 feet, but generally greater than 8.2 feet, and optimally 16.4 feet or deeper (unless some other refuge from freezing is available).



(b) Maintain a natural flow pattern, including periodic flooding, and have functional community dynamics in order to provide sufficient productivity and a prey base to support the growth and development of rearing tadpoles and metamorphs.

(c) Be free of introduced predators.

(d) Maintain water during the entire tadpole growth phase (a minimum of 2 years). During periods of drought, these breeding sites may not hold water long enough for individuals to complete metamorphosis, but they may still be considered essential breeding habitat if they provide sufficient habitat in most years to foster recruitment within the reproductive lifespan of individual adult frogs.

(e) Contain:

(i) Bank and pool substrates consisting of varying percentages of soil or silt, sand, gravel, cobble, rock, and boulders (for basking and cover);

(ii) Shallower microhabitat with solar exposure to warm lake areas and to foster primary productivity of the food web;

(iii) Open gravel banks and rocks or other structures projecting above or just beneath the surface of the water for adult sunning posts;

(iv) Aquatic refugia, including pools with bank overhangs, downfall logs or branches, or rocks and vegetation to provide cover from predators; and

(v) Sufficient food resources to provide for tadpole growth and development.

(2) Aquatic nonbreeding habitat (including overwintering habitat). This habitat may contain the same characteristics as aquatic breeding and rearing habitat (often at the same locale), and may include lakes, ponds, tarns, streams, rivers, creeks, plunge pools within intermittent creeks, seeps, and springs that may not hold water long enough for the species to complete its aquatic life cycle. This habitat provides for shelter, foraging, predator avoidance, and aquatic dispersal of juvenile and adult mountain yellow-legged frogs. Aquatic nonbreeding habitat contains:

(a) Bank and pool substrates consisting of varying percentages of soil or silt, sand, gravel, cobble, rock, and boulders (for basking and cover);

(b) Open gravel banks and rocks projecting above or just beneath the surface of the water for adult sunning posts;

(c) Aquatic refugia, including pools with bank overhangs, downfall logs or branches, or rocks and vegetation to provide cover from predators;

(d) Sufficient food resources to support juvenile and adult foraging;

(e) Overwintering refugia, where thermal properties of the microhabitat protect hibernating life stages from winter freezing, such as crevices or holes within bedrock, in and near shore; and/or

(f) Streams, stream reaches, or wet meadow habitats that can function as corridors for movement between aquatic habitats used as breeding or foraging sites.

(3) Upland areas.

(a) Upland areas adjacent to or surrounding breeding and nonbreeding aquatic habitat that provide area for feeding and movement by mountain yellow-legged frogs:

(i) For stream habitats, this area extends 82 feet from the bank or shoreline;

(ii) In areas that contain riparian habitat and upland vegetation (for example, mixed conifer, ponderosa pine, montane conifer, and montane riparian woodlands), the canopy overstory should be sufficiently thin (generally not to exceed 85 percent) to allow sunlight to reach the aquatic habitat and thereby provide basking areas for the species;

(iii) For areas between proximate (within 984 feet) of water bodies (typical of some high mountain lake habitats), the upland area extends from the bank or shoreline between such water bodies; and

(iv) Within mesic habitats such as lake and meadow systems, the entire area of physically contiguous or proximate habitat is suitable for dispersal and foraging.

(b) Upland areas (catchments) adjacent to and surrounding both breeding and nonbreeding aquatic habitat that provide for the natural hydrologic regime (water quantity) of aquatic habitats. These upland areas should also allow for the maintenance of sufficient water quality to provide for the various life stages of the frog and its prey base.

Critical Habitat Unit 1 represents the northernmost portion of the Sierra Nevada yellow-legged frog's range. There are four sub-units within Critical Habitat Unit 1, all of which occur within the boundaries of the Plumas National Forest (although critical habitat does cover relatively small private inholdings within the Plumas National Forest as well). The frog populations within Critical Habitat Unit 1 are at very low numbers and face significant threats from habitat fragmentation (Service 2016). The presence of introduced fishes, water diversions and operations, inappropriate grazing activity, timber management and fuels reduction, and recreational activities may require special management considerations or protection (Service 2016).

