



# United States Department of the Interior



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FISH AND WILDLIFE SERVICE  
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AUG 30 2016

Mr. Laurence Crabtree  
Eldorado National Forest  
U. S. Forest Service  
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Placerville, California 95667

Subject: Deer Valley 4wd Trail (19E01) Meadow Restoration and Blue Lakes/Meadow Lake Road (09N01) Maintenance Project on the Eldorado National Forest and the Threatened Yosemite Toad, and Yosemite Toad Proposed Critical Habitat

Dear Mr. Crabtree:

This letter is in response to the Eldorado National Forest's June 2, 2015, request for concurrence and initiation of formal consultation with the U.S. Fish and Wildlife Service (Service) on the proposed Deer Valley 4wd Trail (19E01) Meadow Restoration and Blue Lakes/Meadow Lake Road (09N01) Maintenance Project (Deer Valley Project; proposed project) in Alpine County, California. Your request was received by the Service on June 2, 2015. At issue are the proposed project's effects on the threatened Lahontan cutthroat trout (*Oncorhynchus clarki henshawi*), endangered Sierra Nevada yellow-legged frog (*Rana sierrae*), critical habitat for the Sierra Nevada yellow-legged frog, threatened Yosemite toad (*Anaxyrus canorus*), and critical habitat for the Yosemite toad. This response is provided under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. §§ 1531)(Act).

The Federal action on which we are consulting covers the re-opening of Forest Service routes 09N01 and 19E01, re-routing of a portion of 19E01, hardening of a stream crossing (19E01 crossing of Deer Creek at Meadow 9N83-2), streambank restoration activities on Deer Creek, and road maintenance activities on Route 09N01 by the Eldorado National Forest. Pursuant to 50 CFR § 402.12(j), you submitted a biological assessment for our review and conclude that the proposed project *may affect, not likely to adversely affect* the Lahontan cutthroat trout and the Sierra Nevada yellow-legged frog, *may affect, likely to adversely affect* the Yosemite toad, and it will not result in adverse modification or destruction of (then proposed) critical habitat for the Yosemite toad and Sierra Nevada yellow-legged frog.

In considering your request for formal consultation, we based our evaluation on the following: (1) letter from the Forest Service to the Service dated June 2, 2015; (2) *Biological Assessment for the Deer Valley 4wd Meadow Restoration and Blue Lakes/Meadow Lake Road Maintenance Project* dated March 15, 2016 (biological assessment 1); (3) *Biological Assessment (amended) for the Deer Valley 4wd Meadow Restoration and Blue Lakes/Meadow Lake Road Maintenance Project* received electronically

April 1, 2016 (biological assessment 2); (4) *Results of 2009 Surveys for Sierra Nevada Yellow-legged Frog (Rana Sierrae) and Yosemite Toad-Western Toad (Anaxyrus sp.) in the Mokelumne River Project Area (FERC No. 137) Monitoring Year 5* by Ecorps Consulting for Pacific Gas and Electric dated January 25, 2010 (PG&E Report); (5) Deer Valley 4wd Trail Meadow Restoration and Blue Lakes Road Maintenance Project hydrologist's report dated March 15, 2016; (7) *Programmatic Biological Opinion on Nine Forest Programs on Nine National Forests in the Sierra Nevada of California for the Endangered Sierra Nevada Yellow-legged Frog, Endangered Northern Distinct Population Segment of the Mountain Yellow-legged Frog, and the Threatened Yosemite Toad* (Programmatic Biological Opinion)(Service 2014b); (8) correspondence and electronic mail (email) concerning the Deer Valley Project between the Service and the Forest Service; and (9) other information available to the Service.

The Service concurs with the Forest Service's determination that the proposed project *may affect, but is not likely to adversely affect* the Lahontan cutthroat trout, Sierra Nevada yellow-legged frog, and it will not result in adverse modification or destruction of critical habitat for the Sierra Nevada yellow-legged frog. The trout currently is not known from Deer Creek; the Sierra Nevada yellow-legged frog has not been located during the surveys described in the PG&E report; and the effects to the critical habitat of the Sierra Nevada yellow-legged frog are anticipated to be minor and short term in duration. Therefore, the effects on the Lahontan cutthroat trout, Sierra Nevada yellow-legged frog, and critical habitat are insignificant or discountable. The remainder of this document provides our biological opinion on the effects of the proposed project on the Yosemite toad, and its critical habitat.

### Consultation History

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|-------------------------|--|
| June 2, 2015:           | The Forest Service requested initiation of consultation on the Deer Valley 4wd Trail (19E01) Meadow Restoration and Blue Lakes/Meadow Lake Road (09N01) Maintenance Project.                                       |
| October 26, 2015:       | The Service and Forest Service met in the field to discuss the project.  |
| December 10, 2015:      | The Forest Service met with the Service at the FWS Sacramento Field Office to discuss the project.   |
| January 13, 2016:       | The Forest Service provided the Service with an updated biological assessment clarifying public comments on analysis for Yosemite toad and updating Lahontan cutthroat trout survey results from the project area. |
| March 15, 2016:         | The Forest Service provided the Service with an updated biological assessment.   |
| March 2016 - June 2016: | Forest Service biologist provided assistance to the Service with the consultation and the preparation of the draft biological opinion.   |
| March 2016 - May 2016:  | Emails and discussions between the Forest Service and Service personnel concerning the Deer Valley 4wd Trail (19E01) Meadow Restoration and Blue Lakes/Meadow Lake Road (09N01) Maintenance Project.               |
| August 26, 2016         | The Service issued a final rule designating critical habitat for the Sierra Nevada yellow-legged frog and the Yosemite toad.   |

## BIOLOGICAL OPINION

### Description of the Action

The Amador Ranger District of the Eldorado National Forest proposes trail maintenance and meadow restoration on the Deer Valley 4wd trail and road maintenance on the Blue Lakes/Meadow Lakes road. The proposed project area is located between the areas of Meadow Lake and Lower Blue Lake along Blue Lakes/Meadow Lake Road (09N01), and along Deer Valley 4wd trail (19E01). The project will implement the necessary corrective measures to bring Forest Service Route 09N01 into compliance with Standard & Guideline 100 (S&G 100), and to implement restorative actions to limit resource impacts along 19E01

