

Survey and Manage Species Analysis

Lower Trinity and Mad River Motorized Travel Management FEIS

Alternative 3

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Introduction:

This analysis assesses the potential for significant negative impacts to the habitat of current Survey and Manage species (including plant, lichen, fungi, terrestrial mollusk, aquatic mollusk and vertebrates) of Alternative 3 of the Lower Trinity and Mad River Motorized Travel Management Final Environmental Impact Statement (FEIS). This project proposes the following actions:

- (1) Prohibit cross-country motor vehicle travel off designated National Forest Transportation System (NFTS) roads, motorized trails, and areas by the public except as allowed by permit or other authorization;
- (2) Add approximately 62 miles of unauthorized routes (trails) to the current NFTS for public motor vehicle use, with seasonal and vehicle class restrictions assigned to some routes;
- (3) Changes to the Existing NFTS.

In general Survey and Manage species requirements associated with this project, per the 2001 ROD standards and guidelines as amended by 2001-2003 Annual Species Reviews, are as follows:

1. Manage for known sites based on the known sites database
2. Complete pre-disturbance surveys for Category A and C species if activity is potentially habitat disturbing such that it is likely to have a significant negative impact on the species' habitat, life cycles, microclimate, or life support requirements (Standards and Guidelines p. 22)

Appendix 1 is a table of all Survey and Manage species that are thought to occur or have the potential to occur on Six Rivers National Forest. The following Category A and C Survey and Manage species were selected for further consideration in this document and are discussed in the Category A and C Survey and Manage Species Selected for Further Consideration section below:

- Bryophytes (*Ptilidium californicum*);
- Lichens (*Lobaria oregana*, *Platismatia lacunosa*, *Ramalina thrausta*, *Usnea longissima*);
- Fungi (*Bridgeoporus nobilissimus*); and
- Vascular Plants (*Bensoniella oregana*, *Cypripedium fasciculatum*, *Cypripedium montanum* and *Eucephalus vialis*)

Methodology:

1. Queried known sites database for Survey and Manage species and the results of purposive and strategic surveys to determine if known sites exist within 100 feet (for indirect effects) of routes proposed for addition to NFTS.
2. Determined which Survey and Manage species range coincides with Six Rivers National Forest and for which pre-disturbance surveys may be required (see Appendix 1).
3. Assessed which known sites would be necessary to protect.
4. Assessed of addition of routes (Table 1) or changes to existing NFTS (Tables 2, 3 and 4) would have a significant negative impact on the species' habitat, life cycle, microclimate, or life support requirements and therefore require pre-disturbance surveys.
5. Did not carry forward for additional consideration the following:

- a. Species for which known sites are not present within 30 feet of routes proposed for addition to the NFTS;
- b. Species that do not require pre-disturbance surveys (Category D and E), as prescribed by 2001 ROD standards and guidelines as amended by Annual Species Reviews; or
- c. Species whose range does not coincide with Six Rivers National Forest were eliminated from further consideration.

Known Sites

There are no known sites of survey and manage plant, lichen, fungi, terrestrial mollusk, or vertebrates species within the 30 feet (potential direct effect) of any of the proposed routes.

There is a known site of a survey and manage bryophyte species, *Ptilidium californicum*, located 50 feet from proposed route JM-2051. Because this site is buffered by 50 feet from the route proposed for use by motorcycles and because the species grows on substrate avoided by motorcycles, continued use on the proposed route at current rates of use will not have a significant impact on the species habitat, its life-cycle, microclimate, or life support requirements.

Therefore, known sites would not be disturbed by use on the proposed routes and only Category A and C Survey and Manage species whose geographic range coincides with Six Rivers National Forest were selected for further analysis. Routes proposed for addition to the NFTS were evaluated to determine if their use would have a significant negative impact on Category A and C Survey and Manage species habitat, life cycle, microclimate, or life support requirements for those species whose range coincides with the project area.

Category A and C Survey and Manage Species Selected for Further Consideration

The following is an assessment of impacts from actions proposed under Alternative 3 to species habitat, life cycles, microclimate or life support requirements to determine if significant negative impacts will occur to Category A and C survey and manage species whose range coincides with Six Rivers National Forest. This assessment aggregates species by taxa groups, which, in general, have similar habitat, life cycles, microclimate or life support requirements.