Critical Habitat Unit 2 represents a significant fraction of the Sierra Nevada yellow-legged frog's range, and it reflects unique ecological features within the range by comprising populations that are both stream- and lake-based. There are 14 sub-units within Critical Habitat Unit 2, which occur within the following National Forests: Lassen, Plumas, Tahoe, Eldorado, Stanislaus, Inyo, and the Lake Tahoe Basin Management Unit. Four of the sub-units occur within Yosemite National Park and are therefore not affected by Forest Service programs. Portions of sub-units 2F and 2H occur within the Humboldt-Toiyabe National Forest. Sierra Nevada yellow-legged frog populations within Critical Habitat Unit 2 are at very low to intermediate abundance and face significant threats from habitat fragmentation resulting from the introduction of fish (Service 2016). The presence of introduced fishes, water diversions and operations, inappropriate grazing activity, timber management and fuels reduction, and recreational activities may require special management considerations or protection (Service 2016).

Critical Habitat Unit 3 represents a significant portion of the species' range, and it reflects a core conservation area comprising the most robust remaining populations at higher densities (closer proximity) across the species' range. The frog populations within Critical Habitat Unit 3 face significant threats from habitat fragmentation (Service 2016). The presence of introduced fishes, inappropriate grazing activity, and recreational activities may require special management considerations or protection (Service 2016).

### **Environmental Baseline**

*Environmental baseline* refers to the condition of the listed species or its designated critical habitat in the action area, without the consequences to the listed species or designated critical habitat caused by the proposed action. The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process. The consequences to listed species or designated critical habitat from ongoing agency activities or existing agency facilities that are not within the agency's discretion to modify are part of the environmental baseline.

### *Species*

#### Foothill yellow-legged frog

The proposed project occurs within the current and historic range of the foothill yellow-legged frog. The majority of habitat for this species in the proposed project area occurs along the Tiger Creek and North Fork Mokelumne River watershed. This area has been surveyed extensively by both the Forest Service and Pacific Gas and Electric (PG&E) as part of their Federal Energy Regulatory Commission (FERC) requirements. The Forest Service surveyed numerous sites in this watershed from 2001 to 2009. Pacific Gas and Electric surveyed extensively along the Mokelumne and tributaries in 2001 and continue to survey every five years. Furthermore, while PG&E has not observed foothill yellow-legged frog on the North Fork Mokelumne River upstream of the confluence with the Bear River, eDNA sampling indicated that populations may extend upstream into the Bear River drainage and have the potential to be impacted by the proposed project. However, more surveys are needed to determine the presence/absence of the foothill yellow-legged frog in the Bear River Drainage. Based on these survey results, Map 3 in the biological assessment (page 26) shows the occupied locations of the foothill yellow-legged frog. Therefore, we believe that the proposed project could affect occupied locations of foothill yellow-legged frog.

#### Sierra Nevada yellow-legged frog

The proposed project occurs within the current and historic range of the Sierra Nevada yellow-legged frog. The majority of Sierra Nevada yellow-legged frog habitat within the proposed action area occurs within the Bear River and Cole Creek watershed. These areas have been surveyed extensively by the Forest Service, PG&E and California Department of Fish and Wildlife (CDFW). Most of these surveys have occurred within the 1990s and early 2000s. In more recent years (2017-2021), CDFW and the Forest Service also surveyed the Cole Creek watershed. Therefore, we believe that the action area is occupied by Sierra Nevada yellow-legged frog as seen on Map 4 of the biological assessment (page 31) and the proposed project could affect occupied locations of Sierra Nevada yellow-legged frog.

## *Critical Habitat*

### Sierra Nevada yellow-legged frog critical habitat

The proposed project is within the East Amador subunit, which consists of approximately 107,278 acres and is located in Amador, Alpine and El Dorado Counties, California. The subunit is considered to be located within the geographical area occupied by the species at the time of listing, and it contains the physical or biological features essential to the conservation of the species. Sierra Nevada yellow-legged frog populations within Critical Habitat Unit 2 are at very low to intermediate abundance and face significant threats from habitat fragmentation resulting from the introduction of fish (Service 2016). The presence of introduced fishes, water diversions and operations, some grazing activity, timber management and fuels reduction, and recreational activities may require special management considerations or protection (Service 2016).

