

BAER SURVEY - WILDLIFE SPECIALIST REPORT

Resource Specialty: Wildlife

Fire Name: Yolla Bolla Complex (Vinegar and Trough Fires)

Month and Year: September 2008

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I. Potential Values at Risk

Overview

The Yolla-Bolla Complex consists of several fires that burned primarily within the Upper Middle Fork Eel River and the South Fork Cottonwood Creek watersheds of the Yolla Bolla Wilderness in the south east portion of the Shasta-Trinity NF. The fires started during a lightning storm on June 21, 2008 and burned with varying intensity approximately 90,000 acres (34,200 acres on the Shasta-Trinity NF and 54,520 acres on the Mendocino NF). Elevations within the fire perimeter range from 3000 to 6500 feet. Habitat types within these areas include red fir and mixed-conifer timber in the upper elevations and hardwood/chapparral-manzanita brush habitat in the lower elevations.

Federally Endangered and Threatened and Forest Service Sensitive Species (TES)

Habitat exists for one federally listed species and 17 Forest Service Sensitive species (as derived from the most recent Regional Forester's Sensitive Species list for Region 5 issued in April of 2004).

The following list includes those species for which habitat exists within the fire perimeter:

Federally listed as *Threatened*

- Northern spotted owl (*Strix occidentalis caurina*)

Federally listed as *Candidate*

- Pacific fisher (*Martes pennanti pacifica*); also a FS Sensitive species

Forest Service *Sensitive*

Mammals

- Pacific fisher (*Martes pennanti pacifica*)
- American marten (*Martes americana*)
- California wolverine (*Gulo gulo luteus*)
- pallid bat (*Antrozous pallidus*)
- Townsend's big-eared bat (*Corynorhinus townsendii*)
- western red bat (*Lasiurus blossevillii*)

Birds

- northern goshawk (*Accipiter gentilis*)

Reptiles

- northwestern pond turtle (*Clemmys marmorata marmorata*)

Amphibians

- Cascade frog (*Rana cascadae*)
- foothill yellow-legged frog (*Rana boylei*)

Invertebrates

- Shasta sideband snail (*Monadenia troglodytes troglodytes*)
- Wintu sideband snail (*Monadenia troglodytes wintu*)
- Shasta chaparral snail (*Trilobopsis roperi*)
- Tehama chaparral snail (*Trilobopsis tehamana*)
- Pressley hesperian snail (*Vespericola pressleyi*)
- Shasta hesperian snail (*Vespericola Shasta*)

II. Resource Condition Assessment

A. Resource Setting

The Vinegar and Trough fires impacted suitable habitat for the species listed above. Because these fires burned within a designated Wilderness Area, historical surveys have not been conducted in the area, and consequently very little baseline presence/absence data exists for these species. General statements as to the effects to these species and their habitats are made by using the presence of suitable habitat as a proxy for species presence/absence.

B. Findings

1. Resource Condition Resulting from the Fire

In general, these fires tended to burn in a mosaic pattern that left pockets of more severely burned areas within the areas that had been drier, more sparsely forested and brushy. Forested areas with higher canopy closure burned with less severity, resulting in “pockets” where the canopy is opened up but the surrounding stand is relatively intact. Forested areas where burn-out activities were conducted tended to burn much hotter, and consequently resulted in the destruction of the entire forest canopy. The remaining stands have not yet recovered their vegetative cover, but will eventually consist of early seral vegetation with the gradual re-introduction of coniferous species.

2. Consequences of the fire on values at risk

In general, remaining habitat will consist of openings of early seral vegetation with available cover within functional distances. The dramatic “green up” in many areas has much of the burned area already showing signs of use by multiple species. Upon field visits, sightings were made of the standard groups of species generally found within

burned areas post-fire including; western bluebirds, acorn, hairy and white-headed woodpeckers, deer, nuthatches, black bear (sign) and western fence lizards.

In areas that burned with particular severity, mortality or injury may have occurred. However, it is unlikely that any detrimental, population-level effects occurred as a result of these fires, due largely to the generally slow-moving, mosaic nature of the burn pattern. Initial concerns were for a widespread loss of cover and forage leading to fragmentation. However, upon field review of the moderately and severely burned areas of these fires, it was determined that very few severely burned areas were large enough to render them unsuitable for use, due to a lack of cover, by most terrestrial and avian species.

The creeks and riparian areas within the burn area have the potential for increased debris flow, erosion and sedimentation as a result of the fire burning in adjacent hillsides during the rainy season. Some of the suitable habitat for the reptile and amphibian species associated with riparian habitat will have a temporary loss of thermal cover due to the loss of shrubs and herbaceous vegetation in the area. This may cause a temporary displacement of individuals and possible impacts into next year's neotropical migratory birds' nesting season. However, field reviews have indicated that riparian vegetation, particularly willow, has already begun to grow back within the burned areas. This will aid in the recovery of the riparian community and alleviate impacts from a loss of cover.

There is a general preponderance of snags throughout much of the burned area. Therefore, removal of snags within safety zones for trail and creek rehabilitation work is not a concern for species that rely on snag habitat. In addition, trees that were not immediately burned and killed, may have been exposed to enough heat, that damage to the root systems and/or cambium layer was sufficient to cause eventual mortality. This snag recruitment will likely occur over multiple seasons and will ensure an abundance of future snags.

III. Emergency Determination

No rehabilitation treatment emergency exists pertaining to the Federally listed or Forest Service Sensitive species or their habitats described above.

IV. Treatments to Mitigate the Emergency

Recommended treatments based on assessments by geologists, hydrologists and soil scientists for the area are sufficient to the biological resources described above. Removal of snags within safety zones for trail and creek rehabilitation work is not a concern for the TES species present in the area.

V. References

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