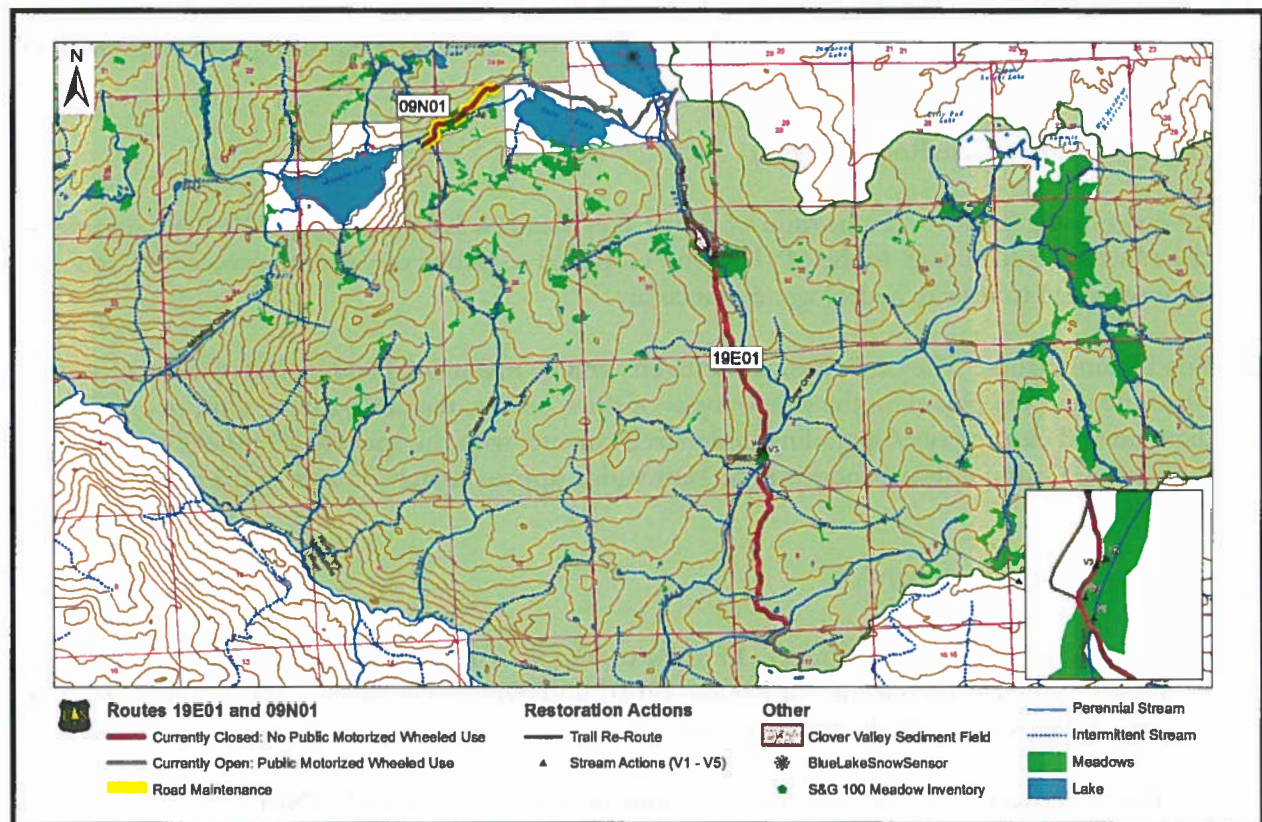


Figure 1. Map of project activity locations for the Deer Valley 4wd Trail Meadow Restoration and Blue Lakes/Meadow Lake Road Maintenance Project

The Deer Valley Project consists of the following:

1. **Re-open Route 19E01:** The portion of the Deer Valley 4wd Trail (19E01) that currently is closed will be added back to the Motor Vehicle Use Map (MVUM) and re-opened for public use. Adding 19E01 to the MVUM is not contingent on the completion of the proposed corrective actions at meadows 09N83-2 or 09N83-1 since evaluation found the route to be consistent with Standard and Guide 100.
2. **Trail Reroute:** A short reroute (<500 feet) of 19E01 (Deer Valley 4wd Trail) on the west side of Deer Creek will be completed in order to move the trail away from areas of active stream bank erosion while improving the angle of approach to the existing stream crossing. The new trail would be located approximately 100 feet west of the existing trail and will require the removal of

approximately 20 trees (5 trees >20 inch dbh) and stumps to clear the new trail corridor. Material generated from construction of the reroute (wood and chips) will be used to block dispersed areas, define a new trail, and apply mulch to the old corridor. The old roadbed will be planted with locally collected vegetation.

3. Harden Stream Crossing at Meadow 09N83-2: Native rock, cobble, and boulders (8-16 inches diameter) from the trail or the Clover Valley sediment field will be imported to harden the approaches to Deer Creek. Most of the rock that will be used for hardening the crossing will be moved by jeeps and volunteers and will be sourced from the southern portion of the trail. The hardening of the stream crossing, and route delineation will be completed in 2-7 days.
4. Stream bank Restoration: Stream banks impacted by past off-trail vehicle travel will be restored using revegetation methods such as seeding, willow cuttings, and transplanting sod plugs at Deer Valley and Clover Valley meadows.

#### Blue Lakes/Meadow Lake Road (09N01)

1. Re-open Route 09N01: The portion of Blue Lake/Meadow Lake Road (09N01) that currently is closed will be added back to the MVUM and reopened to public use after the corrective actions have occurred to restore hydrologic connectivity.
2. Road Maintenance: The catch basins at culverts will be maintained and installed, new culverts where needed and gravel on the steep slopes of the roadway, repairing rolling dips, re-grading the road and clearing out/upgrading undersized culverts with the specific alignment and grade tolerances. Ground disturbances will be kept within approximately 25 feet of the road centerline.

#### Both Routes (19E01 and 09N01)

- a. Seasonal Closure (Forest Order): In order to mitigate the potential impacts that re-opening the currently closed portions of Routes 19E01 and 09N01 will have on the Yosemite toad, a seasonal closure would be implemented.

This seasonal closure will affect the portions of Routes 19E01 and 09N01 currently closed under the Eldorado National Forest's Travel Management SEIS and the northern portion of Route 19E01 between the Trailhead and Clover Valley (not currently closed under the Travel Management SEIS). The timing of the seasonal closure would be annually variable. The season of use date will be determined annually by the water content (WC) levels (available remotely) at the Blue Lakes (BLK) California Data Exchange Center (CDEC) Weather Station/Active Snow Sensor.

Routes 19E01 and 09N01 will remain closed from Jan 1<sup>st</sup> to 6 weeks post-"snowmelt". "Snowmelt" will be indicated by a WC reading of less than or equal to 1.0 inch. If WC readings increase due to late season storms to greater than 1.0 inch after values have dipped below the 1.0-inch threshold, the calculation of 6 weeks post snowmelt will be reset, and the closure duration will be re-initiated/extended. Historically (2005-2014), had the proposed seasonal closure been in effect, it would have been lifted between June 24 and August 20.