Approximately 12,187 acres of designated critical habitat fall within the action area, making up 11 percent of the unit. Only a portion of the critical habitat within the action area supports aquatic breeding or non-breeding PCE for Sierra Nevada yellow-legged frog (916 acres). The rest of the critical habitat within the action area supports the upland area PCE.

No fires have occurred in the project area since the designation of critical habitat. Additionally, tree mortality from drought has not impacted the designated critical habitat. Overall, there have been no major changes to the environmental baseline since the designation of critical habitat.

### **Effects of the Action**

*Effects of the action* are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action.

### Ground Equipment and Tree Felling

Ground based equipment (such as masticators) and the felling of trees during proposed project activities may result in affects to Sierra Nevada yellow-legged frog and foothill yellow-legged frog (frogs). These two frog species may be injured or killed if they are crushed by equipment, personnel, or falling trees. Frogs are more likely to move across upland areas during or shortly after rain events, increasing the risk of injury or death from these activities. Some activities, such as mastication, may be done from a road. This could result in effects to the frogs if they are injured by flying debris, burrows are buried by excessive wood chips and debris, or they could still be directly harmed by masticators if the masticator is operating close to the ground surface. Any skid trails or landings within RCAs will be repaired using heavy equipment. It is possible that frogs move back into the disturbed areas, and heavy equipment could crush frogs. However, the Forest Service has proposed conservation measures that will minimize impacts to the frogs, such as implementing mechanical exclusion zones and felling trees away from streams. The implementation of these conservation measures will lower the number of individuals injured or killed as a result of encounters with ground equipment and tree felling.

### Prescribed Burning

Prescribed burning has the potential to affect the Sierra Nevada yellow-legged frog and foothill yellow-legged frog. These frog species could be injured or killed from the prescribed fire, especially if they are using upland habitat. Prescribed fires will not be ignited in the ignition exclusion zone, but the fire will be allowed to burn into the ignition exclusion zone. If the Forest Service determines that a prescribed fire becomes too hot (i.e., flame lengths, burning severity is higher than desired) they may enter the ignition exclusion areas and do a backburn which could cause mortality or injury to frogs. However, the Forest Service will implement conservation measures to minimize impacts to the frogs such as the review of burn plans by the appropriate biologist and implementing ignition exclusion zones for frogs. With the implementation of these conservation measures, effects to these two frog species will be minimized. In addition, these impacts would be short-term and temporary (i.e., occur once and not be recurring).

### Erosion Control Activities

Erosion control activities have the potential to affect the Sierra Nevada yellow-legged frog and foothill yellow-legged frog through entanglement in plastic or synthetic mesh erosion control products. This could cause the injury or death of frogs. However, conservation measures will be implemented that require wildlife friendly loose weave netting or similar material. This will minimize any potential effects on frogs caused by erosion control equipment.

### Water Drafting

Water drafting could potentially negatively affect the Sierra Nevada yellow-legged frog and foothill yellow-legged frog. The main risk associated with water drafting is the potential for egg masses and/or tadpoles to come in contact with equipment used to suction water from the aquatic habitat. These actions could result in the death or injury of developing eggs and/or tadpoles. However, the Forest Service will implement conservation measures which greatly reduce any impacts to frogs due to water drafting. The conservation measures limit water drafting, to the extent possible, to reservoirs. It is likely that water drafting would only occur at Bear River Reservoir, which is located above the range of foothill yellow-legged frog. Additionally, while this reservoir is within the range of Sierra Nevada yellow-legged frog and is located within Critical Habitat Subunit 2F, the reservoir itself is not considered critical habitat due to abundant trout populations and therefore not considered suitable habitat. If water is drafted in suitable habitat for either of the frogs, surveys would be conducted prior to water drafting. If frogs are found, sites will not be used. Additionally, water drafting will not occur at Dufrene Pond, where there is a known population of Sierra Nevada yellow-legged frogs. With the implementation of these conservation measures, water drafting will have a discountable effect on these two frog species.

