



U.S. Forest Service  
Pacific Southwest Region



May 2016

# Sequoia National Forest Rationale for Decision of Animal Species of Conservation Concern

Forest species are evaluated for “Species of Conservation Concern” listing by following a process outlined in a national directive, specifically FSH 1909.12 § 12.52c-d. As species are considered, Forest Service specialists research databases, scientific studies, local information and expert knowledge. The national directive also requires use of threat status rankings, determined in large part through [NatureServe](#), a non-profit organization that provides proprietary species conservation-related data, tools, and services. The conservation status rank of a species is represented by a letter and a number. The letter represents one of two distinct geographic scales: global (G) and state (S). The status rank number is on a scale of one to five, where a ranking of one indicates a species at the highest level of risk and a ranking of five indicates the lowest level of risk. The status rank number is preceded by the letter reflecting the appropriate geographic scale of the assessment. For example, a status rank of G5 represents a species that has an extensive range of distribution and has a low risk of extinction. Intraspecific taxa refer to subspecies, varieties, and other designations below the level of species. The status rank of intraspecific taxa (subspecies or varieties) is indicated by a supplementary T-rank. Rules for assigning T-ranks follow the same principles outlined above.

## Rationale for Animal Species Determined to be Species of Conservation Concern

Bald eagle - *Haliaeetus leucocephalus*

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: None

NatureServe State Rank: S2(CA)

Other Designations: Sensitive (USFS)

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Primary threats in the Plan Area include human disturbances; uncharacteristic severe fire potentially eliminating large tree perching and nesting habitat; and drought conditions potentially negatively affecting foraging areas and prey availability.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Current and future nest site protection is integral to the persistence of this species in the plan area, and is expected to continue with the continued implementation of the Sequoia NF Bald Eagle Management Plans and the federal bald eagle conservation act. The bald eagle was delisted in the last decade due to recovery objections being met.

Sources Used: NatureServe references; BBA; eBird; NRIS; CNDDDB; BCC; Sauer et. al. 2008; 2007 USFWS 2009.

### **Kern red-winged blackbird - *Agelaius phoeniceus aciculatus***

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: T1T2

NatureServe State Rank: S1S2

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Changes in water level in Lake Isabella and lower Kern River due to climate change/reservoir management. Invasive plants (particularly Tamarisk).

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Proposed as a SCC due to T1T2 and S1S2 NatureServe rankings. Re-evaluation of whether this is a valid subspecies is needed. This taxa has a very small range limited to a few wetlands in Kern County.

Sources Used: Shuford, W. D., and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento; DEIS; Gallion 2008.

### **Tricolored blackbird - *Agelaius tricolor***

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G2G3

NatureServe T Rank: None

NatureServe State Rank: S2

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Changes in water level in Lake Isabella and lower Kern River. Climate change. The losses of native habitats and widespread pesticide use are the most likely causes of the chronic low productivity of the species, and the continuing severe drought is likely further stressing the species.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: The number of tricolored blackbirds in California continues a rapid decline. Dramatic decline in local colony on Sequoia National Forest.

Sources Used: NatureServe references; BBA; eBird; NRIS; CNDDDB; BCC; Results of the 2014 tricolored blackbird statewide survey; Kyle and Kelsey 2011, Conservation Plan for the Tricolored Blackbird, Sept. 2007.

### **Mount Pinos sooty grouse (applies to Kern County only) - *Dendragapus fuliginosus howardi***

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: T1T2

NatureServe State Rank: S1S2

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Threats include incompatible timber harvest, fire suppression and altered fire regime, livestock grazing practices, land development, recreational use of habitat, and climate change;

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: SCC listing is limited to Kern County as concerns are limited to that area. Mt. Pinos Sooty Grouse has declined throughout southern portions of its range, such that it is now extirpated or nearly so south of extreme northern Kern County (Bland 2008). Recent data on population trends specific to the howardi subspecies is lacking. Current rank reflects the traditional scope of this taxon, but further genetic study is needed to determine whether *D. f. howardi* actually may be restricted to a smaller area and represent a distinct (and extinct) species. This taxa is hunted in Fresno and Tulare Counties.

Sources Used: Shuford, W. D., and Gardali, T., editors. 2008. California Bird Species of Special Concern, NatureServe references; BBA; eBird; NRIS; CNDDDB; BCC; Bland 2013.

**Willow flycatcher - *Empidonax traillii***

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: T3T4

NatureServe State Rank: S1-2

Other Designations: Sensitive (USFS); FWS Birds of Conservation Concern

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Loss of habitat quality in meadows due to climate change or poorly managed livestock grazing

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Substantial decline during the past 40 years, resulting in the absence or near-absence from multiple areas that were historically inhabited, loss and degradation of riparian and meadow habitats due to anthropogenic factors, affected primarily by grazing, clearing and burning for agricultural and residential/recreational purposes, lowering of water tables, stream crossings and road construction, and diverting of water which feeds riparian water courses.