### Other Actions:

Seasonal closure information (i.e., status), signs, and maps displaying the closure areas will be placed at each 19E01 trailhead, and 0.25 mile north of the Eldorado National Forest and Stanislaus National Forest boundary along route 19E01. Additional signage and a gate will be installed west of Twin Lake on Route 09N01 to help enforce the closure period. Seasonal closure information also will be available on the Eldorado NF website, and at the Amador Ranger District Office.

### Conservation Measures

The Forest Service proposes to avoid and minimize effects to the Yosemite toad from the Deer Valley 4WD Meadow Restoration and Blue Lakes/Meadow Lake Road Maintenance Project. The Forest Service will implement the following Conservation Measures when implementing the proposed actions:

1. Wheeled vehicles off designated routes, trails, and limited off-highway (OHV) use will be prohibited to reduce the risk of crushing, injuring, or disturbing individuals of the listed species (per S&G 69).
2. Within occupied habitats or areas proposed as Critical Habitat, mitigation measures to avoid impacts to Yosemite toad will be implemented for ground disturbing equipment to reduce the risk of killing individuals and adversely affecting their habitat (per S&G 109). The measures may include avoiding the activity all together.
3. The use of low velocity water pumps and screening devices (a drafting box measuring 2 feet on all sides covered in a maximum of 0.25 inch screening) for pumps (per S&G 110) will be utilized during drafting for project treatments to prevent mortality of eggs, tadpoles, juveniles, and adult Yosemite toad.
4. Fuels and other toxic materials will be stored outside of riparian conservation areas (per S&G 99) to limit the exposure of the listed species to the toxic materials associated with vegetation management activities.
5. If management activities are proposed in a CAR or RCA, site-specific mitigation measures will be designed to (1) minimize risk of sediment entry into aquatic systems and (2) minimize impacts to habitat for aquatic- and riparian-dependent species (per S&G 92).
6. When a project results in riparian vegetation being outside the range of natural variability to an extent that Yosemite toad and/or their habitats may be negatively affected, design criteria will be incorporated to mitigate effects or restore riparian vegetation to the natural range of variability during project implementation (per S&G 105).
7. Management activities will not adversely affect water temperatures required for local species, including Yosemite toad (per S&G 96).
8. For projects that could adversely affect streams to the extent that Yosemite toad and/or their habitats may be negative affected, and the streams are already outside the range of natural variability, mitigation measures and short-term restoration actions will be implemented to prevent declines and/or improve conditions. Long-term restoration actions will be evaluated

and implemented according to priority (per S&G 102), which includes adverse impacts to listed species.

9. Culverts and stream crossings will not create barriers except for the benefit of Yosemite toad. Water drafting sites will be located to avoid adverse effects to instream flows and depletion of pool habitat. Where possible, maintain and restore timing, variability and duration of floodplain inundation and water table elevation in meadows, wetlands, and other special aquatic features (per S&G 101).
10. Corrective actions will be implemented when needed to restore hydrologic connectivity of aquatic systems that are disrupted by roads (per S&G 100).
11. Actions consistent with S&Gs and the desired conditions of aquatic habitats will be implemented after identifying and evaluating adverse effects of recreation-associated activities (per S&G 116).
12. Protection needs will be established with appropriate restrictions and mapped prior to commencement of operations (per BMP 1.4). This includes wetlands, meadows, lakes, springs, stream course protection zone widths, etc.
13. A limited operating period may be established to ensure that negative impacts to resources may be avoided; contract provisions also can be used to close down operations during adverse operating conditions (per BMP 1.5).
14. Soil erosion will be minimized to protect water quality via the stabilizing influence of vegetation foliage and root networks. Surface-disturbed areas will be revegetated with grass or browse species between previously planted trees as needed for control of overland runoff and to meet wildlife needs (per BMP 5.4).
15. High-erosion hazard areas will be identified pre-project to adjust treatment measures and prevent downstream water-quality degradation (per BMP 1.3).
16. Use of mechanized equipment will be prohibited from sensitive areas in meadows, wetlands, Streamside Management Zones, and landslide areas (per BMP 1.22, per BMP 1.8, and per BMP 1.1).
17. Watersheds will be restored to repair degraded watershed conditions and improve water quality and soil stability. Watershed restoration is a corrective measure to improve ground cover density; improve infiltration; prevent excessive overland runoff and conserve the soil resource; stabilize stream banks and stream channels; improve soil productivity; reduce flood occurrence and flood damage; and improve overall watershed function (per BMP 7.1).
18. Tractor operations will be limited in wetlands and meadows. In order to limit turbidity and sediment production resulting from compaction, rutting, runoff concentration, and subsequent erosion, the use of mechanical equipment will be excluded in wetland and meadows except for the purpose of restoring wetland and meadow functions. Sediment and other pollutants will be controlled from entering stream courses. The application of this BMP will be mandatory on all vegetation-manipulation projects as prescribed in the environmental documentation (per BMP 5.3). Specific protection measures will be established for each area that could incur adverse water-quality impacts (per BMP 1.18).

19. Adverse water-quality impacts associated with destruction, disturbance, or modification of wetlands will be avoided (per BMP 7.3). Factors that will be evaluated include, but are not limited to, water supply, water quality, recharge areas, functioning of the wetland during flood and storm events, flora and fauna, habitat diversity and stability, and hydrologic function of riparian areas.
20. A water quality monitoring plan will be part of this Project's EA to evaluate the implementation and effectiveness of a management prescription in protecting water quality (per BMP 7.6).
21. Management by closure to seasonal, temporary, and permanent use will be used to exclude activities that could result in damages to either resources or improvements, including impaired water quality from roads and trails (per BMP 7.7). Closure to use will occur when the condition of the watershed must be protected to preclude adverse water-quality effects and adverse impacts to the listed amphibians (per BMP 1.5; per BMP 2.9).
22. The Forest Service will minimize water, aquatic, and riparian resource disturbances that may affect Yosemite toad when constructing, reconstructing, or maintaining temporary and permanent water crossings (BMP 2.8). Specifications for stream crossing areas and design, construction/reconstruction of permanent and temporary crossings, as well as maintenance of these crossings included in 36 technical specifications listed in BMP 2.8 will be followed.
23. Measures described in BMP 2.11 to prevent adverse effects from fuels, lubricants, cleaners, and other harmful materials that are 1) discharged into nearby surface waters or 2) infiltrated through soils to contaminate groundwater resources on skin-respiring amphibians resulting from equipment refueling and servicing will be implemented.
24. To protect water quality during road maintenance and operations, 31 practices related to road inspection, maintenance planning, and operations will be implemented as appropriate based on local site conditions (per BMP 2.4).
25. A project-specific erosion control plan will be developed to effectively limit and mitigate erosion and sedimentation from any ground-disturbing activities, through planning prior to commencement of project activity, and through project management and administration during project implementation (per BMP 2.13).
26. The effects to riparian and aquatic resources of creating, maintaining and using routes and areas for motorized off-highway vehicles (OHV) will be mitigated by OHV-specific BMPs designed for each individual project or batch.
27. OHV trails will be located to reduce the risk that sediment originating from designated trails and areas will enter watercourses and water bodies to minimize hydrologic connectivity, and by incorporating drainage structures into trail design to disperse concentrated runoff (per BMP 4.7.2).
28. The discharge of sediment into water bodies from OHV use will be minimized or prevented by implementing the appropriate techniques outlined in BMP 4.7.3 for crossing location, trail approaches to watercourses, and design and construction of watercourse crossings.
29. The discharge of sediment into water bodies will be minimized or prevented during construction, reconstruction, and realignment of OHV trails (per BMP 4.7.4).