### Sedimentation and Water Quality

The proposed fuels reductions treatments (i.e., mechanical, hand thinning, aspen restoration, and prescribed burns) could potentially expose bare soils and destabilize slopes around Sierra Nevada yellow-legged frog and foothill yellow-legged frog occupied sites. Exposed, unprotected soil has the potential to move into aquatic systems, altering the water quality and impacting hydrology. Sediment could potentially fill deep pools used by foothill yellow-legged frog, alter primary productivity, reduce dissolved oxygen, and reduce amount and quality of refugia. Fine sediment could also potentially smother foothill yellow-legged frog egg masses. However, the Forest

Service will implement conservation measures which are expected to minimize sediment-related effects to the frogs. All proposed treatment areas would be implemented consistent with best management practices for erosion control. Additionally, equipment exclusion zones will reduce high levels of soil disturbance directly next to aquatic features, reducing erosion related effects to the frogs. These measures will greatly reduce the number of individuals harmed or injured due to erosion.

#### Changes in Canopy Cover and Ground Cover

The proposed project may cause changes in canopy cover which could affect foothill yellow-legged frog. Foothill yellow-legged frogs are known to favor channels with some shading (greater than 20 percent), and they are rarely found in habitats where canopy cover is too great (more than 90 percent). The proposed project would reduce understory and ladder fuels but retain the canopy provided by mature trees. There is the possibility that the canopy could be altered beyond or below the level that foothill yellow-legged frogs prefer, resulting in harm of the species through increased light and resulting changes in temperature. While we expect this to occur in some discrete locations, changes in density of canopy along aquatic habitat is not expected to be widespread throughout aquatic habitat in the action area. Ground cover will be reduced during the proposed project; however, the Forest Service has proposed to retain 70% of available ground cover along stream channels, which will ensure sufficient habitat for the frogs. In addition, downed logs greater than 16 inches in diameter will be retained during mechanical fuels treatments (i.e., mastication) to the extent practicable. Impacts from decreased canopy cover and ground cover are expected to be temporary, as canopy and ground cover will return as trees grow and limbs, debris, etc. fall to the ground and are therefore discountable.

#### *Sierra Nevada yellow-legged frog critical habitat*

A portion of the action area falls within Sierra Nevada yellow-legged frog critical habitat. The action area contains the PCEs of the physical and biological feature essential to the conservation of the species. Effects to aquatic habitat are expected to be minimal. Increased sedimentation into streams and lakes could affect aquatic breeding and non-breeding habitat (PCE 1 and 2). The proposed project could also alter stream hydrology and impact water quality. However, the proposed project includes conservation measures that will prevent or reduce sedimentation. With the implementation of these measures, sediment deposition is not expected to be impacted to a degree that they are no longer utilized by the species.

The proposed project may also have minor impacts to upland habitat (PCE 3). Mechanical fuels reduction, hand thinning, and prescribed burns could potentially affect the suitability of upland habitat through loss of cover (riparian vegetation, burrows, logs, tree roots, and stumps). However, these impacts will be temporary and there will be no long-term effects to the PCEs. Additionally, conservation measures will be implemented to minimize impacts to the species and its critical habitat. These measures include, mechanical exclusion zones, ignition exclusion zones, and maintaining a minimum of 70 percent ground cover within 50 to 100 feet of stream channels.

#### Benefits of the Proposed Project

While the proposed project will have short term and temporary effects to both the Sierra Nevada yellow-legged frog and the foothill yellow-legged frog and their critical habitat, the proposed fuels reduction project is intended to reduce understory ladder and surface fuels in order to

prevent high intensity, large-scale wildfires which will result in long term benefits to the frogs. Fuels treatment projects have shown to effectively reduce the severity of wildfires (Pollet and Omi 2002; Finney et al. 2005; Raymond and Peterson 2005; Cram et al. 2006; Martinson and Omi 2008; Wimberly et al. 2009). Foothill yellow-legged frog and Sierra Nevada yellow-legged frog and its critical habitat will benefit from these treatments as wildfire has the potential to remove vegetation cover and sheltering habitat, degrade aquatic habitat due to sedimentation, or kill or injure frogs. Therefore, these two frog species and their critical habitat will likely benefit from the proposed project in the long term as the project aims to reduce large, high intensity wildfires.