Background: Survey and Manage species are associated with late successional old growth forests which provide microclimatic conditions and life support requirements to provide for the persistence of these species. No new route construction is proposed under this action. The unauthorized routes proposed for inclusion into the NFTS are pre-existing and the associated habitat is highly disturbed and compacted and no longer contains suitable habitat structures (barren of vegetation, duff, down logs, high canopy cover) or refugia. Changes to microclimatic conditions (shifts in moisture condition and wind intrusion) occurred long ago when the proposed routes were first constructed and will not change as a result of the proposed actions. Effects within 30 feet of the highly disturbed route surfaces are primarily the result of vehicles parking or pulling over to let other by. These actions will select already disturbed sites and are not likely to result in changes to suitable habitat or modify the microclimatic conditions or remove substrate.

Category A and C Bryophytes

Category A and C bryophytes whose range coincides with Six Rivers National Forest includes; *Ptilidium californicum*. This bryophyte, which lack the vascular system found in seed plants, depends on its

immediate surroundings for moisture and nutrients. Persistence at an occurrence is dependent upon suitable moist microclimate conditions and available substrate, boles of trees for *Ptilidium*. Because the species grows on substrate avoided by motorized vehicles and because habitat is no longer suitable due to changes in microclimate conditions along or within 30 feet of proposed routes where pulling over is feasible (generally areas disturbed by past use) proposed actions would not have a significant negative impact on the species habitat, life cycles, microclimate, or life support requirements.

Category A and C Lichens

Category A and C Lichens whose range coincides with Six Rivers National Forest includes; *Lobaria oregon*, *Platismatia lacunosa*, *Ramalina thrausta*, *Usnea longissima*. These lichen species are found in the canopy or on the boles of either hardwood or conifer species that provides protection from motorized vehicles. Additionally, no trees will be removed under the proposed actions. Hence, proposed actions would not have a significant negative impact on the species habitat, life cycles, microclimate, or life support requirements.

Category A Fungi

Bridgeoporus nobilissimus is the only Category A fungi whose range coincides with Six Rivers National Forest. No routes are proposed for addition to the NFTS within its host range. The Pacific Silver fir zone is the host range and its hosts are the following true fir species - *Abies procera* and possibly *Abies amabilis*. Hence, proposed actions would not have a significant negative impact on the species habitat, life cycles, microclimate, or life support requirements.

Category A and C Vascular Plants

Category A and C vascular plants whose range coincides with Six Rivers National Forest includes *Bensoniella oregano*, *Cypripedium fasciculatum*, *Cypripedium montanum* and *Eucephalus vialis*. Because habitat is no longer suitable due to changes in microclimate conditions along proposed routes or within 30 feet of proposed routes where pulling over is feasible (generally areas disturbed by past use) proposed actions would not have a significant negative impact on the species habitat, life cycles, microclimate, or life support requirements.

Evaluation of Selected Modified Alternative 3 Routes:

The following tables list all routes affected by the proposed actions. There are no known sites within 30 feet of these routes proposed actions.