30. The discharge of sediment into watercourses and water bodies will be minimized or prevented by permanently restoring OHV-damaged areas, watercourse crossings, and OHV trails no longer designated for use (per BMP 4.7.8).
31. The discharge of sediment into watercourses and water bodies will be minimized or prevented by permanently restoring OHV-damaged areas, watercourse crossings, and OHV trails no longer designated for use (per BMP 4.7.8).
32. Each Yosemite toad encountered shall be treated on a case-by-case basis, but the general procedure that would be followed is as follows; 1) Leave the non-injured animal alone if it is not in danger; or 2) Move the animal to a nearby safe location if it is in danger. These two actions are further described below.
  - a. When a Yosemite toad is encountered within the project site, the first priority is to stop all activities in the surrounding area that may have the potential to result in the harassment, injury, or death of the individual. Then, the situation shall be assessed by a Forest Service biologist or Service-approved biologist in order to select a course of action that will minimize adverse effects to the individual.
  - b. Avoidance is the preferred option if an individual Yosemite toad is not moving or is found using a burrow or other refuge. A Forest Service biologist or Service-approved biologist shall inspect the animal and the area to evaluate the necessity of fencing, signage, or other measures to protect the animal.
  - c. If appropriate, the Yosemite toad shall be allowed to move out of the hazardous situation on their own volition to a safe location. An animal shall not be picked up and moved based on it not moving fast enough or it is an inconvenience for activities associated with project operations.
  - d. Individual Yosemite toad shall be captured and moved by hand only when it is necessary to prevent harassment, injury, or death. If suitable habitat is located immediately adjacent to the capture location, then the preferred option is relocation to that site. An individual shall not be moved outside of the radius it would have traveled on its own. Under no circumstance shall they be relocated to a non-Forest Service property without the landowner's written permission.
  - e. Only Forest Service biologists or Service-approved biologists may capture Yosemite toad. Nets or bare hands may be used to capture the animals. Soaps, oils, creams, lotions, repellants, or solvents of any sort cannot be used on hands within two hours of handling the individuals. If the animal is held for any length of time in captivity, they shall be kept in a cool, dark, moist, environment with proper airflow, such as a clean and disinfected bucket or plastic container with a damp sponge. Containers used for transporting shall not contain any standing water, or objects, or chemicals that may injure or kill Yosemite toad.
  - f. To avoid transferring disease or pathogens between suitable habitats during the course of trans-locating the Yosemite toad, Forest Service biologists or the Service-approved biologist shall use the following guidance for disinfecting equipment and clothing (<http://www.open.ac.uk/daptf/>).



33. In addition to the Conservation Measures listed above, separate Design Criteria were also developed to reduce the effects of the proposed actions on the Yosemite toad. These additional Design Criteria include:
- a. The efficacy and accuracy of the snow sensor at Blue Lake for indicating snow melt conditions in the project area will be assessed by Forest Service biologists and other qualified staff during the first few seasons of implementing the seasonal closure. Field verification of snow melt and trail condition will occur prior to lifting the seasonal closure.
  - b. In the event that the Blue Lakes snow sensor is not functioning, Forest Service staff would attempt to verify snow condition at Blue Lakes and/or within the suitable habitat in the vicinity of 19E01 and 09N01 during spring snowmelt. Routes 19E01 and 09N01 would remain closed until snowmelt is confirmed, or the timing of snowmelt assessed.
  - c. To limit impacts to Yosemite toad, the use of ground-based mechanized/motorized vehicles or equipment to implement the restoration activities would not occur during the proposed seasonal closure for Routes 19E01 and 09N01.
  - d. Restoration activities associated with Deer Creek and the unnamed perennial stream between Meadow Lake and Twin Lake would be completed during a period of low streamflow. This typically occurs in late summer and early fall. The project Hydrologist will be consulted before implementation of work along 09N01 and 19E01 to ensure that streamflow is low enough for road maintenance and restoration activities to occur.
  - e. Restoration activities associated with Deer Valley 4WD Trail (19E01) and Blue Lake/Meadow Lake Road (09N01) would be monitored for effectiveness as outlined in the Eldorado National Forest Travel Management SEIS Settlement Agreement Monitoring plan of 2015.
  - f. All equipment would avoid traveling off the hardened road surface (i.e., outside of the route footprint) or crossing into aquatic habitat to the extent possible during restoration activities associated with the hardening of the approaches at Route 19E01's stream crossing at Deer Creek (in Meadow 9N83-2) and the culvert installation, repair, and maintenance on Route 09N01. Aquatic habitat includes the portion of Route 19E01 that crosses directly through Deer Creek.
  - g. Where equipment travels off the hardened road surface or crosses through stream habitat for restoration work (such as the re-route) these areas shall be surveyed for existing Yosemite toad by qualified Forest Service personnel just prior to starting work to avoid crushing.
    1. Qualified personnel (i.e., biologist) will remain on-site during implementation of all of the proposed restoration and maintenance actions.
    2. If Lahontan cutthroat trout are found in Meadow, Blue, or Deer Creek, their safety shall be assessed by the on-site biologist and the Service will be notified of the occupancy detection.

3. Since Yosemite toads have been found to have site fidelity to burrows, attention will be given to identify existing burrows during the survey. Burrows will be avoided where possible.