Sources Used: NatureServe references; BBA; eBird; NRIS; CNDDDB; BCC; Sedgwick 2001; 2004 Sierra Nevada Forest Plan Amendment; Green et al. 2003 Conservation Assessment of the Willow Flycatcher in the Sierra Nevada; Green et al. 2003.

**American Peregrine falcon - *Falco peregrinus anatum***

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G4

NatureServe T Rank: T4

NatureServe State Rank: S2

Other Designations: FWS Birds of Conservation Concern

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Human disturbance to occupied nest sites.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Small population size in the plan area combined with limited suitable nest sites puts this species at risk.

Sources Used: NatureServe references; BBA; eBird; NRIS; CNDDDB; BCC; White et al. 2002; Sauer et al. 2008.

### **Great gray owl - *Strix nebulosa***

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: None

NatureServe State Rank: S1

Other Designations: Sensitive (USFS)

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): The primary threats are a small, isolated population that is susceptible to a variety of potential degrading influences including degraded habitats and disturbances resulting from management practices and other activities, including fire suppression and large-scale, high-intensity fire that is outside the natural range of variability.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Ongoing management threats and other stressors such as widespread fires in the recent and foreseeable future combined with its small population are reasons for SCC status. It also has a small population (i.e., less than 150 adults) in the Southern Sierra Range and this isolated population, possibly a DPS, is susceptible to management and non-management factors. Consideration includes that this species is a CA "state designated Endangered Species" as well as its S1 ranking indicating critical concern state-wide for this species.

Sources Used: Hull et al. 2010; Wu et al. 2015; NatureServe references; BBA; eBird; NRIS; CNDDDB; BCC

### **California spotted owl - *Strix occidentalis occidentalis***

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G3

NatureServe T Rank: T3

NatureServe State Rank: S3

Other Designations: Sensitive (USFS); Sensitive (BLM); FWS Birds of Conservation Concern

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Loss of habitat in large stand-replacing fire, forest management practices that remove key habitat features and competition with barred owls

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: This species is being proposed as an SCC due to the overall concern of many factors, including the declining population, expected increased competition from the barred owl and habitat condition and trend particularly as it relates to mature forest. Sources Used: NatureServe references; BBA; eBird; NRIS; CNDDDB; BCC; DEIS; Verner et al. 1992; Keane 2014.

### **Townsend's Western big-eared bat - *Corynorhinus townsendii***

Type of Animal: Mammal

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G3G4

NatureServe T Rank: None

NatureServe State Rank: S2S3

Other Designations: Sensitive (USFS); Sensitive (BLM)

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Disturbance of roosting sites. May be at risk in the future from white-nose syndrome.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Proposed as an SCC due to significant declines in population (G3, T3) (Nature Serve 2015). This species' population is also vulnerable due to specific cave habitat use requirements and sensitivity to disturbance. Not known how it will be affected by white-nose syndrome, which could have significant impacts to the population if that disease comes into the plan area.

Sources Used: NatureServe references; NRIS; CNDDDB; DEIS; Piaggio 2005; Pierson and Rainey 1998.

### **Pacific fringe-tailed bat - *Myotis thysanodes vespertinus***

Type of Animal: Mammal

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G4

NatureServe T Rank: T2

NatureServe State Rank: SNR

Other Designations: Sensitive (USFS)

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Disturbance of roosting sites. Loss of large snags for roost sites. May be at risk in the future from white-nose syndrome.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: This species is proposed as an SCC due to the T2 NatureServe rankings. Appears to be in serious decline as historic maternity colonies have disappeared and those remaining are significantly reduced in size, management activities that reduce the number or recruitment of snags may reduce available roost sites.

Sources Used: NatureServe references; NRIS; CNDDDB; DEIS; Piaggio 2005; Pierson and Rainey 1998.

### **Yellow-eared pocket mouse - *Perognathus parvus xanthonotus***

Type of Animal: Mammal

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: T2

NatureServe State Rank: S1S2

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Laabs (1998) listed grazing, off-highway vehicle activity, mineral extraction, and road networks for wind-energy production as potential threats to the yellow-eared pocket mouse.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Proposed as an SCC due to ranking of T2 and S1S2. Only the Kiavah Wilderness area of Sequoia NF is within the range identified for this spp.; population size and trend are unknown; no known major threats, but further evaluation is needed.

Sources Used: NatureServe references; NRIS; CNDDDB; DEIS; CWHR 2008; BLM 1998.

### **Fairview slender salamander - *Batrachoseps bramei***

Type of Animal: Amphibian

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G3

NatureServe T Rank: None

NatureServe State Rank: S3(CA)

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): The use of heavy equipment for fire suppression has the potential to impact salamander habitat. Road maintenance of Mountain Highway 99 (Kernville-Johnsondale) road grading and proximity of some populations should be considered. Considered relatively common and not known to be declining.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Small range in the Kern River drainage in southern California; some populations are vulnerable to habitat degradation from human activities

Sources Used: NatureServe references; CaliforniaHerps; Herpnet; NRIS; CNDDDB; DEIS

### **Gregarious slender salamander - *Batrachoseps gregarius***

Type of Animal: Amphibian

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G2G3

NatureServe T Rank: None

NatureServe State Rank: S4

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): The use of heavy equipment for fire suppression has the potential to impact salamander habitat. Road maintenance of road grading and proximity of some populations should be considered.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Proposed as an SCC due to the G2 and S2 rankings.