Table 1 - Unauthorized Routes Added to the NFTS									
Route Number	JM-2003	JM-2009	JM-2013	JM-2016n	JM-2023	JM-2024	JM-2025	JM-2026	JM-2027
Miles	0.13	0.61	0.41	0.33	0.16	0.08	0.12	0.16	0.19
Route Number	JM-2028	JM-2051	JM-2053	JM703	JM706	JM709	JM714	JM732	JM734
Miles	0.05	0.55	0.65	0.02	0.05	0.02	0.07	0.05	0.04
Route Number	JM735	JM737	JM738	JM767	M811	MM790	MM791e	MM791w	MM792
Miles	0.08	0.03	0.02	0.33	0.2	0.64	0.7	0.13	0.93
Route Number	MM800	MM802	MM813	MM815	MM816	MM817	MM821	MM823	MM824
Miles	0.85	0.12	0.52	0.22	0.3	0.82	0.25	0.04	0.19
Route Number	MM825	MM826	MM828	MM830	MM832	MM833	MM835	MM836	MM837
Miles	0.14	0.49	0.47	0.35	0.17	0.13	1.29	0.19	0.05
Route Number	MM838	MM839	MM842	MM843	MM844	MM845	MM848	MM849	MM850
Miles	0.54	0.93	0.48	0.17	0.14	0.14	0.4	0.5	0.32
Route Number	MM852	MM853	MM862	MM864	PK804	PK813	PK820	PK821	PK822
Miles	0.28	0.3	0.02	0.07	1.58	0.04	0.07	0.63	0.68
Route Number	PK843n	PK844	PK845	PK848s	PK851n	PK852	PK853	PK854	PK855
Miles	0.58	0.23	0.16	0.05	0.14	0.09	0.13	0.1	0.05
Route Number	PK856	PK857	TH01	TH02	TH03	TH16	UALT0007r	UALT1000r	UALT4000
Miles	0.61	0.07	0.07	0.11	0.12	0.04	0.5	0.49	0.13

Table 1 - Unauthorized Routes Added to the NFTS									
Route Number	UALTCC	JM1002	JM1031	JM1032	JM1033	JM1036	JM1061	JM1071	JM-2016s
Miles	0.06	0.1	0.03	0.15	0.06	0.04	0.04	1.79	0.26
Route Number	JM-2078	JM-2079	JM-2080	JM-2087	JM-2090	JM-2095	JM-2096n	JM-2096s	JM-2097e
Miles	0.13	3.08	0.05	0.8	1.97	1.67	0.7	0.05	2.23
Route Number	JM-2097w	JM-2098	JM-2101	JM-2102	JM-2104	JM-2112	JM-2119	JM-2123	JM760
Miles	0.88	0.33	0.06	0.63	0.03	0.03	0.04	0.16	0.08
Route Number	JM761	JM765	JM806	JM811	JM813	JM816	JM830	JM851	JM858
Miles	0.16	1.62	0.14	0.03	0.06	0.07	0.29	0.21	0.11
Route Number	JM888	JM892	JM893	JM894	JM898	JM899	JM900	JM901	JM902
Miles	0.06	0.02	0.02	0.15	0.06	0.13	0.08	0.02	0.07
Route Number	JM903	JM909	JM911	JM912	JM913	JM914	JM915	JM916	JM917
Miles	0.05	0.06	0.03	0.03	0.48	0.09	0.61	0.07	0.05
Route Number	JM918e	JM918w	JM919	JM947	JM948	JM952	JM954	JM955	JM956
Miles	0.02	0.07	0.06	1.83	0.14	0.4	0.24	0.42	0.25
Route Number	JM957	JM959	JM979	JM982	JM995	JM999	PK703	PK751	PK815
Miles	0.03	0.07	0.29	0.23	0.07	0.12	0.08	1.07	0.1
Route Number	PK817	PK839	PK851	PK857x	PK874	PK887	PK889	SS113	SS116
Miles	0.01	0.06	0.21	0.09	0.05	0.06	0.21	0.06	0.18

Table 1 - Unauthorized Routes Added to the NFTS									
Route Number	SS121	SS201	SS202	SS85	SS87	SS91	TH022	TH1007	TH1008
Miles	0.05	0.04	0.06	0.75	0.54	0.06	0.06	0.1	0.09
Route Number	TH1011	TH1013	TH1020	TH1034	TH1058	TH108	TH1080	TH113	TH122
Miles	0.08	0.09	1.29	0.16	0.04	0.18	0.16	0.08	0.07
Route Number	TH147	TH151	TH153	TH154	TH155	TH186	TH205	TH214	TH218
Miles	0.23	0.15	0.03	0.19	0.08	0.06	0.09	0.23	0.01
Route Number	TH223	TH227	TH242	TH249	TH250	TH267	TH278	TH279	TH281
Miles	1.48	0.36	0.16	0.07	0.05	0.2	0.05	0.12	0.05
Route Number	TH287	TH288	TH289	TH291	TH293	TH295	TH302	TH306	TH323
Miles	0.05	0.15	0.08	0.04	0.14	0.03	0.25	0.04	0.02
Route Number	TH324	TH345	TH349	UAMR0029t	UAMR0030t	UAMR0034r	UAMR0034rl	UAMR0047r	UAMR0050r
Miles	0.03	0.48	0.24	0.03	0.08	0.13	0.11	0.35	0.14
Route Number	UAMR0071r	UAMR0088r1	UAMR0088r2	UAMR0088r3	UAMR1000				
Miles	0.03	0.66	0.22	0.14	0.09				

