

Management Indicator Species Review
Smith River National Recreation Area (NRA) Restoration and Motorized
Travel Management Project (RMTM)
Smith River National Recreation Area
Six Rivers National Forest
September, 2016

Under the National Forest Management Act (NFMA), the Forest Service is directed to “provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives” (PL 94-588, Sec 6 (g) (3) (B)). The 1982 regulations implementing NFMA require that “Fish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area.” (36 CFR 219.19) Management Indicator Species (MIS) is a concept used by the agency to serve as a barometer for species viability at the Forest level. Population changes of MIS are believed to indicate the effects of management activities.

The Forest Land Management and Resource Plan for the Six Rivers National Forest uses Management Indicator Species (MIS) to assess potential effects of project activities on the various habitats and habitat assemblages with which these species are associated. Forty-one fish and wildlife species have been selected as MIS or assemblages for a variety of habitats that are potentially affected by resource management activities on the Forest (LRMP IV-97). For the analysis associated with this project, specific MIS were addressed based on their potential to occur within the project area and the potential for suitable habitat to be affected by project activities.

Table 1 lists the MIS and assemblages occurring on the Six Rivers National Forest, and those known or thought to occur within the project area based on habitat suitability, survey results, or incidental sighting records. Habitat suitability evaluations were made using the California Wildlife Habitat Relationships System, Version 8.2 software, developed by the California Department of Fish and Wildlife. In addition habitat evaluations were made utilizing Six Rivers National Forest Wildlife Sighting Database, Six Rivers National Forest Vegetation Layer, field reviews, and Forest GIS Vegetation Layers.

Table 1. Management Indicator Species and Habitat Assemblages – Six Rivers NF

MIS Species and Habitat Assemblages	Habitat is Impacted by the Project	Habitat is in or adjacent to the project areas, but is not directly or indirectly impacted by the project	Habitat is not in or adjacent to the project area and is not directly impacted by the project
<i>Individual Species</i>			
Northern Spotted Owl*	Potential for minor habitat impacts (See BA)	Habitat is adjacent to the project area, but will not be directly or indirectly affected (See BA)	
Pileated woodpecker		Habitat is adjacent to the project area, but will not be directly or indirectly affected	
Black Bear		Habitat is adjacent to the project area, but will not be directly or indirectly affected	

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American marten*		Habitat is adjacent to the project area, but will not be directly or indirectly affected (See BE)	
Fisher*		Habitat is adjacent to the project area, but will not be directly or indirectly affected (See BE)	
Black-tailed deer	Suitable habitat – no adverse impacts		
Southern torrent salamander*	Suitable habitat – Short term impacts to habitats (See BE)		
<i>Marsh/ Lake/ Pond/ Assemblage</i>			
California red-legged frog			No suitable habitat present in project area
Western pond turtle*		Habitat is adjacent to the project area, but will not be directly or indirectly affected (See BE)	
Wood duck		Habitat is adjacent to the project area, but will not be directly or indirectly affected	
<i>River/Stream/Creek Assemblage</i>			
Cutthroat trout			
Steelhead/rainbow trout			
Tailed frog	Suitable habitat – Short term impacts to habitats		
Summer steelhead			
Common merganser	Suitable habitat – Short term impacts to habitats		
Ruffed grouse	Suitable habitat – Short term impacts to habitats		
Winter wren	Suitable habitat – Short term impacts to habitats		
American dipper	Suitable habitat – Short term impacts to habitats		
Yellow-breasted chat	Suitable habitat – Short term impacts to habitats		
<i>Tanoak/Madrone Assemblage</i>			
Hammond's Flycatcher		Habitat is adjacent to the project area, but will not be directly or indirectly affected	
Western Tanager		Habitat is adjacent to the project area, but will not be directly or indirectly affected	
Black-headed grosbeak		Habitat is adjacent to the project area, but will not be directly or indirectly affected	
<i>Snag Assemblage</i>			
Flamulated Owl		Habitat is adjacent to the project area, but will not be directly or indirectly affected	
Western screech owl		Habitat is adjacent to the project area, but will not be directly or indirectly affected	