### **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.” The action area is located in the central Sierra Nevada range in the vicinity of Upper Blue Lake, Lower Blue Lake, Twin Lake, and Meadow Lake at approximately 8,100 feet in elevation. The action area is bounded by Lower Blue Lake to the North and east, Meadow Lake to the west, and Eldorado and Stanislaus National Forest boundary to the south. The proposed action area contains wet meadow, stream, granitic outcropping, and coniferous forested habitats that are suitable for breeding and dispersal habitat for the Yosemite toad. For the proposed project, the action area encompasses approximately 3.2 miles of Route 19E01 comprising approximately 4.6 acres, approximately 0.7 mile of Route 09N01 (approximately 2.2 acres), approximately 0.05 acre (2,090 square feet) of streambank along Deer Creek upstream of the 09N83-2 crossing, Meadow Creek between Twin Lake and Meadow Lake, and the length of Blue Creek and Deer Creek from Blue Lake to a distance of approximately 100 feet downstream of the crossing of Route 19E01 at 09N83-2.

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

In accordance with policy and regulation, the jeopardy analysis in this biological opinion relies on four components: (1) the *Status of the Species*, which evaluates the Yosemite toad’s range-wide condition, the factors responsible for that condition, and its survival and recovery needs; (2) the *Environmental Baseline*, which evaluates the condition of the Yosemite toad in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of the Yosemite toad ; (3) the *Effects of the Action*, which determines the direct and indirect impacts of the proposed Federal action and the effects of any interrelated or interdependent activities on the Yosemite toad ; and (4) *Cumulative Effects*, which evaluates the effects of future, non-Federal activities in the action area on the Yosemite toad.

In accordance with the implementing regulations for Section 7 and Service policy, the jeopardy determination is made by evaluating the effects of the proposed Federal action in the context of the Yosemite toad’s current status, taking into account any cumulative effects, to determine if implementation of the proposed action is likely to cause an appreciable reduction in the likelihood of both the survival and recovery of this species in the wild.

The jeopardy analysis in this biological opinion places an emphasis on consideration of the range-wide survival and recovery needs of the Yosemite toad and the role of the action area in its survival and recovery as the context for evaluating the significance of the effects of the proposed Federal action, taken together with cumulative effects, for purposes of making the jeopardy determination.

### **Analytical Framework Adverse Modification**

In accordance with policy and regulation, the adverse modification analysis in this biological opinion relies on four components: (1) the *Status of Critical Habitat*, which evaluates the range-wide condition of critical habitat for the Yosemite toad; in terms of key components of the critical habitat 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 listed species; (2) the

*Environmental Baseline*, which analyses the condition of the critical habitat in the action area, the factors responsible for that condition, and the value of the critical habitat in the action area for the conservation for the listed species; (3) the *Effects of the Action*, which determines the direct and indirect impacts of the proposed Federal action and the effects of any interrelated or interdependent activities on the key components of critical habitat that provide for the conservation for the listed species of the listed species; and (4) *Cumulative Effects*, which evaluates the effects of future, non-Federal activities that area reasonably certain to occur 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 value of the affected critical habitat units for the conservation/recovery of the listed species.

### **Status of the Yosemite Toad**

Please refer to the Programmatic Biological Opinion for information on the status of the Yosemite toad.

As a result of Global Climate Change, snowpack is, by all projections going to decrease dramatically following the temperature rise and more precipitation falling as rain (Kadir *et al* 2013). Higher winter streamflows, earlier runoff, and reduced spring and summer streamflows are projected, with increasing frequency in the Sierra Nevada (Point Reyes Bird Observatory 2011; Kadir *et al.* 2013). Snow dominated elevations of 6,560-9,190 feet will be the most sensitive to temperature increases, and a warming of 9°F is projected to shift center timing, the measure of when a stream's annual flow has passed a given point in time, to more than 45 days earlier in the year as compared to the 1961-1990 baseline (Point Reyes Bird Observatory 2011). Lakes, ponds, and other standing water fed by snowmelt or streams are likely to dry out or be more ephemeral during the non-winter months (Lacan *et al.* 2008; Point Reyes Bird Observatory 2011). This pattern could influence ground water transport, and springs may be similarly depleted, leading to lower lake and stream levels. Climate change remains a primary threat to the Yosemite toad.

### **Status of Proposed Critical Habitat for the Yosemite Toad**

Critical habitat for the Yosemite toad was proposed on April 25, 2013 (78 **Federal Register** 24515) and finalized on August 26, 2016 (81 **Federal Register** 59046). Under the Act and its implementing regulations, we are required to identify the physical or biological features essential to the conservation of the Yosemite toad in areas occupied at the time of listing (in this case, areas that are currently occupied), focusing on key components of the critical habitat that provide for the conservation of the listed species. We consider these key elements, characterized as Primary Constituent Elements (PCEs) in this proposed critical habitat, to represent the physical or biological features that are essential to the conservation of the species.

Based on our current knowledge of the physical or biological features and habitat characteristics required to sustain the species' life-history processes, we determine that the PCEs, or key elements, specific to the Yosemite toad are:

1. Aquatic breeding habitat. This habitat consists of bodies of fresh water, including wet meadows, slow-moving streams, shallow ponds, spring systems, and shallow areas of lakes, that:
  - a. Are typically (or become) inundated during snowmelt,
  - b. Hold water for a minimum of 5 weeks, and

- c. Contain sufficient food for tadpole development.
  - d. During periods of drought or less than average rainfall, these breeding sites may not hold water long enough for individual Yosemite toads to complete metamorphosis, but they are still considered essential breeding habitat because they provide habitat in most years.
2. Upland Areas: This habitat consists of areas adjacent to or surrounding breeding habitat up to a distance of 0.78 mile in most cases (that is, depending on surrounding landscape and dispersal barriers), including seeps, springheads, and areas that provide:
- a. Sufficient cover (including rodent burrows, logs, rocks, and other surface objects) to provide summer refugia,
  - b. Foraging habitat,
  - c. Adequate prey resources,
  - d. Physical structure for predator avoidance,
  - e. Overwintering refugia for juvenile and adult Yosemite toads,
  - f. Dispersal corridors between aquatic breeding habitats,
  - g. Dispersal corridors between breeding habitats and areas of suitable summer and winter refugia and foraging habitat, and/or
  - h. The natural hydrologic regime of aquatic habitats (the catchment).
  - i. These upland areas should also allow maintain sufficient water quality to provide for the various life stages of the Yosemite toad and its prey base.

All units and subunits proposed for designation as critical habitat are currently occupied by Yosemite toads, and contain the Primary Constituent Elements (PCEs), sufficient to support the life-history needs of the species.

#### Special Management Considerations or Protection

When designating critical habitat, we assess whether the specific areas within the geographic area occupied by the species at the time of listing contain those features that are essential to the conservation of the species. These features may require special management considerations or protection to reduce the following threats: Impacts associated with timber harvest and fuels reduction activity; impacts associated with livestock grazing; the spread of pathogens; and intensive use by recreationists, including packstock camping and grazing.