Table 2 - Co-located Motorized Trails on NFTS Closed Roads				
Route Number	3N05	7N14C	7N15	2N24
Miles	0.06	0.26	2.34	0.23

Table 3 - Changes to NFTS to Allow Mixed Use on NFTS Roads									
Road Number	06N12	06N19	01N08	01S11	02N12	02N14	03S12	1N15	27N12
Miles	2.3	1.96	1.65	2.43	2.99	3	1.7	0.12	0.04

Table 4 - Changes to NFTS Motorized Trails										
Change to Vehicle Type										
Trail Number	5E14									
Miles	3.85									
Remove Motorized Use										
Trail Number	6E27	7E04								
Miles	1.26	4.56								
Establish Season of Use										
Trail Number	5E12	5E12A	5E12B	5E12C	5E17	5E21C	5E23	5E24	5E43	5E43
Miles	1.12	0.13	1.01	1.47	3.52	1.81	0.9	1.51	0.98	0.41

Appendix 1: Six Rivers National Forest Survey and Manage Species Considered¹

(The current SM List for SRNF was identified from the 2004 S&M status incl. 2001-2003 ASRs)

Taxa Group	Scientific Name	SRNF SM List	Habitat Description - Most taken from field guides on BLMs manage S&M site	Selected for further consideration	If not selected for further consideration, reason(s) why not
bryophytes	<i>Buxbaumia viridis</i>	E	<i>Buxbaumia viridis</i> occurs on rotten stumps and logs and on mineral or organic soil in cool, shaded, humid locations at middle elevations. Floodplains and stream terraces are favorable habitats because of the large amount of decayed wood available in old growth, but the species can be found on almost any landform as long as microclimatic conditions are favorable. A number of specimens have been found growing on shaded cutbanks of trails and roads. Elevations of known sites range from 1165 to 1525 m (3500 to 5000 feet).	No	No surveys required.
bryophytes	<i>Kurzia makinoana</i>	D	Occurs on well-shaded, rotten wood and humic soil at low elevations, especially stream terraces, floodplains and other cool, moist forest locations. Highly susceptible to desiccation.	No	No surveys required.
bryophytes	<i>Orthodontium gracile</i>	B	Occurs in shady habitats in old-growth or mature second growth coast redwood forests.	No	No surveys required.

¹ Survey and Manage categories are as follows: Category A=Rare, Pre-disturbance Surveys Practical; Category B=Rare, Pre-disturbance Surveys Not Practical; Category C=Uncommon, Pre-disturbance Surveys Practical; Category D= Uncommon, Pre-disturbance Surveys Not Practical; Category E=Rare, Status Undetermined; Category F=Uncommon or Concern for Persistence Unknown, Status Undetermined. For more information about species objectives and management direction for each of these categories, see pp. 6-14 of Standards and Guidelines, USDA/USDI 2001 Survey & Manage ROD; online at <http://www.reo.gov/s-m2006/2001/RODjan01.pdf>.