Sources Used: NatureServe references; CaliforniaHerps; Herpnet; NRIS; CNDDDB; DEIS

### **Relictual slender salamander - *Batrachoseps relictus***

Type of Animal: Amphibian

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G1

NatureServe T Rank: None

NatureServe State Rank: S1

Other Designations: Sensitive (USFS)

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Fire, timber harvest, any direct or indirect ground or water disturbing impacts to habitat.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes



Rationale for Proposed Species Conservation Concern Designation: Rankings indicate species is critically imperiled. Small range in southern Sierra Nevada of California; small number of known populations; apparently extirpated at lower elevation extent of historical range; apparently small population size.

Sources Used: NatureServe references; CaliforniaHerps; Herpnet; NRIS; CNDDDB; DEIS

### **Kern Plateau salamander - *Batrachoseps robustus***

Type of Animal: Amphibian

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G3

NatureServe T Rank: None

NatureServe State Rank: S2

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Road construction, timber harvesting activities, or forest fire suppression efforts. Vulnerable to habitat degradation through capping of springs by humans or other alterations of spring water or habitat. Habitat is easily altered by destructive intrusion. Prolonged drought and climate change could alter springs, etc.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Known from a few dozen sites in the southern Sierra Nevada, California; habitat is vulnerable to alteration, but most populations currently are not imperiled by ongoing threats or known to be declining.

Sources Used: NatureServe references; CaliforniaHerps; Herpnet; NRIS; CNDDDB; DEIS

### **Kern Canyon slender salamander - *Batrachoseps simatus***

Type of Animal: Amphibian

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G2G3

NatureServe T Rank: None

NatureServe State Rank: S2(CA)

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Climate change.

Construction of state highway 178 probably negatively affected the habitat of this species. Cattle grazing has degraded the habitat, particularly in narrow ravines. See Hansen and Wake (2005).

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Patchy distribution and localized occurrences on the Forest and drivers/stressors may lead to a concern about the species' capability to persist in the plan area. Small range and area of occupancy in the lower Kern River Canyon, California; vulnerable to habitat destruction/degradation from human activities. Known range includes several locations (disjunct patches of habitat, all south of Lake Isabella and the Kern River) in the lower Kern River Canyon.

Sources Used: NatureServe references; CaliforniaHerps; Herpnet; NRIS; CNDDDB; DEIS

### **Yellow-blotched salamander - *Ensatina eschscholtzii croceator***

Type of Animal: Amphibian

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: T3

NatureServe State Rank: S3(CA)

Other Designations: Sensitive (USFS)

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Habitat loss and degradation from human recreational activities, livestock grazing, logging/wood removal, and climate warming.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Proposed as an SCC due to the S3 rankings and the on-going concerns about the long-term persistence of relatively small distribution.

Sources Used: NatureServe references; CaliforniaHerps; Herpnet; NRIS; CNDDDB; DEIS

### **Foothill yellow-legged frog - *Rana boylei***

Type of Animal: Amphibian

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G3

NatureServe T Rank: None

NatureServe State Rank: S2S3

Other Designations: Sensitive (USFS)

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Recent local research has repeatedly shown that *R. boylei* are adversely affected by seasonal pulse flows, which create stressful or fatal velocity conditions for early life stages. Also, large physical barriers (highways) and invasive species.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Occurs in California and western Oregon; substantial ongoing decline especially in southern and central California, apparently due to habitat alteration (especially that caused by dams), impacts of airborne agrochemicals, and/or effects of exotic species, and because recolonization abilities may be greatly restricted by lack of connectivity and steep mountain ranges. Threatened by warming temperatures and changes in hydrology associated with climate change and hydropower.

Sources Used: NatureServe references; CaliforniaHerps; Herpnet; NRIS; CNDDB;DEIS

### Central Valley hitch - *Lavinia exilicauda exilicauda*

Type of Animal: Fish

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G4

NatureServe T Rank: T2T4

NatureServe State Rank: S2S4

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): The many dams on rivers fragment watersheds and often create conditions below them that are unfavorable to native fishes like hitch, apparently either because of too little water or because of too much cold water. High predation by centrarchid basses may be a problem.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Hitch populations are scattered and usually small. It does not appear that regulated rivers and their reservoirs can be relied up to support hitch indefinitely.

Sources Used: NatureServe references; calfish.ucdavis; fishbase.org; NRIS; CNDDB;DEIS

### California golden trout - *Oncorhynchus mykiss aguabonita*

Type of Animal: Fish

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: T1

NatureServe State Rank: S1

Other Designations: Sensitive (USFS)

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Introduction of non-native species and hybridization; climate change; livestock grazing; especially historical connectivity of habitats

disrupted by water diversions. By far most major threat is hybridization with non native fish species. They are at risk of extinction from catastrophic events due to drought, fire, over-fishing, and unauthorized fish introductions

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Most of the native fish in CA are in a long term well documented decline, have small isolated populations or some are on a trajectory toward extinction. Area occupied by nonhybridized golden trout is very small. This species is locally considered critically imperiled.