Management activities that could ameliorate the threats described above include, but are not limited to, physical habitat restoration and responsible management practices covering potentially incompatible beneficial uses such as timber harvest and fuels management, water supply development and management, livestock and packstock grazing, and other recreational uses. These management activities will protect the PCEs for the Yosemite toad by reducing the stressors currently affecting population viability. Additionally, management of critical habitat lands will help

maintain or enhance the necessary environmental components, foster recovery, and sustain populations currently in decline.

## **Environmental Baseline**

### *Yosemite toad*

Formal surveys for the Yosemite toad have occurred in the project area by the U.S. Forest Service and Pacific Gas and Electric Company (PG&E). There are several recent occurrence records in and adjacent to the action area, including the Twin Lake vicinity, Route 09N01, Route 19E01, Lower Blue Lake, and Upper Blue Lake. A dead crushed Yosemite toad was found at the proposed restoration site in 2014 (Biological Assessment). The project is also surrounded by proposed critical habitat (Unit 1 – Blue Lakes/Mokelumne), and there is sufficient connectivity that this area could be used as upland dispersal and overwintering habitat connecting breeding meadows. The Yosemite toad occurs within the action area as demonstrated by: (1) recent observations of the species on Forest Service and private lands in the Sierra Nevada; (2) the biology and ecology of the animal, especially the ability of individuals to move, forage, and winter in uplands; and (3) the action area contains physical features that provide refuge, breeding, foraging, and dispersal habitat for the amphibian. Upland habitat lost from the re-routing of 19E01 will be compensated through habitat improvement achieved by re-routing 19E01 out of wet meadow breeding habitat and into upland habitat.

### *Critical Habitat*

Critical habitat unit 1 Blue Lakes/Mokelumne for the Yosemite toad is located within the action area (Service 2016).

Unit 1 (Blue Lakes/Mokelumne) of the proposed critical habitat for the Yosemite toad is approximately 36,778 acres in size and it is located in Elpine County, north and south of Highway 4. The Blue Lakes/Mokelumne Unit is predominantly within Eldorado, Humboldt-Toiyabe, and Stanislaus National Forests. This unit currently is occupied by the Yosemite toad and it contains the physical or biological features essential to its conservation. This unit is considered essential to the conservation of the Yosemite toad because it represents the northernmost portion of the range of this threatened amphibian, and constitutes an area of high genetic diversity. The Blue Lakes/Mokelumne unit is an essential component of the entirety of this proposed critical habitat designation due to the genetic and distributional area this unit encompasses. The physical or biological features essential to the conservation of the Yosemite toad in the Blue Lakes/Mokelumne unit may require special management considerations or protection due to grazing and recreational activities.

## **Effects of the Action**

### *Yosemite toad*

The proposed Deer Valley 4wd Trail Meadow Restoration and Blue Lakes/Meadow Lake Road Maintenance Project will result in adverse and beneficial effects to the Yosemite toad.



## Re-open Routes 19E01 and 09N01

Individuals may be disturbed, injured, or killed by re-opening routes 09N01 and 19E01 to public access, during the re-routing of Route 19E01, and during stream hardening, road maintenance actions, and stream bank restoration actions (Figure 1). Re-opening the approximately 3.17 mile (4.6 acres) portion of Route 19E01 and the 1 mile (2.2 acres) portion of Route 09N01 that currently are closed would allow motorized use of the routes similar to levels occurring prior to the closure. Use of both routes would allow travel directly through suitable Yosemite toad wet meadow and upland habitat. Motorized travel through these habitats has the potential to disturb, injure, or kill individual Yosemite toads. Vehicle related pollutants could enter wet meadow and aquatic habitats and affect the survival, growth, and metamorphosis of individuals, altered physiology and behaviors, deformities in tadpole oral cavities, and elevated levels of stress hormones (Mahaney 1994; Lefcort *et al.* 1997; Brown *et al.* 2014; Andrews *et al.* 2008; Beebee 2013).

### Re-route of 19E01

The re-routing of 19E01 would occur in upland habitat for the Yosemite toad and relocate the route out of wet meadow habitat. Yosemite toads could be within burrows underground, hiding in grasses, shrubs, stumps, or downed woody debris along the new route. During construction activities in upland habitat, individual Yosemite toads could become crushed by equipment or disturbed by the presence of equipment and personnel. Alterations to toad habitat include the damage or loss of rodent burrows, rocks, logs, or tree stumps that could be used by the Yosemite toad as refuges. The loss of these habitat elements may increase the risk of predation, change microclimates which can affect growth and survival, and influence prey availability by changed the prey's habitat (Brown *et al.* 2009). The existing route travels through the wet meadow adjacent to the stream, and restoration actions in the meadow would result in the improvement of wet meadow habitat for the Yosemite toad.

### Harden approaches of Route 19E01 to Deer Creek

The Route 19E01 approaches to Deer Creek would be hardened and the trail better defined in the meadow with boulders to limit the width of the crossing on both sides of Deer Creek. The rock used to harden the crossing would be locally sourced and transported to the stream crossing by vehicles. The action of hardening the stream crossing at Deer Creek may affect Yosemite toads if they were to occupy the streambanks during implementation and they could be crushed or their behavior disturbed.

### Streambank restoration

Stream banks impacted by previous off-trail vehicle travel would be restored at three locations along Deer Creek and one location along Blue Creek. Each of these points are located within suitable Yosemite toad wet meadow habitat. Techniques used to restore these sites would include seeding, willow cutting planting, and transplanting sod plugs. Yosemite toads present along the stream banks may be disturbed by the stream bank restoration activities, although injury and mortality are not expected. Since the scope of implementing the stream bank restoration is minor, disturbance would be temporary and would not cause a lasting effect on Yosemite toad behavior or persistence in the area. Furthermore, these restoration actions should result in improved bank stability and subsequently reduce the potential that future erosion and sedimentation would occur. This would indirectly improve water quality and stream conditions of Deer Creek and Blue Creek. Seeding and willow planting would also provide additional cover opportunities for Yosemite toad.

### Road restoration of Route 09N01

Road restoration actions on Route 09N01 would include creating catch basins, installing new culverts, clearing out or upgrading undersized culverts, re-grading the road surface, repairing rolling-dip water control structures, and adding gravel along steep sections of the roadway. These actions would improve the existing condition of the meadows and streams along route 09N01. The maintenance actions may, however, affect Yosemite toads where they occur along the 0.07 miles traversing wet meadow habitat, and the 0.93 miles (2.2 acres) traversing upland habitat.