Taxa Group	Scientific Name	SRNF SM List	Habitat Description - Most taken from field guides on BLMs manage S&M site	Selected for further consideration	If not selected for further consideration, reason(s) why not
bryophytes	<i>Ptilidium californicum</i>	A	Old stands of White-Red Fir, and Douglas-fir, specifically those classified as old-growth or second-growth stands with legacy components. Micro-habitat is generally near or on the base of older coniferous trees, but can also include smaller conifers and hardwoods, snags, and logs. [from 2005 Region 5 Sensitive Plant Species Evaluation and Documentation Form]	Yes	
bryophytes	<i>Racomitrium aquaticum</i>	E	<i>Racomitrium aquaticum</i> is often associated with high moisture conditions and substrates. It occurs within forests on moist rocks and boulders in and near streams, springs, waterfalls, on cliff faces and rock outcrops. Rock substrates include granite and basalt. The habitat is shaded, with associated overstory including Jeffrey pine, incense cedar, western hemlock, or oak. It has been reported from elevations between 610 and 1950 m (2,000 and 6,400 ft.).	No	No surveys required.
fungi	<i>Bridgeoporus nobilissimus</i>	A	Sporocarps occur in late successional conifer forest in the Pacific Silver fir zone and have <i>Abies procera</i> and possibly <i>A. amabilis</i> as the host.	Yes	.
fungi	<i>Clavariadelphus occidentalis</i>	D	Scattered to gregarious on soil or duff, under mixed conifers.	No	No surveys required.
fungi	<i>Clitocybe senilis</i>	B	Forms gregarious to subcaespitose sporocarps in duff, restricted to conifer forests.	No	No surveys required.

Taxa Group	Scientific Name	SRNF SM List	Habitat Description - Most taken from field guides on BLMs manage S&M site	Selected for further consideration	If not selected for further consideration, reason(s) why not
fungi	<i>Clitocybe subditopoda</i>	B	Forms gregarious to subcaespitose sporocarps in fairy rings on needle beds of <i>Picea spp.</i> And <i>Pinus spp.</i> , in coastal to mid-elevation conifer forests.	No	No surveys required.
fungi	<i>Galerina heterocystis</i>	E	Fragile. On moss (Rarely on Sphagnum. Circum-polar & Circum-boreal.	No	No surveys required.
fungi	<i>Mycena tenax</i>	B	Restricted to conifer forests above 1,000 ft. elevation, particularly those with <i>Abies spp.</i> and usually found in gregarious, caespitose clusters on decayed wood near snow banks or just after snow melt.	No	No surveys required.
fungi	<i>Otidea leporina</i>	D	Associated with <i>Picea spp.</i> , <i>Pseudotsuga menziesii</i> , and <i>Tsuga heterophylla</i> .	No	No surveys required.
fungi	<i>Phaeocollybia kauffmanii</i>	B	Associated with the roots of <i>Abies amabilis</i> , <i>Picea sitchensis</i> , <i>Pseudotsuga menziesii</i> , and <i>Tsuga heterophylla</i> .	No	No surveys required.
fungi	<i>Ramaria conjunctipes</i>	B	Fruits in humus or soil and matures above the surface of the ground. Associated with <i>Abies spp.</i> , <i>Pseudotsuga menziesii</i> , and <i>Tsuga heterophylla</i> .	No	No surveys required.
fungi	<i>Ramaria maculatipes</i>	B	Fruits in humus or soil and matures above the surface of the ground. Associated with <i>Abies spp.</i> , <i>Pseudotsuga menziesii</i> , and <i>Tsuga heterophylla</i> .	No	No surveys required.
fungi	<i>Rhizopogon truncatus</i>	D	occurs with true firs (<i>Abies</i>) in alpine regions	No	No surveys required.
fungi	<i>Spathularia flavida</i>	B	In clusters or fairy rings on litter or woody debris of conifer and hardwood forests.	No	No surveys required.

Taxa Group	Scientific Name	SRNF SM List	Habitat Description - Most taken from field guides on BLMs manage S&M site	Selected for further consideration	If not selected for further consideration, reason(s) why not
fungi	<i>Tremiscus helvelloides</i>	B	Solitary or more commonly crowded-caespitose in duff, soil, and rotten wood under conifers.	No	No surveys required.
lichen	<i>Calicium glaucellum</i>	F	mesic/moist coastal forest	No	No surveys required
lichen	<i>Calicium viride</i>	F	mesic/moist coastal forest	No	No surveys required.
Lichen	<i>Chaenotheca chrysocephala</i>	B	mesic/moist coastal forest	No	No surveys required.
lichens	<i>Chaenotheca ferruginea</i>	B	Typically found at an altitude of 0 to 2,352 meters	No	No surveys required.
lichen	<i>Chaenotheca subroscida</i>	E	Usually on bark or Picea or Thuja , near the base of old trees in shady and moist positions, rarely on lignum, in old coniferous forests.	No	No surveys required.
lichen	<i>Chaenothecopsis pusilla</i>	E	Saprobic or parasitic on free-living algae or on lichens (often occurring in mosaics with several other calicioid species and then possibly parasitic on Calicium species on old lignum of a variety of trees.	No	No surveys required.