Sources Used: NatureServe references; calfish.ucdavis;fishbase.org; NRIS; CNDDB; DEIS

### **Hardhead - *Mylopharodon conocephalus***

Type of Animal: Fish

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G3

NatureServe T Rank: None

NatureServe State Rank: S3 (CA)

Other Designations: Sensitive (USFS)

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Dams and diversions have eliminated habitat and left many populations isolated and vulnerable to local extinction due to unsuitable stream temperatures and flows. Centrarchid fishes (bass, sunfish) threaten if not eliminate populations in foothill streams and reservoirs .

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Area of occupancy, number of locations, and abundance have historically decreased. Current conditions on this Forest suggests this species is vulnerable to local extirpation(s).

Sources Used: NatureServe references; calfish.ucdavis;fishbase.org; NRIS; CNDDB

### **Kern River Golden trout - *Oncorhynchus mykiss gilberti***

Type of Animal: Fish

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: T1

NatureServe State Rank: S1S2

Other Designations: Sensitive (USFS)

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Most limiting factor is hybridization with non-native fish. Other threats include dams, reservoirs, diversions, aqueducts or ditches (many off-Forest) influencing aquatic organism passage and connectivity. Historical or more recent impacts have included grazing, logging, road building, floods, fires and drought.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: This species is proposed as an SCC because it is only found in a few small and isolated populations in the Plan Area and it is ranked by NatureServe as G1 and S1 which is critically imperiled. Long-term persistence in the Plan Area is a concern.

Sources Used: NatureServe references; calfish.ucdavis; fishbase.org; NRIS; CNDDB

### **Tight coin - *Ammonitella yatesii***

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G1

NatureServe T Rank: None

NatureServe State Rank: S1

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Barriers include barriers to dispersal such as the presence of permanent water bodies greater than 30 m in width, permanently frozen areas (e.g. mountaintop glaciers) which generally lack land snails (Frest and Johannes, 1995), or dry, xeric areas with less than six inches precipitation annually, as moisture is required for respiration and often hatching of eggs. Fire presumably may impact this species.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: This species is ranked as critically imperiled and as such has higher potential to become extirpated on this planning unit under drought or other conditions. This air breathing land snail is a terrestrial pulmonate gastropod mollusk and found in the upper King watershed.

Sources Used: NatureServe references; CNDDB; NRIS; Xerces; DEIS

### **A Caddisfly - *Anagapetus chandleri***

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G2G3

NatureServe T Rank: None

NatureServe State Rank: SNR

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Climate change effects of springs and small streams threaten this species

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: G2G3 ranking and presence in SQF

Sources Used: NatureServe references; CNDDB; NRIS; Xerces; DEIS

### **Behr's metalmark - *Apodemia virgulti davenporti***

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: T2T3

NatureServe State Rank: SNR

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Invasion of alien weeds, fire and habitat destruction.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Found in restricted ranges along the east slope of the Sierra Nevada Mountains from approximately Olancho, Inyo County to the Walker Pass, Kern County.

Sources Used: [www.butterfliesandmoths.org](http://www.butterfliesandmoths.org), Forest Plan Revision for Inyo, Sequoia, Sierra, USFS R5, June 29, 2015; DEIS

### **Juniper hairstreak - *Callophrys gryneus juniperaria***

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: T2T3

NatureServe State Rank: SNR

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Loss of habitat, decline of host plants.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Threats from cheatgrass invasion, and large intensive fire in the Kern River Basin.

Sources Used: [www.butterfliesandmoths.org](http://www.butterfliesandmoths.org), NatureServe, Forest Plan Revision for Inyo, Sequoia, Sierra, USFS R5, June 29, 2015; DEIS

### Comstock's blue - *Euphilotes battoides comstocki*

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: T1T3

NatureServe State Rank: S2S3

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Cheatgrass invasion and elimination of larval and adult foods

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Threats from cheatgrass invasion

Sources Used: [www.butterfliesandmoths.org](http://www.butterfliesandmoths.org), Forest Plan Revision for Inyo, Sequoia, Sierra, USFS R5, June 29, 2015; DEIS

### A caddisfly - *Glossosoma mereca merecum*

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G2G3

NatureServe T Rank: None

NatureServe State Rank: SNR

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Threats from climate change, changes to groundwater recharge, changes to flows from springs and small streams

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Threats to habitat from climate change, warming temperatures, lower flows in springs and small streams

Sources Used: NatureServe references; CNDDDB; NRIS; Xerces; DEIS

### **Gorgon copper - *Lycaena gorgon micropunctata***

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G3G4

NatureServe T Rank: T1

NatureServe State Rank: SNR

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Invasive weed competition with exotic grasses and other weeds.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Threats from cheatgrass invasion

Sources Used: Butterflies of America, Forest Plan Revision for Inyo, Sequoia, Sierra, USFS R5, June 29, 2015;

### **Western pearlshell mussel - *Margaritifera falcata***

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G4G5

NatureServe T Rank: None

NatureServe State Rank: S1S2

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Eutrophication, sedimentation, mining, grazing, water impoundments, loss of habitat, changing hydrology, increasing stream temperatures.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes



Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Populations severely reduced. Few, isolated individuals in flow refugia.