### **Cumulative Effects**

Cumulative effects include the effects of future State, Tribal, local, or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act. During this consultation, the Service did not identify any future non-federal actions that are reasonably certain to occur in the action area of the proposed project.

### **Conclusion**

After reviewing the current status of the South Sierra Distinct Population Segment of the foothill yellow-legged frog, the Sierra Nevada yellow-legged frog, the environmental baseline for the action area, the effects of the proposed project, and the cumulative effects, it is the Service's biological opinion that the Eldorado National Forest Project Plan, as proposed, is not likely to jeopardize the continued existence of the foothill yellow-legged frog or the Sierra Nevada yellow-legged frog. The Service reached this conclusion because the project-related effects to the species, when added to the environmental baseline and analyzed in consideration of all potential cumulative effects, will not rise to the level of precluding recovery or reducing the likelihood of survival of the species based on the following:

- 1) The Service believes that the number of individuals injured or killed will be low due to the implementation of the proposed conservation measures.
- 2) The proposed project will not permanently remove suitable habitat for the two species.
- 3) The overall proposed project will be beneficial to the two species as it will reduce the risk of large, catastrophic wildfires.

After reviewing the current status of designated critical habitat for the Sierra Nevada yellow-legged frog, the environmental baseline for the action area, the effects of the proposed project and the cumulative effects, it is the Service's biological opinion that the Eldorado National Forest Project Plan, as proposed, is not likely to destroy or adversely modify designated critical habitat. The Service reached this conclusion because the project-related effects to the designated critical habitat, when added to the environmental baseline and analyzed in consideration of all potential cumulative effects, will not rise to the level of precluding the function of the Sierra Nevada yellow-legged frog critical habitat to serve its intended conservation role for the species based on the following:

- 1) The proposed project includes conservation measures that will ensure the preservation of the PCEs of the critical habitat unit.
- 2) Only 11% of the critical habitat unit is within in the action area and treatments will not occur throughout the entire 11% at the same point in time.
- 3) The effects to Sierra Nevada yellow-legged frog critical habitat are small and discrete, relative to the entire area designated, and are not expected to appreciably diminish the value of the critical habitat or prevent it from sustaining its role in the conservation of the Sierra Nevada yellow-legged frog.

### **INCIDENTAL TAKE STATEMENT**

Section 9 of the Act and federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harass is defined by Service regulations at 50 CFR 17.3 as an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. Harm is defined by the same regulations as an act which actually kills or injures wildlife. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavior patterns, including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

This incidental take statement is based upon the proposed action occurring as described in the accompanying biological opinion. Take of listed species in accordance with this incidental take statement is exempted under section 7(o)(2) of the Act. The Forest Service must implement the proposed action as described in this biological opinion and undertake the non-discretionary measures described below; otherwise, the exemption provided under section 7(o)(2) of the Act may lapse. To monitor the impact of incidental take, the Forest Service must report the progress of its action and the impact on the species to the Service as specified in this incidental take statement (50 CFR 402.14(i)(3)).

#### **Amount or Extent of Take**

##### *Foothill yellow-legged frog*

The Service anticipates that the incidental take of the foothill yellow-legged frog will be difficult to detect or quantify due to their size, cryptic coloring, and complexity of their habitat. In addition, behavioral modification before death, water flow, rapid rates of decomposition, and scavenging makes finding an incidentally taken frog extremely unlikely. All these factors contribute to the difficulty in detecting the true number of frogs taken. Often even experienced surveyors encounter different numbers of live frogs on subsequent surveys, since water temperature, air temperature, elevation, substrate characteristics, degree of isolation, presence of other frog species, and presence of predator species influences frog presence and the number of



frogs observed. In addition, we believe that if one frog is observed, it is highly likely that other undetected frogs exist in the general area.