Taxa Group	Scientific Name	SRNF SM List	Habitat Description - Most taken from field guides on BLMs manage S&M site	Selected for further consideration	If not selected for further consideration, reason(s) why not
lichens	<i>Dendroscopula intricatum</i>	E	At known sites in the range of the Northwest Forest Plan, <i>D. intricatum</i> occurs between 30-2170 ft. elevation in moist habitats. In the western Cascades it is known from riparian forests (two sites), upland old-growth in the Western Hemlock and Pacific Silver Fir Zones, mature Douglas-fir (<i>Pseudotsuga menziesii</i>)/western hemlock (<i>Tsuga heterophylla</i>) forests, and a stand of subalpine fir (<i>Abies lasiocarpa</i>) on an old lava flow. In northern California it is known from three sites in the coastal fog zone. It also occurs on the boles of oaks (<i>Quercus</i>) in oak balds at sites that appear to receive high levels of humidity from coastal influences. <i>D. intricatum</i> is rare throughout its range, and only one or a few individuals are known from each site.	No	No surveys required.
lichens	<i>Dermatocarpon luridum</i>	E	Aquatic lichen growing on rocks, small boulders, and bedrock, submerged or seasonally submerged, adjacent to or in clear mountain streams between 105 and 1980 meters.	No	No surveys required.
lichens	<i>Leptogium teretiusculum</i>	E	Occurs in mixed conifer and Doug fir stands, and in maple and willows in both riparian and upland habitats.	No	No surveys required.

Taxa Group	Scientific Name	SRNF SM List	Habitat Description - Most taken from field guides on BLMs manage S&M site	Selected for further consideration	If not selected for further consideration, reason(s) why not
lichens	<i>Lobaria oregana</i>	A	Occurs in moist forests of Western North America. Reaches its greatest mass in sites greater than 200 years of age.	Yes	
lichens	<i>Leptogium rivale</i>	B	An aquatic lichen found primarily on rocks submerged in water or in the splash or inundation zone of small-order, clear mountain streams, and in a coastal freshwater seep.	No	No surveys required.
lichens	<i>Pannaria saubinetii</i> (<i>Fuscopannaria Saubinetii</i>)	E	Found on the bases of large trees. True <i>P. saubinetii</i> is apparently rare in North America and limited to humid, low forests of the Pacific coast. Restricted to certain moisture regime; found only at the bases of trees in moist locations.	No	No surveys required.
lichens	<i>Platismatia lacunosa</i>	C	Globally, <i>P. lacunosa</i> is restricted to western North America, from coastal northern California, north through coastal Alaska and the Aleutian Islands	Yes	
lichens	<i>Ramalina thrausta</i>	A	Occurs in moist low elevation conifer stands that frequently have a hardwood component where it grows on the branches and boles of conifers and hardwoods.	Yes	
lichens	<i>Usnea longissima</i>	A	Occurs in old-growth and late-successional conifer stand, and in hardwood stands and riparian areas.	Yes	