Sources Used: NatureServe references; CNDDDB; NRIS; Xerces; DEIS

### **Boisduval's blue - *Plebejus icarioides inyo***

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: T1T3

NatureServe State Rank: SNR

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Cheatgrass invasion and elimination of larval and adult foods

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Limited distribution.

Sources Used: Butterflies of America, Forest Plan Revision for Inyo, Sequoia, Sierra, USFS R5, June 29, 2015; DEIS

### **Lupine blue - *Plebejus lupini chlorina***

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: T1

NatureServe State Rank: SNR

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Cheatgrass invasion and elimination of larval and adult foods

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Limited distribution.

Sources Used: Butterflies of America, Forest Plan Revision for Inyo, Sequoia, Sierra, USFS R5, June 29, 2015; DEIS

**Veined blue - *Plebejus neurona***

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G2

NatureServe T Rank: None

NatureServe State Rank: SNR

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Cheatgrass invasion and elimination of larval and adult foods

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Limited distribution.

Sources Used: [www.butterfliesandmoths.org](http://www.butterfliesandmoths.org); Butterflies of America, Forest Plan Revision for Inyo, Sequoia, Sierra, USFS R5, June 29, 2015; DEIS

**Arrowhead arctic blue - *Plebejus podarce cilla***

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G3G4

NatureServe T Rank: T2

NatureServe State Rank: SNR

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Cheatgrass invasion and elimination of larval and adult foods

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Limited distribution.

Sources Used: Butterflies of America, Forest Plan Revision for Inyo, Sequoia, Sierra, USFS R5, June 29, 2015; DEIS

**San Emigdio blue - *Plebulina emigdionis***

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G2

NatureServe T Rank: None

NatureServe State Rank: S1S2

Other Designations: Sensitive (USFS)

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Threats from unauthorized OHV trails and elimination of larval and adult foods. Limited range is partly due to symbiotic relationship with ant species *Formica pilicornis*

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: This butterfly is rare and localized species ranging from 3,000' to 5,000' in washes and alluvial fans. Threats from cheatgrass invasion and occasional extensive fire in the Kern River Basin.

Sources Used: Butterflies of America, Forest Plan Revision for Inyo, Sequoia, Sierra, USFS R5, June 29, 2015; DEIS

### **Tehachapi fritillary - *Speyeria egleis tehachapina***

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: T2

NatureServe State Rank: S2

Other Designations: Sensitive (USFS)

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Threats include stochastic events that could affect the very limited distribution of this species. Violet host plants are susceptible to destruction from wildfire.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Limited distribution and restricted habitat would indicate that this butterfly has very limited dispersal capabilities. Davenport believes its in serious decline and no records from the Tehachapi Mountains since 1998, however it has had records from the Piute Mountains since that date.

Sources Used: [www.butterfliesandmoths.org/](http://www.butterfliesandmoths.org/), NatureServe, CNDDDB Forest Plan Revision for Inyo, Sequoia, Sierra, USFS R5, June 29, 2015; DEIS

### **Hydaspe fritillary - *Speyeria hydaspe viridicornis***

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G4G5

NatureServe T Rank: T1T2

NatureServe State Rank: SNR

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Cheatgrass invasion and elimination of larval and adult foods

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? Yes

Proposed Species of Conservation Concern: Yes

Rationale for Proposed Species Conservation Concern Designation: Southern end for this subspecies, limited distribution in plan area. invasive grasses can eliminate native plants this species depend upon.

Sources Used: Butterflies of America, NatureServe, Forest Plan Revision for Inyo, Sequoia, Sierra, USFS R5, June 29, 2015; DEIS

## **Rationale for Animal Species Determined Not to be Species of Conservation Concern**

Northern goshawk - *Accipiter gentilis*

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: None

NatureServe State Rank: S3(CA)

Other Designations: Sensitive (USFS)

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Loss of habitat in large stand-replacing fire, forest management practices that remove key habitat features and human disturbance.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: This species is not proposed as an SCC due to the secure population and expectation that it will continue to persist with the proposed action. This species is uncommon but widely distributed in conifer forests of the western U.S. and Sierra Nevada,

and the population is stable or possibly slightly increasing. Current and proposed nest site protection measures have helped assure a stable or increasing population. Primary threats are the potential loss of nests and young due to disturbances, increased rate of large-scale, high-severity fires and fire suppression that results in excessive stand density that degrades foraging habitat.