Actions occurring within a few feet of the edge of the road prism (i.e. re-grading, rolling dip repairs, and graveling) would not directly affect the Yosemite toad wet meadow or upland habitat, but individual Yosemite toads may be affected. During their active season, Yosemite toads move among multiple habitats. Since Route 09N01 bisects suitable Yosemite toad habitat, they may be, and have been observed directly on the route. Because toads move slowly and cannot easily avoid maintenance vehicles or equipment and because they are relatively small and hard to see, they are difficult to avoid.

Actions occurring within the roadway and shoulders and those associated with culvert repair or installation may affect Yosemite toad through disturbance, injury, or mortality. Yosemite toad juveniles and sub-adults have been observed on Route 09N01 and at and near the culverts along the route. Culvert maintenance occurring at crossings of Meadow Creek, intermittent streams, or other ephemeral streams may also cause increased stream turbidity or sedimentation downstream. Despite these potential effects, the functionality of the culverts and subsequently stream condition would be improved after completion of the work. Therefore, implementation of the proposed culvert maintenance is expected to improve the water quality of the aquatic habitats and would indirectly benefit Yosemite toads utilizing the area.

During trail maintenance and stream crossing construction, equipment could introduce chemicals into the environment if they are leaking fluids, despite the conservation measures to minimize this effect. Because amphibians have permeable skin, they are more susceptible to the toxic effects of chemicals from off highway vehicles or vehicles used for road maintenance. As noted previously, adverse effects of pollutants such as vehicle emissions, oil and gas leaks or spills, may include reduced survival, growth, and effect metamorphosis, altered physiology and behaviors, deformities in tadpole oral cavities, and elevated levels of stress hormones.

Road maintenance actions would also repair/modify sections of the road that have standing water or water flowing over them. This should eliminate an attractive nuisance and reduce the potential for toads to sit in wet puddles on the road surface. In turn, this would lower the susceptibility to injury and mortality of the threatened amphibian during future use of the route.

### Effects on Proposed Critical Habitat 1 Blue Lakes/Mokelumne

A number of the conservation measures that will be implemented for the Yosemite toad will avoid and minimize adverse effects to the PCEs of this proposed critical habitat unit.

The Deer Valley Project will provide long-term protection and enhancement of the aquatic and upland PCEs through trail rerouting, hardened stream crossings, stream bank restoration, seasonal closure, and other activities. The proposed project will have short-term adverse effects on aquatic and upland PCEs, however, these effects will be minimized by the conservation measures.

## 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. The action area consists entirely of National Forest lands.

## Conclusion

After reviewing the current status of the Yosemite toad, current status of the critical habitat, the environmental baseline for the action area, the effects of the proposed Deer Valley 4wd Trail (19E01) Meadow Restoration and Blue Lakes/Meadow Lake Road (09N01) Maintenance Project, and the cumulative effects, it is the Service's biological opinion that the Deer Valley 4wd Trail (19E01) Meadow Restoration and Blue Lakes/Meadow Lake Road (09N01) Maintenance Project, as proposed, is not likely to jeopardize the continued existence of the Yosemite toad or result in adverse modification or destruction of proposed critical habitat for the Yosemite toad. 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 or result in adverse modification or destruction of the critical habitat based on the following: (1) actions in the project description and conservation measures will minimize the duration and intensity of adverse effects to the Yosemite toad and its critical habitat; (2) the adverse effects upon a small percentage of this population of the Yosemite toad is outweighed by the potential for its expansion; (3) the anticipated adverse effects to critical habitat are small and discrete, relative to the entire area proposed for designation; (4) the Deer Valley Project would reduce sediment delivery to suitable wet meadow habitats by improving road related runoff; and (5) the proposed project will improve wet meadow function, a PCE, by relocating a segment of Route 19E01 that traverses a portion of suitable wet meadow.

## 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 FWS 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.

The measures described below are non-discretionary, and must be undertaken by the Forest Service so that they become binding conditions of any grant or permit issued to the applicant, as

appropriate, for the exemption in section 7(o)(2) to apply. The Forest Service has a continuing duty to regulate the activity covered by this incidental take statement. If the Forest Service (1) fails to assume and implement the terms and conditions, or (2) fails to require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, the Forest Service must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement [50 CFR §402.14(i)(3)].

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

The Service anticipates that incidental take of the Yosemite toad will be difficult to detect due to its cryptic appearance, behavior, life history and ecology. We do not have a measure of the number of animals taken as a result of this action because the toads are difficult to locate, particularly if they are already dead or impaired. An individual may be challenging to observe due to its size, coloring, and behavior, and the complexity of its habitat. In addition, egg masses, tadpole, sub-adults, and adults are frequently hidden in submerged vegetation, debris, or other objects and cannot be precisely counted. Losses of the Yosemite toad also may be difficult to quantify due to seasonal fluctuations in their numbers, random environmental events, changes in water regime at their aquatic habitat, or other environmental perturbations or fluctuations. The actions analyzed in the biological opinion could take individuals of the Yosemite toad including tadpoles, sub-adults, and adults, although we are unable to estimate the exact number, due to direct death or injury from humans or machines, and harm and harassment through habitat modification (e.g. as a result of mechanical vegetation removal, road and water crossing improvements, and associated project activities). It is likely that once a single individual of the Yosemite toad has been killed or injured, other individuals of this species will have been taken undetected by the Service-approved biologist or other personnel. There is a risk of harm, harassment, injury, or mortality as a result of the proposed road and stream crossing improvements, permanent or temporary loss/degradation of suitable habitat, and capture and relocation; therefore, the Service anticipates incidental take to the proposed Deer Valley Project as (1) the injury, death, or harm of one individual in the form of a tadpole, sub-adult, or adult Yosemite toad; and (2) capture or harassment of all individuals of tadpoles, sub-adults, and adults of the Yosemite toad within the action area.

### **Effect of the Take**

In the accompanying biological opinion, the Service determined that this level of anticipated take for the Deer Valley Project is not likely to result in jeopardy to the Yosemite toad, or adverse modification or destruction of its critical habitat.

We have identified actions that may result in the incidental take of individual Yosemite toads (discussed in the Effects section above); however, we do not anticipate the complete loss of all individuals within the Deer Valley Project. The actions analyzed could take individual toads of various life stages including adults, and sub-adults (though we are unable to count the exact number) through direct fatality, injury or harm from trampling (human or machine); and harassment, harm, injury or death resulting from activities associated with roadwork, stream crossings, and associated habitat modification. This amount of incidental take will not prevent the population of the Yosemite toad from recovering to pre-take levels because we believe that the Conservation Measures will be effective at avoiding and minimizing the amount and extent of incidental take from the Deer Valley Project.

