

## Summary of biological requirements for forestry practices Information for Practice 384 Wood Residue Treatment

The NRCS-CA Environmental Compliance Coordinator completed a review to summarize forestry related environmental compliance (NEPA) requirements for protected species and their habitats. This review is specific to NRCS forestry operations such as tree and brush removal in the central Sierra Nevada forests. Requirements would be most applicable to NRCS forestry practices that treat vegetation with mechanical equipment (Practice 383, 384, 490, 666). The summary of biological requirements is focused on upland forests, wet meadows, and riparian areas. The goal is to provide consistency among Field Offices and reduce the time and correspondence between a planner, a biologist, and a forester for better coordination and efficiency.

Details of the environmental compliance requirements are still in progress. Additional information is expected.

The initial set environmental compliance requirements have been incorporated into the new Practice 384 Woody residue Treatment Specification. Below are excerpts highlighting the requirements:

### Watercourse and Meadow Protection Standards

- The IR shall include information on watercourses, riparian areas, wetlands, including a map, in the project area.
- Protection measures/treatment limitations must be provided when the project affects any Class I or II perennial watercourses, or Class III seasonal/intermittent watercourses<sup>1</sup>. Refer to the Table1 below.
- All watercourse riparian stream buffer areas exclude entry by heavy equipment, except at existing crossing or designated locations.
- Exclusions are needed to continue large snag/wood recruitment and avoid impacts to species that utilize aquatic and riparian areas such as fish, red-legged and yellow-legged frogs, Pacific fisher, and great gray owl.

Table 1 – Protection measures/treatment limitations for watercourse protection zones (Buffer Zones)

	<b>Class I wet</b>	<b>Class II wet</b>	<b>Class III dry</b>	<b>Class III wet</b>	<b>Wet meadow</b>
<b>Work Exclusion Zone</b> (from channel edge or edge of meadow)	25 ft.	25 ft.	None	25 ft.	100 ft.
Heavy Equipment Exclusion Zone (Hand work only)	75 ft.	25 ft.	25 ft.	25 ft.	N/A
<b>Total Buffer for Limited Work</b>	100 ft.	50 ft.	25 ft.	50 ft.	100 ft.

- Vegetative treatments and equipment entry within watercourse buffer zones can be included when an assessment is made that the buffer treatment is needed to protect human life, structures .

<sup>1</sup> See California Forest Practices rules section 14 CCR 895.1

- Forest management operations outside the watercourse buffer zones will ensure tree falling and other slash is not in buffer zones.
- Flagging will be established to delineate watercourses, riparian areas, and wetland buffers.

### **Migratory and TES Birds and Other Species**

- Project activities will not commence until a biologist concurrence is received.

### **Migratory Birds:**

- Work will not occur during the migratory bird nesting season unless an assessment is conducted to determine active nesting or breeding behavior.
- Assessments will be completed by NRCS staff persons knowledge on migratory birds. Assessments shall be conducted within ten days prior to the start of work.
- The nesting season varies by region. Below are the nesting season dates by region. Refer to Technical Note TN-Biology-CA-23 for complete information on measures to minimize disturbance migratory birds.
- Generally, projects less than 10 acres in size are not required to conduct migratory bird assessments, as well as projects implemented after July 15. These projects are not expected to have migratory bird population level adverse effects. **Consider conducting surveys on <10-acre projects when they are adjacent to other areas planned for treatment in the same year.**

### **TES:**

- No known threatened, endanger, sensitive (TES) or rare plants or animals, including migratory birds, will be disturbed or harmed.
- Measures to avoid disturbance to TES may be required if known species are present or suitable habitat is found on-site in areas accessible to TES.
- In consultation with NRCS Biologist, develop a project alternative that avoids or minimizes these potential effects.
- Avoidance and/or minimization measures may include:
  - Buffer zones around nests and dens,
  - Limitations to types of equipment and/or times used,
  - Limited operating periods,
  - TES monitoring prior to or during activities,
  - Additional snag and downlog retention,
  - Any requirements when provided from ESA consultation with other agencies.