Sources Used: NatureServe references; BBA; eBird; NRIS; CNDDDB; BCC; Keane, 2008; Kennedy, P.L. 1997. Keane, Morrison, Fry 2006; Reynolds, Graham & Boyce, 2008; Allison, Bonnie. 1996; Morrison ed, and Squires and Kennedy in Studies in Avian Biology No.31; USFWS 1998 Status Review of N. Goshawk in forested west; 2013 (Dec) Sierra, Sequoia and Inyo Forest Plan Assessments

### **Swainson's hawk - *Buteo swainsoni***

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: None

NatureServe State Rank: S3

Other Designations: FWS Birds of Conservation Concern

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Loss and disturbance of nesting habitat. Major threats appear to be loss of prairie/grassland habitat to agriculture and urban development as well as pesticide use in South America. No threats or issues identified within the planning area. Species use of the planning area appears to be rare and incidental.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Not proposed as an SCC due to the NatureServe G5 ranking and no scientific evidence there is concern for the species persistence in the plan area. Breeding Bird Survey data indicate a population rebound during the past 40 years. Riparian habitat degradation has substantially abated in the last 50 years. Species is only an occasional winter visitor, Current and expected conditions have and will support use.

Sources Used: NatureServe references; BBS; eBird; Multiple detections in NRIS; CNDDDB; BCC

### **Cassin's finch - *Carpodacus cassinii***

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: None

NatureServe State Rank: SNR

Other Designations: FWS Birds of Conservation Concern

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): None identified

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Not proposed as an SCC due to the NatureServe G5 ranking and no scientific evidence there is concern for the species persistence in the plan area. Fairly high population numbers on the Sequoia, but trends unknown.

Sources Used: NatureServe references; BBA; eBird; NRIS; CNDDDB; BCC

### **Western snowy Plover - *Charadrius nivosus nivosus***

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G4

NatureServe T Rank: T3

NatureServe State Rank: S2

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Disturbance at nesting sites.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Species is a rare vagrant at Lake Isabella. No nesting within the plan area.

Sources Used: NatureServe references; BBA; eBird record in 2012; NRIS; CNDDDB; BCC

### **Olive-sided flycatcher - *Contopus cooperi***

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G4

NatureServe T Rank: None

NatureServe State Rank: S4

Other Designations: FWS Birds of Conservation Concern

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): In California, Marshall (1988) found that some forest birds breeding on Redwood Mountain in Tulare County in the 1930s were no longer present in the 1980s. Marshall (1988) speculated that the disappearance from suitable, unchanged habitat was caused by the destruction of corresponding forests in Central America, where these birds winter.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Not proposed as an SCC due to the NatureServe G4 ranking and no scientific evidence there is concern for the species persistence in the plan area. Considered uncommon to fairly common as a breeding species and migrant on Sequoia National Forest.

Sources Used: NatureServe references; BBA; eBird; NRIS; CNDDDB; BCC

### **Black swift - *Cypseloides niger***

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G4

NatureServe T Rank: None

NatureServe State Rank: S2

Other Designations: FWS Birds of Conservation Concern

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Loss of nesting habitat.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Not proposed as an SCC due to the NatureServe G4 ranking and no scientific evidence there is concern for the species persistence in the plan area. Breeding habitats in California, behind or beside permanent waterfalls are generally inaccessible to humans, have undergone little change, and are located primarily on protected lands.

Sources Used: NatureServe references; BBA; eBird; NRIS; CNDDDB; BCC

### **Yellow warbler - *Dendroica petechia brewsteri* also known as *Setophaga petechia morcomi***

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: T5

NatureServe State Rank: S2(CA)

Other Designations: FWS Birds of Conservation Concern

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Loss or degradation of riparian communities such as may result from water use by humans, livestock grazing, or effects of invasive plant species, and by brood parasitism by brown-headed cowbirds.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Recent efforts to conserve and manage riparian habitats in California is helping to keep populations stable. Fairly widespread on Sequoia National Forest based on MIS monitoring.

Sources Used: NatureServe references; BBA; eBird; NRIS; CNDDDB; BCC, MIS monitoring

### **Lewis' woodpecker - *Melanerpes lewis***

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G4

NatureServe T Rank: None

NatureServe State Rank: SNR(CA)

Other Designations: FWS Birds of Conservation Concern

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Vulnerable to loss of nesting sites (large snags) such as may result from logging, urban and agricultural development; and to degradation of riparian habitats by drought and overgrazing. Effects of drought & climate change.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Not proposed as an SCC due to the NatureServe G4 ranking and no scientific evidence there is concern for the species persistence in the plan area. Winters but does not nest in the plan area, primarily at lower elevations.

Sources Used: NatureServe references; BBA; eBird; NRIS; CNDDDB; BCC

### **Flammulated owl - *Otus flammeolus***

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G4

NatureServe T Rank: None

NatureServe State Rank: S3

Other Designations: FWS Birds of Conservation Concern

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Ongoing threats include forestry practices that remove large trees and snags, epidemics of insect pests such as the Mountain Pine Beetle and catastrophic fires combined with the species' small population, limited distribution, small clutch size and delayed breeding of males

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No



Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Considered locally common, population stable.

Sources Used: NatureServe references; multiple NRIS records from local surveys; CNDDDB; bird; Flammulated Owl Surveys in Sequoia National Forest 2011 Final Report; Hayward and Verner, eds. 1994 USFS GTR RM-253.