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Red-breasted sapsucker		Habitat is adjacent to the project area, but will not be directly or indirectly affected	
Downy woodpecker		Habitat is adjacent to the project area, but will not be directly or indirectly affected	
Hairy woodpecker		Habitat is adjacent to the project area, but will not be directly or indirectly affected	
White-headed woodpecker		Habitat is adjacent to the project area, but will not be directly or indirectly affected	
Vaux's swift		Habitat is adjacent to the project area, but will not be directly or indirectly affected	
Brown creeper		Habitat is adjacent to the project area, but will not be directly or indirectly affected	
Western bluebird		Habitat is adjacent to the project area, but will not be directly or indirectly affected	
Douglas squirrel		Habitat is adjacent to the project area, but will not be directly or indirectly affected	
<i>Down Woody Debris Assemblage</i>			
Arboreal salamander			No suitable habitat present in project area
Clouded salamander		Habitat is adjacent to the project area, but will not be directly or indirectly affected	
Blue grouse		Habitat is adjacent to the project area, but will not be directly or indirectly affected	
Dusky-footed wood rat		Habitat is adjacent to the project area, but will not be directly or indirectly affected	
Western fence lizard		Habitat is adjacent to the project area, but will not be directly or indirectly affected	
<i>Black Oak/White Oak Assemblage</i>			
Acorn woodpecker		Habitat is adjacent to the project area, but will not be directly or indirectly affected	
Scrub jay		Habitat is adjacent to the project area, but will not be directly or indirectly affected	
Lazuli bunting		Habitat is adjacent to the project area, but will not be directly or indirectly affected	
Western gray squirrel		Habitat is adjacent to the project area, but will not be directly or indirectly affected	

* Habitat impacts for this species have been analyzed and documented in the Smith River National Recreation Area (NRA) Restoration and Motorized Travel Management Project Biological Assessment/Evaluation.

The project area occurs in forested areas ranging in seral stage from shrub and pole to patches of late mature and old growth. All proposed actions would occur in the road prism on current National Forest Transportation System (NFTS) roads and unauthorized routes. No new construction or reconstruction would occur on previously undisturbed lands.

Impacts to MIS

None of the changes made to any of the alternatives between the draft and final EIS change the level of impact or effects to Management Indicator Species.

All action alternatives will reduce road densities of OML 1, 2 roads and unauthorized routes across the NRA (Table 2). Reducing road density across the District will reduce fragmentation of habitat as the decommissioned roads revegetate, increase patch size, reduce sedimentation in stream channels, and reduce disturbance and direct mortality. In addition, cross-country travel is prohibited under the Smith River NRA Act of 1990. An overall reduction of road densities across the NRA will benefit wildlife in the short-term through elimination of noise disturbance on closed roads/routes and in the long-term through the reduction of fragmentation and habitat restoration. The project will benefit MIS.

Table 2. Road/route reductions and road density by Alternative

5th Field Watershed	Alternative 1	Alternative 4	Alternative 5	Alternative 6
	Road Density (mi/mi ²)			
Lower Smith River	0.58	0.41	0.22	0.37
Middle Fork Smith River	1.62	1.30	1.05	1.25
North Fork Smith River	0.42	0.30	0.15	0.24
South Fork Smith River	1.12	0.86	0.58	0.80

During culvert repair, replacement and/or removal, there will be minor habitat degradation for stream and riparian habitat within the project area due to the removal of brush and small diameter trees sapling trees less than 11 inches dbh, on approximately one-tenth acre per worksite.

It is estimated that an average of 0.1 acres of vegetation may be affected at any one site where culverts are repaired, replaced or removed. Alternative 4 would remove 82 culverts for 8 acres of habitat affected, Alternative 5 would remove 251 culverts (approximately 25 acres), and Alternative 6 would remove 170 culverts (17 acres affected) across the NRA. This is an overestimate of the amount of vegetation to be removed in that not all culverts sites have been brushed in, the roads may occur in naturally open areas, or the amount of vegetation to be removed is less than one-tenth of an acre, which will be negligible in any one area. Due to different habitat requirements, not all culvert sites occur in suitable for all MIS, therefore acres of habitat degraded under any alternative greatly overestimates the amount of habitat potentially affected for any one species. The project will benefit MIS in the long term by reducing road density across the District.

Potential impacts to MIS would be minimized through the adherence of LRMP Standards and Guidelines for snags/down woody debris, limited ground disturbance, re-vegetation of disturbed areas, and maintenance of existing live over-story canopy closure.

The project is designed to improve habitat conditions by restoring habitat through the decommissioning of roads and unauthorized routes. It will also prevent further habitat disturbance by delineating authorized routes and barricading vehicle use in unauthorized areas.

No Action

Under the No Action alternative, there would be no reduction in road density across the District, and no habitat restoration would occur for MIS from decommissioning roads and restoring unauthorized routes. Disturbance and direct mortality from on-going road use would not be eliminated on removed roads. Sedimentation into streams would not be reduced.

Cumulative Effects

Given the small of acreage the RMTM will impact (less than one-tenth acres in any one area), and that all other proposed actions will occur in the road prism, these projects will not have a negative cumulative impact on MIS species when combined with the other project occurring on the District. It is expected that the trend for these species will be towards recovery as all past and planned federal actions in the watershed are restoration projects.

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