Therefore, we are using the detection of two (2) injured or dead subadult or adult foothill yellow-legged frogs per year directly attributed to the proposed project as the level of take exempted for the proposed project. We based this amount of take exempted on the survey results supplied (page 25 through 27 of biological assessment) and the number of activities expected to occur in or adjacent to locations with known populations. We believe that if this level of take is exceeded, then likely additional frogs have also been adversely affected by the proposed project but not detected. If more than two (2) adult or subadult foothill yellow-legged frogs are injured or killed per year, then reinitiation of formal consultation will be required for the proposed project as the amount or extent of incidental take would be exceeded.

The prohibitions against taking the foothill yellow-legged frog found in section 9 of the Act do not apply until the species is listed. After the conference opinion has been adopted as a biological opinion following listing and upon implementation of the following reasonable and prudent measures, incidental take of the foothill yellow-legged frog associated with the proposed project will become exempt from the prohibitions described in section 9 of the Act. No other forms of take will be exempted under this opinion.

#### *Sierra Nevada yellow-legged frog*

The Service anticipates that the incidental take of the Sierra Nevada yellow-legged frog will be difficult to detect or quantify due to their size, cryptic coloring, and complexity of their habitat. In addition, behavioral modification before death, water flow, rapid rates of decomposition, and scavenging makes finding an incidentally taken frog extremely unlikely. All these factors contribute to the difficulty in detecting the true number of frogs taken. Often even experienced surveyors encounter different numbers of live frogs on subsequent surveys, since water temperature, air temperature, elevation, substrate characteristics, degree of isolation, presence of other frog species, and presence of predator species influences frog presence and the number of frogs observed (Pope and Matthews 2001; Knapp et al. 2003). In addition, we believe that if one frog is observed, it is highly likely that other undetected frogs exist in the general area.

Therefore, we are using the detection of two (2) injured or dead subadult or adult Sierra Nevada yellow-legged frogs per year directly attributed to the proposed project as the level of take exempted for the proposed project. We based this amount of take exempted on the survey results supplied (page 29 through 31 of biological assessment) and the number of activities expected to occur in or adjacent to locations with known populations. We believe that if this level of take is exceeded, then likely additional frogs have also been adversely affected by the proposed project but not detected. If more than two (2) adult or subadult Sierra Nevada yellow-legged frogs are injured or killed per year as a result of the proposed project, then reinitiation of formal consultation will be required for the project as the amount or extent of incidental take would be exceeded.

Upon implementation of the following reasonable and prudent measures, incidental take of Sierra Nevada yellow-legged frog associated with the proposed project will become exempt from the prohibitions described in section 9 of the Act. No other forms of take are exempted under this opinion.

## Effect of the Take

In the accompanying biological opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the species.

## Reasonable and Prudent Measures

All necessary and appropriate measures to avoid or minimize effects on the Sierra Nevada yellow-legged frog resulting from implementation of this project have been incorporated into the project's proposed conservation measures. Therefore, the Service believes the following reasonable and prudent measure is necessary and appropriate to minimize incidental take of the Sierra Nevada yellow-legged frog:

- 1) All conservation measures, as described in the biological assessment and restated in the *Description of the Action* section of this biological opinion, shall be fully implemented and adhered to. Further, this reasonable and prudent measure shall be supplemented by the *Terms and Conditions* below.

All necessary and appropriate measures to avoid or minimize effects on the foothill yellow-legged frog resulting from implementation of this proposed project have been incorporated into the project's proposed conservation measures. However, the prohibitions against taking the foothill yellow-legged frog found in section 9 of the Act do not apply until the species is listed. Therefore, the service advises the Forest Service to consider implementing the following reasonable and prudent measures. If this conference opinion is adopted as a biological opinion following a listing, these measures, with their implementing terms and conditions, will be nondiscretionary.

- 1) All conservation measures, as described in the biological assessment and restated in the *Description of the Action* section of this biological opinion, shall be fully implemented and adhered to. Further, this reasonable and prudent measure shall be supplemented by the *Terms and Conditions* below.

## Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the Act, the Forest Service must ensure compliance with the following terms and conditions, which implement the reasonable and prudent measure described above. These terms and conditions are nondiscretionary.