### **Osprey - *Pandion haliaetus***

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: None

NatureServe State Rank: S3

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Generalized threats includes illegal gunshots, and some impact with or electrocution by high-tension wires. Now recovering in many areas following severe declines resulting from organochlorine biocide use.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Not proposed as an SCC due to the NatureServe G5 ranking. Very large range; increasing population trend in many areas where formerly depleted by effects of pesticides; benefiting from active management in many areas; pesticide-related problems still exist in some areas. Population within SQF planning area stable, no major identified threats.

Sources Used: NatureServe references; BBA; eBird; NRIS; CNDDDB; BCC

### **Black-backed woodpecker - *Picoides arcticus***

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: None

NatureServe State Rank: S3S4(CA) S3(NV)

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Altered fire regime and changes in number of snags.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Currently there is inadequate science to show substantial concern for persistence of this species over the long-term in the plan area. Current conditions including drought and climate change, are expected to result in more high-severity burned habitat in the plan area throughout the plan period, while also sustaining green forest habitat (that includes snags) for this species.

Sources Used: NatureServe references; BBA; eBird; NRIS; CNDDDB; BCC; Bond et al. 2012 A Conservation Strategy for the Black-backed woodpecker in California.

### **Summer tanager - *Piranga rubra***

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: None

NatureServe State Rank: S2(CA)

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): None specifically identified other than generalized impacts to habitat types

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Not proposed as an SCC due to the NatureServe G5 ranking and no scientific evidence there is concern for the species persistence in the plan area. Breeding populations north and west of the Colorado River appeared to be expanding in both range and numbers, from none prior to the 1960s to an estimated 80-90 pairs during the 2000s, about half of which occur along the South Fork of the Kern River in Kern County.

Sources Used: NatureServe references; BBA; eBird; NRIS; CNDDDB; BCC

### **White-faced Ibis - *Plegadis chihi***

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: None

NatureServe State Rank: S1

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Limited number of breeding

locations; vulnerable to fluctuating water levels. Susceptible to breeding failure in areas of pesticide contamination off Forest

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Insufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Not proposed as an SCC due to the NatureServe G5 ranking and insufficient information to indicate declines on the Forest.

Sources Used: NatureServe references; BBA; eBird; NRIS; CNDDB; BCC

### **Calliope hummingbird - *Selasphorus calliope***

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: None

NatureServe State Rank: SNR

Other Designations: FWS Birds of Conservation Concern

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Loss of montane meadow habitat

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Not proposed as an SCC due to the NatureServe G5 ranking and no scientific evidence there is concern for the species persistence in the plan area.

Sources Used: NatureServe references; BBA; eBird; NRIS; CNDDB; BCC

### **Williamson's sapsucker - *Sphyrapicus thyroideus***

Type of Animal: Bird

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: None

NatureServe State Rank: SNR

Other Designations: FWS Birds of Conservation Concern

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Species is relatively quiet so that BBS are not very effective at detecting this species. Threatened in general by loss of old-growth forest and logging in some parts of its range.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Not proposed as an SCC due to the NatureServe G5 ranking and no scientific evidence there is concern for the species persistence in the plan area. Fairly common locally. Trends in populations in CA were nearly stable, because of its high-elevation occurrence, open coniferous forest habitats are generally stable throughout their range.

Sources Used: NatureServe references; BBS; eBird; NRIS; CNDDB; BCC

### **Pallid bat - *Antrozous pallidus***

Type of Animal: Mammal

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G4

NatureServe T Rank: None

NatureServe State Rank: S3

Other Designations: Sensitive (USFS)

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Agricultural expansion, wildfire, disturbance of roosting sites. Loss of large trees or snags may reduce the availability of roost structures. May be at risk in the future from white-nose syndrome.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Ranking of G5 does not justify this species as an SCC. General habitat requirements, including structures used for roosts, are widespread throughout SQF but local population abundance is unknown.

Sources Used: NatureServe references; NRIS; CNDDB

### **Sierra marten - *Martes americana sierrae***

Type of Animal: Mammal

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: None

NatureServe State Rank: S3

Other Designations: Sensitive (USFS)

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): The limiting and key factors affecting Sierra marten habitat are fire and climate change, both system drivers. The effects of timber harvest can be positive and negative for marten.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: While population trends in the plan area are unknown, there are a number of other areas in California that have documented population declines. Habitat fragmentation from large fires and climate changes are serious threats to the viability of Pacific martens in the Sierra Nevada. Therefore, the best available information, obtained from a wide range of sources, indicates substantial concern about the species' capability to persist over the long term in the plan area. Sierra martens therefore meet the criteria to be designated as a Species of Conservation Concern.

Sources Used: Recent records in NRIS; Recent records in CNDDDB; Multiple records from SNAMP research; PSWRS 1998; Zielinski 2014; Pers. Comm. provided by Josephine Fites-Kaufman, USFS, R5 RO 2015; Hargis and McCullough 1984; Lawler et al. 2012.