We conclude that these levels of incidental take do not place recovery of the Yosemite toad at risk. We know that regardless of whether the Forest Service completes the Deer Valley Project, environmental factors such as drought, movement of nonnative species, increased amount of exotic vegetation, and natural fluctuations in frog populations will result in changes in the amount and occupancy by these listed amphibians of suitable habitat throughout the action area. The Service is working closely with the Forest Service and with other partners to complete and implement a conservation strategy for the Yosemite toad throughout their range. Recovery of these animals will not be achieved or lost within the Deer Valley Project area as it includes only a small portion of their overall range. However, by implementing the proposed action with the Conservation Measures in this Biological Opinion, the prospects for these populations to recover and contribute to the overall recovery of this species is high, even with the loss of individuals and habitat modification associated with the Deer Valley Project.

### **Reasonable and Prudent Measure**

Upon implementation of the following reasonable and prudent measures within this document, these levels of incidental take of the Yosemite toad associated with the Deer Valley Project will become exempt from the prohibitions described under section 9 of the Act. No other forms of take are exempted under this opinion.

All necessary and appropriate measures to avoid or minimize effects on the Yosemite toad resulting from implementation of the Deer Valley Project have been incorporated into the project's conservation measures. Therefore, the Service believes the following reasonable and prudent measure is necessary and appropriate to minimize incidental take of this listed species:

1. Adverse effects to the Yosemite toad, and its suitable habitats shall be minimized to the maximum extent feasible.

### **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 non-discretionary.

1. The Forest Service shall ensure the conservation measures in the project description of this biological opinion are implemented for the Deer Valley Project.
2. The Forest Service shall require that all personnel associated with this project, including volunteers, are made aware of the conservation measures and the responsibility to fully implement them. The status, ecology, and biology of the Yosemite toad, and the need to follow the conservation measures including avoiding them during road construction will be made part of the initial training for field personnel.
3. At least one Forest Service biologist, appropriate Forest Service personnel, or Service-approved monitor must be on site during all project-related activities that may result in take, or whenever there is the potential to encounter a Yosemite toad.
4. A gate at the entrance to Route 19E01 will be constructed to prevent the unauthorized use of the route. Boulders or other appropriate obstruction(s) also shall be appropriately placed to prevent circumvention of the gate during the season of closure.



5. Prior to implementing the re-routing of 19E01 and hardening of Deer Creek crossing approaches (Route 19E01), a Forest Service biologist, or a Service-approved biologist(s) shall perform a Yosemite toad clearance survey immediately prior to the initial ground disturbance, at the beginning of each work day, and within one hour of initiating ground-disturbing activities or placement of material used in streambank hardening. If work stoppages exceed one hour, the area of anticipated impact will be re-surveyed by the Forest Service biologist, or Service-approved biologist(s) prior to the re-initiation of activities.
6. The material collected for hardening the 19E01 crossing of Deer Creek shall not come from the wetted perimeter of Deer Creek, or other streams containing suitable habitat for the Lahontan cutthroat trout. This material shall not be removed from upland areas providing suitable habitat for Yosemite toad.
7. The Service shall be notified by telephone and email within twenty-four (24) hours when a Yosemite toad the Forest Service has been encountered or relocated at the Deer Valley Project. The Service contact is Chris Nagano, Chief, Endangered Species Division (Forest) via telephone (916) 414-6621 or email (chris\_nagano@fws.gov).
8. Injured Yosemite toads shall be cared for by a licensed veterinarian or other qualified person such as a Forest Service biologist, Forest Service personnel trained by a Forest Service biologist, or a biologist possess a valid section 10(a)(1)(A) permit for this species; dead individuals must be placed in a sealed plastic bag with the date, time, location of discovery, and the name of the person who found the animal; the carcass will be kept in a freezer; and held in a secure location. The Service shall be notified within one (1) working day of the discovery of death or injury to a Yosemite toad that occur due to project related activities or is observed or recovered at the project. Notification shall include the date, time, and location of the incident or of the finding of a dead or injured animal clearly indicated on a U.S. Geological Survey 7.5 minute quadrangle and other maps at a finer scale, as requested by the Service, and any other pertinent information. The Forest Service must provide the information on the incident within twenty-four (24) hours to the Chief of the Endangered Species Division (Forest) at the Sacramento Fish and Wildlife Office at (916) 414-6621 or via electronic email (chris\_nagano@fws.gov).

#### Monitoring:

In order to monitor whether the amount or extent of incidental take anticipated from implementation of the project is approached or exceeded, the Forest Service shall adhere to the following reporting requirement. Should the anticipated amount or extent of incidental take be exceeded, the Forest Service must immediately reinstate formal consultation as per 50 CFR § 402.16.

- a. The Service must be notified as soon as possible if large numbers of the Yosemite toad are found injured, sick or dead (e.g., due to illness, chemicals, or other factors), if foul play is suspected, or unauthorized take of any listed species is observed or suspected. For such incidents, immediate notification shall be made by Forest Service biologist, Forest Service law enforcement ranger, or other Forest Service personnel. The report of the incident will include the date(s), location(s), habitat description, photographs, maps, preserved specimens (if possible), and any other pertinent information. The Service contact is the Chief of the Endangered Species Division (Forest) at the Sacramento Fish and Wildlife Office via email (Chris\_Nagano@fws.gov) or via telephone ((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 action:

1. The Forest Service should assist in the implementation of the conservation strategy for the Yosemite toad when it is finalized.

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 this conservation recommendation.

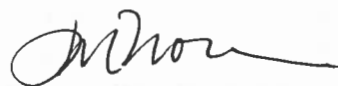
## REINITIATION—CLOSING STATEMENT

This concludes formal consultation on the Deer Valley 4wd Trail (19E01) Meadow Restoration and Blue Lakes/Meadow Lake Road (09N01) Maintenance Project. As provided in 50 CFR §402.16, reinitiation of formal consultation is required and shall be requested by the Federal agency or by the Service where discretionary Federal agency 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
4. If a new species is listed or critical habitat designated that may be affected by the identified action.

If you have any questions regarding this biological opinion on the Deer Valley Project, please contact Chris Nagano, Chief of our Endangered Species Division (Forest) at the letterhead address, or at (916) 414-6621, or via email ([Chris\\_Nagano@fws.gov](mailto:Chris_Nagano@fws.gov)).

Sincerely,



Jennifer M. Norris  
Field Supervisor

cc:

Katie Wilkinson, Matt Brown, Eldorado National Forest, U.S. Forest Service, Placerville, California  
Steve Holdeman, Stanislaus National Forest, Sonora, California  
Diane MacFarlane, U.S. Forest Service, Vallejo, California  
Sandra Jacks, Jennifer Garcia, California Department of Fish and Wildlife, Rancho Cordova, California  
Lee Anne Caranza, U.S. Fish and Wildlife Service, Reno, California

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