1. The Forest Service shall include full implementation and adherence to the conservation measures as a condition of any permit or contract issued for the proposed project.
2. The Forest Service shall require that all personnel associated with this proposed project are made aware of the conservation measures and the responsibility to implement them fully.
3. In order to monitor whether the amount or extent of incidental take anticipated from implementation of the proposed project is approached or exceeded, the Forest Service shall adhere to the following reporting requirements.
  - a. The Forest Service shall immediately contact the Service's Sacramento Fish and Wildlife Office at (916) 414-6621 to report direct encounters between listed

species and project workers and their equipment whereby incidental take in the form of injury or death occurs. If the encounter occurs after normal working hours, the Forest Service shall contact the Sacramento Fish and Wildlife Office at the earliest possible opportunity the next working day. When injured or killed individuals of the listed species are found, the Forest Service shall follow the steps outlined in the Salvage and Disposition of Individuals section below.

### **Salvage and Disposition of Individuals:**

Injured listed species must be cared for by a licensed veterinarian or other qualified person(s), such as the Service-approved biologist. Dead individuals must be sealed in a resealable plastic bag containing the date and time when the animal was found, the location where it was found, the name of the person who found it. The specimen should be kept in a freezer located in a secure site, until instructions are received from the Service regarding the disposition of the dead specimen. The Service contact person is the Sierra Cascades Division Supervisor at the Sacramento Fish and Wildlife Office at (916) 414-6621.

### **CONSERVATION RECOMMENDATIONS**

Section 7(a)(1) of the Act directs federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information. The Service recommends the following actions:

- 1) The Forest Service should continue to monitor known populations of listed and proposed listed species such as the Sierra Nevada yellow-legged frog and foothill yellow-legged frog and in coordination with the Service, conduct presence/absence surveys in areas where presence is unknown.
- 2) The Forest Service should continue ongoing recovery actions for federally-listed amphibian species at Dufrene Pond (when necessary), relocating egg masses and tadpoles when they are likely to desiccate and working with zoos to propagate and release frogs on Forest Service lands.

In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

### **REINITIATION—CLOSING STATEMENT**

This concludes formal consultation on the Eldorado National Forest Project Plan. As provided in 50 CFR §402.16(a), reinitiation of consultation is required and shall be requested by the federal agency or by the Service where discretionary federal involvement or control over the action has been retained or is authorized by law, and:

- 1) If the amount or extent of taking specified in the incidental take statement is exceeded;
- 2) If new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered;

- 3) If the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion; or written concurrence, or
- 4) If a new species is listed (other than foothill yellow-legged frog) or critical habitat designated that may be affected by the identified action.

Pursuant to 50 CFR 402.10(d), the Forest Service may ask the Service to confirm the conference opinion as a biological opinion issued through formal consultation if the foothill yellow-legged frog is listed. The request must be in writing. The incidental take statement provided in this conference opinion does not become effective until the species is listed and the conference opinion is adopted as the biological opinion issued through formal consultation. At that time, the proposed project will be reviewed to determine whether any injury or mortality of the foothill yellow-legged frog has occurred. Modification of the opinion and incidental take statement may be appropriate to reflect these impacts. If the Service reviews the proposed project and finds that there have been no significant changes in the action as planned or in the information used during the conference, the Service will confirm the conference opinion as the biological opinion on the project and no further section 7 consultation will be necessary. No take of the species may occur between the listing of the species and the adoption of the conference opinion through formal consultation, or the completion of a subsequent formal consultation.

If you have any questions regarding this biological opinion and conference opinion, please contact Chloe Hansum, Fish and Wildlife Biologist ([chloe\\_hansum@fws.gov](mailto:chloe_hansum@fws.gov)), at (916) 414-6590 or Rick Kuyper, Sierra Cascades Division Supervisor ([richard\\_kuyper@fws.gov](mailto:richard_kuyper@fws.gov)), at (916) 414-6621 or at the letterhead address.

Sincerely,

Michael Fris  
Field Supervisor

ec:

Jeffrey Mabe, U.S. Forest Service, Placerville, California

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### **PERSONAL COMMUNICATION**

2017. E-mail communication from Jeff Mabe, Forest Service, to Rick Kuyper, U.S. Fish and Wildlife Service. Dated November 2, 2017.