## Snags

- Projects shall be designed and implemented to retain standing dead and dying trees (snags) as wildlife trees.
- Snag shall be retained where they pose a minimal hazard to human safety and do not affect infrastructure such as roads, buildings, utilities or public safety or commercial features.
- Desirable wildlife trees/snags for retention include dead or dying trees and live “culls”; and larger trees with large forked or horizontal branches, broken tops, or existing cavities.
- Retain all snags >16” dbh and >24’ tall within Class I and II perennial watercourse protection zones and within 500 ft of meadows.
- Retain an average of x snags per acre for all other areas.
- Exceptions to the above requirements:
  - Exception (a): Snags that can fall on roads and structures.
  - Exception (b): Where required for insect or disease control.
  - Exception (c): Where it is a threat to human health and safety (hazard).
  - Exception (d): When a biologist recommends a greater quantity for protection of TES habitat.
  - Exception (e): Fuelbreaks.
  - Exception (f): When the forester and biologist agree the quantities may be reduced, such as to address post wildfire or insect mortality excess biomass/wildfire hazard resource concern in buffer zones.
- Snags shall be designated prior to operations

## Large Down Wood

Retain all pre-existing large wood on the forest floor,  $\geq$  18 inch dbh and 20’ length. Where debris is smaller diameter, retain at least six of the largest down logs per acre, with the following exceptions:

Exception (a): When it is serving as brood habitat for beetle infestation.

Exception (b): Where the density is such that it would contribute significantly to ground fuels.

Exception (d): When a biologist, in consultation with the forester recommends a certain quantity for protection of TES habitat.

## Biological diversity Retention areas

Consideration should be given to leaving some debris for biological diversity.

Consider retaining small vegetated areas that coincide with unique features such as wet areas, riparian buffer zones, rocky or steep terrain, down logs and snags, or other valuable habitat elements. Target retaining 15% of the vegetation in the project area.

**Habitat Requirements for common protected species**

A list of protected species that have the potential for impacts from NRCS forest management practices is described in Attachment A. This list is not all-inclusive of all possible at-risk species that could be encountered during timber operations in the central Sierra Nevada mountains and NRCS staff are still required to avoid impacts to any species not listed here to the maximum extent practicable. Key habitat requirements described for each species are those that can help determine if a species may be present in a project area. **The below attachment is a draft, and will have edits prior to final adoptions.**

Attachment A. Brief summary of protected species known to commonly occur in NRCS project areas in the central Sierra Nevada Mountains. \* T=threatened; E=endangered; C=candidate; P=proposed

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Common Name	Sci Name	Federal Status	State Status*	Work Window	Primary Habitat Metrics
Foothill Yellow-legged Frog	<i>Rana boylei</i>	--	SC	May-February	Elev 0-6000' Diverse habitats, rocky streams Rarely found >100' from water Will hide under rocks and veg if away from water Lay eggs post spring flooding
Red-Legged Frog	<i>Rana draytonii</i>	FT	--	August-January	Elev 0-4000' Quiet stream pools, marshes, ponds, wetlands Require permanent water and stay near Breeds Feb-July
Sierra Nevada Yellow-legged Frog	<i>Rana sierra</i>	FE	ST	September-November	Elev 4500-12000'; Plumas to Fresno Co. Deep water streams, lakes, ponds, wet meadows, montane riparian Breeding June-Aug
Mountain Yellow-legged Frog	<i>Rana muscosa</i>	FE	ST	July-November	Elev 2000-12000'; Fresno to Kern Co, San Gabriel, San Bernardino, and San Jacinto Mts. Deep water streams, lakes, ponds, wet meadows, montane riparian Breeding April-July
Pacific Fisher	<i>Peckania pennanti</i>	--	ST	Aug-November	Large areas of mature, dense forest stands with snags. Deciduous-riparian. Prefer ≥ 50% canopy closure but will stay in home range post-fire; 3-5 snags/ac >18" dbh. Den in winter, young born Feb-May, Female natal denning Feb – July
Great Gray Owl	<i>Strix nebulosa</i>	--	SE	July-December	Elev. 4500-7500; Plumas south to Tulare Counties Mature conifer forests w large trees and dense canopy adjacent to open wet meadows. Dead trees provide nest sites. Nest March-June typically w/in 300' of a meadow, up to 1000' of meadow
Sierra Nevada Red Fox	<i>Vulpes vulpes necator</i>	FC	ST	June-November	Elev 4000'-12000', $\bar{x}$ =7000' Hunts in meadows/open areas Dens in dense veg, rocks, stumps/snags Low activity during winter months