### **Western small-footed myotis - *Myotis ciliolabrum***

Type of Animal: Mammal

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: T1T2

NatureServe State Rank: S2S3

Other Designations: Sensitive (BLM)

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): No major threats are known. Disturbance to hibernation sites (caves/mines). May be at risk in the future from white-nose syndrome.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Not proposed as an SCC due to the high NatureServe G ranking and the S2-S3 rankings and no scientific evidence there is concern for the species persistence in the plan area. This species is widespread in western North America. Known to occur in a variety of habitat types and to roost in a variety of structures.

Sources Used: NatureServe references; NRIS; CNDDDB

### **Gray-headed pika - *Ochotona princeps schisticeps***

Type of Animal: Mammal

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G5

NatureServe T Rank: T4

NatureServe State Rank: SNR

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Loss of habitat, including climate change.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Population ranked as secure but will continue to observe effects from grazing and climate change.

Sources Used: NatureServe references; NRIS; CNDDDB

### Western Pond turtle - *Actinemys marmorata*

Type of Animal: Reptile

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G3G4

NatureServe T Rank: none

NatureServe State Rank: S3

Other Designations: Sensitive (USFS)

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): In California, many populations are small and declining. Invasion of exotic pest species is a threat. Changes in channel morphology and hydrology associated with saltcedar (*Tamarix*) invasion. Other localized threats include habitat degradation caused by grazing, and off-road vehicle use as well as turtle mortality on roads. Habitat fragmentation perhaps magnifies the effects of introduced species through predation, competition, and epidemic disease

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: This species is ranked as a G3 and S3, thus there is not enough concern for long-term persistence in the plan area.

Sources Used: Jennings and Hayes 1996. Natureserve, USFWS

<https://bioaccumulation.wordpress.com/2015/04/14/usfws-announces-90-day-finding-on-petition-to-list-the-western-pond-turtle/>

### Tehachapi shoulderband - *Helminthoglypta berryi*

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G1

NatureServe T Rank: None

NatureServe State Rank: SNR

Other Designations: Sensitive (USFS)

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Threats to habitat from climate change, warming temperatures, lower flows in springs and small streams

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Insufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Species needs to be re-evaluate at a later time due to lack of info to support SCC status. This species is currently listed as Potential SCC.

Sources Used: NatureServe references; CNDDDB; NRIS; Xerces; DEIS

### Kern shoulderband - *Helminthoglypta callistoderma*

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G1

NatureServe T Rank: None

NatureServe State Rank: S1

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Threats to habitat from climate change, warming temperatures, lower flows in springs and small streams

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Insufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Lack of info to support SCC status. This species is currently listed as Potential SCC.

Sources Used: NatureServe references; CNDDDB; NRIS; Xerces

### Breckenridge shoulderband - *Helminthoglypta orina*

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G1

NatureServe T Rank: None

NatureServe State Rank: SNR

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Threats from climate change, earlier snowmelt, and longer and hotter summers

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Insufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Lack of info to support SCC status. This species is currently listed as Potential SCC.

Sources Used: NatureServe references; CNDDB; NRIS; Xerces

### **Yosemite shoulderband - *Helminthoglypta proles***

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G1

NatureServe T Rank: None

NatureServe State Rank: SNR

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Threats from climate change, earlier snowmelt, and longer and hotter summers

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Insufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Lack of info to support SCC status. This species was listed as Potential SCC but no additional scientific feedback was received to support an SCC designation.

Sources Used: NatureServe references; CNDDB; NRIS; Xerces

### **Erskine Creek shoulderband - *Helminthoglypta stageri***

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G1

NatureServe T Rank: None

NatureServe State Rank: SNR

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Threats from climate change, earlier snowmelt, and longer and hotter summers

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Insufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No



Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Lack of info to support SCC status. This species is currently listed as Potential SCC.

Sources Used: NatureServe references; CNDDB; NRIS; Xerces

### **Tulare shoulderband - *Helminthoglypta tularensis***

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G1

NatureServe T Rank: None

NatureServe State Rank: SNR

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Threats from climate change, earlier snowmelt, and longer and hotter summers

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Insufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Lack of info to support SCC status. This species is currently listed as Potential SCC.

Sources Used: NatureServe references; CNDDB; NRIS; Xerces

### **A caddisfly - *Homophylax nevadensis***

Type of Animal: Invertebrate

Species is native to and known to occur in the plan area: Yes

NatureServe Global Rank: G2G4

NatureServe T Rank: None

NatureServe State Rank: SNR

Other Designations: None

Known threats to species persistence (Note: Many of the threats listed in this table are general threats impacting the species and may not apply to populations within the plan area): Threats from climate change, changes to groundwater recharge, changes to flows from springs and small streams.

Is there scientific information available to conclude that there is substantial concern about the species capability to persist? Sufficient

Does the best available science indicate substantial concern about species' capability to persist over the long-term in the plan area? No

Proposed Species of Conservation Concern: No

Rationale for Proposed Species Conservation Concern Designation: Lack of information to support SCC status. Status G2G4, and recorded in Sierra NF, however timing of records unknown.

Sources Used: NatureServe references; CNDDB; NRIS; Xerces

*Rationale for Decision for Animal Species of Conservation Concern*

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