Taxa Group	Scientific Name	SRNF SM List	Habitat Description - Most taken from field guides on BLMs manage S&M site	Selected for further consideration	If not selected for further consideration, reason(s) why not
vascular plants	<i>Cypripedium fasciculatum</i>	C	Habitat is very broad, occurring on various parent materials from ultramafic, schist, and limestone derived soils. In Oregon and California, CYFA is associated with Douglas-fir-dominated and mixed conifer forests in the mid-late seral stands whose structure allows some light to reach the forest floor. Occurrences have also been documented in riparian areas. [from 2006 Region 5 Sensitive Plant Species Evaluation and Documentation Form]	Yes	
vascular plants	<i>Cypripedium montanum</i>	C	Site report data indicate that <i>C. montanum</i> grows at elevations from 1500-6500 ft. However, most sites in the Western Cascades occur between 2500-4000 ft. Aspect is mainly northerly, occurring on slopes of 25 to 50 percent. Grows on a wide variety of substrates in wooded communities with 60-80% canopy closure in mixed conifer and mixed evergreen/oak woodland plant communities. Western Cascade communities most often consist of Douglas-fir in combination with one or more of the following: madrone, sugar pine, or ponderosa pine. Other associates include grand fir, Pacific yew, incense cedar, and California black oak.	Yes	

Taxa Group	Scientific Name	SRNF SM List	Habitat Description - Most taken from field guides on BLMs manage S&M site	Selected for further consideration	If not selected for further consideration, reason(s) why not
vascular plants	<i>Eucephalis vialis</i> (<i>Aster vialis</i>)	A	Dry upland coniferous forest, typically Douglas-fir/hardwood forest in canopy gaps. Current populations of EUVI8 occur in all stages of succession from recent clearcuts to mature forest, but its preferred habitat is thought to have been historically sustained by frequent fire intervals creating open canopy with high light levels. In California it is known from one extant occurrence in Del Norte and one historic occurrence in Humboldt county. [from 2005 Region 5 Sensitive Plant Species Evaluation and Documentation Form]	Yes	
Vascular plants	<i>Bensoniella oregana</i>	A	Occurs along the periphery of meadows adjacent to seeps and small streams in the true fir zone.	Yes	
vertebrate	Oregon Red Tree Vole <i>Arborimus longicaudus</i> [only populations in North Mesic and Xeric Zones]	C	Tree voles are arboreal rodents that spend most of their life in the canopy of primarily Douglas-fir trees. This species is restricted to mesic forest communities west of the crest of the Cascade Mountains in Oregon. The extent of its range in southern Oregon and northern California is uncertain.	No	With the 2003 Annual Species Review, the red tree vole was removed from management in the mesic zone of the species range which encompasses the Orleans, Lower Trinity, & Mad River Ranger Districts

Taxa Group	Scientific Name	SRNF SM List	Habitat Description - Most taken from field guides on BLMs manage S&M site	Selected for further consideration	If not selected for further consideration, reason(s) why not
mollusk	<i>Helminthoglypta talmadgei</i>	D1 (no surveys needed)	Stable talus and rockslides in limestone substrates, especially near springs or streams. Trees and bushes appear to be important for shading and food, though deep shade is not necessary.	No	No surveys required.
mollusk	<i>Vespericola pressleyi</i>	A	Inhabits forests of conifer and/or hardwood trees in permanently damp areas within 200 meters of seeps, springs, and stable streams. Lower Trinity Ranger District.	No	Lower Trinity Ranger District has no known sites and expected to be outside the geographic range based on survey efforts and distance to nearest known site on STNF.
mollusk	<i>Prophysaon coeruleum</i> [only populations in CA & OR]	A	Habitats in which this slug is found are moist forest, normally late-successional or, if second growth, with late-successional attributes. Forests are usually dominated by conifers, but there is often a strong hardwood component. They are usually in moist plant associations, the forest floor being moist but not wet or saturated. The ground is shaded, and covered by moist, fairly deep layers of litter and duff. Lower Trinity, Orleans, and Ukonom Ranger District	No	This species is Category A in California and Washington, however to date species within California have not been confirmed by California Malcologist expert, Dr. Barry Roth. California specimens found on Lower Trinity, Orleans, and Ukonom Ranger District were misidentified as <i>P. coeruleum</i> , and determined to be a colormorph of <i>P. dubium</i> (confirmed by CA Malcologist expert, Dr. Barry Roth)

References:

FS Memorandum/BLM Instruction Memorandum dated December 19, 2003. Implementation of 2003 Survey and Manage Annual Species Review.

Frest, Terrence J., and Edward J. Johannes, 1999. Field Guide to Survey and Manage Freshwater Mollusk Species.