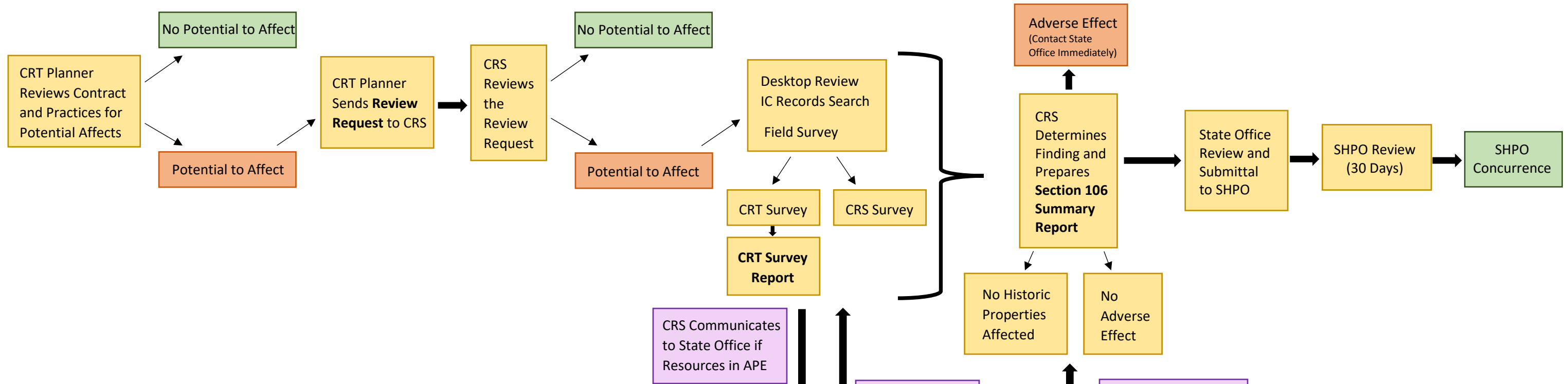
<b>California Wolverine</b>	<i>Gulo gulo</i>	FP (T)	ST	June-December	Elev N. Sierras 4000'-7000'; S. Sierras 6000'-10000'. Most recent recording in Nevada County. Caves, cliffs, logs, rock outcroppings and dense cover. Young born Jan-Apr in den; Active year-round
<b>Willow Flycatcher</b>	<i>Empidonax traillii</i>	--	SE	Anytime	Elev 2000-8000' Montane riparian, broad open river valleys, large mountain meadows, dense shrubby willows Summer migrants, May-Sept
<b>Ione Manzanita</b>	<i>Arctostaphylos myrtifolia</i>	FT	--	Anytime	Primarily near town of Ione, Amador Co. Ione formation, chemise-manzanita chaparral
<b>Layne's Ragwort</b>	<i>Packera layneae</i>	FT	Rare	Anytime	Western El Dorado Co, Yuba Co. Gabbro and serpentine soils Chaparral and oak woodlands

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## NRCS CALIFORNIA – CULTURAL RESOURCES REVIEW PROCESS



### NATIVE AMERICAN CONSULTATION (STATE OFFICE)

