

## SUMMARY

The Sierra National Forest proposes to implement the Kings River Project (KRP) to restore historical pre-1850 forest conditions across a large landscape and provide opportunities for research.

The area affected by the proposal includes 131,500 acres in two watersheds, Dinkey Creek and Big Creek, of the Kings River drainage in the Southern Sierra Nevada. Vegetation types include ponderosa pine, mixed conifer, lodgepole pine, red fir, hardwood species, and areas dominated by brush and rock.

This action is desired, because there is a need for: knowledge about the response of forests to a management strategy consisting of a specific uneven-aged silvicultural system and prescribed fire program designed to restore forests to historical pre-1850 conditions across a large landscape; restoration of forest health; reduced fuel build-up; improved sustainability of shade intolerant pines and black oak; fuel reduction in the Wildland Urban Interface within the KRP area; eradication and control of identified noxious weed infestations; watershed restoration at specific locations.

The Kings River Project (KRP) was developed from the consolidation of the Kings River Administrative Study (KRAS) and ongoing Pacific Southwest Research Station (PSW) studies. KRAS was established in 1994 by a Preliminary Study Plan followed by a 1995 draft Landscape Analysis Plan. The KRP was established in 2002 with an inter-agency memorandum of understanding (MOU) signed by both the Station Director (PSW) and Regional Forester (Forest Service) in 2002.

A notice of intent to prepare an environmental impact statement was filed with the Federal Register on December 20, 2004. Public scoping was conducted and a total of 18 letters were received regarding the proposal. The local line officer approved the following significant issues:

- 1. Large tree removal will have adverse effects to old forest dependant wildlife species.**
- 2. The use of herbicides/surfactant will create an adverse risk of harmful effects to people and wildlife.**
- 3. The proposed action will threaten the viability and cause degradation of habitat of the spotted owl, marten, fisher, and goshawk and will lead to higher short-term risks on aquatic management.**

These issues led the agency to develop three alternatives to the proposed action. Two of these alternatives were eliminated from detailed study and the rationale for elimination is found at the end of Chapter II. One alternative originally eliminated from detailed study is brought forward in this Environmental Impact Statement (EIS) as Alternative 3 (Reduction of Harvest Tree Size)

The alternatives eliminated from detailed analysis include:

- Implement the proposed action with the following exception: eliminate the use of herbicides.
- Implement the proposed action with the following exception: study other previously harvested areas without harvesting more timber.

Major conclusions include:

Species surveys, review of recent literature, and professional judgment have been incorporated into determinations of possible effects on species. Surveys provide information on species presence and habitat on a local scale, but there is an element of uncertainty for effects on species with distributions beyond the project or Forest boundaries. The Pacific fisher and Yosemite toad are Forest Service “sensitive species” that have also been designated by the U.S. Fish and Wildlife Service (USFWS) as “candidate species” for listing under the Endangered Species Act. A candidate species is determined by the USFWS through a 12 month finding as warranted for listing, but the listing process is precluded by other priorities. To address uncertainty related to candidate species with distributions beyond Forest boundaries, the Forest consulted with the USFWS on those two species.

The historical (pre-1850) forest of the KRP area had relatively low tree densities, was uneven-aged, and dominated by large trees found in groups and frequent low intensity fires. To encourage the conditions of the historical forest this project should create regeneration in groups; promote uneven-aged stands, with fewer shade tolerant species, and with more species resistant to fire, such as pines; concentrate growth on large trees, and utilize fire to maintain stand structure.

- The determinations for aquatic species in the KRP area are as follows:

Species	Status	Alternative 1 – Proposed Action	Alternative 3 – Reduction in Harvest Tree Size
California red-legged frog	Federal Threatened	may affect, but is not likely to adversely affect	may affect, but is not likely to adversely affect
Foothill yellow-legged frog	Forest Service Sensitive	may affect, but is not likely to lead to federal listing or loss of viability	may affect, but is not likely to lead to federal listing or loss of viability
Lahontan cutthroat trout	Federal Threatened and Sierra National Forest Management Indicator Species	no effect	no effect
Mountain yellow-legged frog	Federal Candidate and Forest Service Sensitive	no effect	no effect
Relictual slender	Forest Service	may affect , but is not	may affect , but is not

salamander	Sensitive	likely to lead to federal listing or loss of viability	likely to lead to federal listing or loss of viability
Resident trout species (Brown Trout, Eastern Brook Trout, Rainbow Trout)	Sierra National Forest Management Indicator Species	no official determination is required for Management Indicator Species (MIS) however a finding of effect concerning the impact of the project on MIS population trend is needed; therefore neither an upward nor a downward trend is expected	no official determination is required for Management Indicator Species (MIS) however a finding of effect concerning the impact of the project on MIS population trend is needed; therefore neither an upward nor a downward trend is expected
Western pond turtle	Forest Service Sensitive	may affect, but is not likely to lead to federal listing or loss of viability	may affect, but is not likely to lead to federal listing or loss of viability
Yosemite toad	Federal Candidate and Forest Service Sensitive	may affect individuals, and is likely to result in a trend toward federal listing or loss of viability primarily in the Bull Creek & Teakettle watershed population	may affect individuals, and is not likely to result in a trend toward federal listing or loss of viability

The determinations for botanical species in the KRP area are as follows:

Species	Status	Alternative 1 – Proposed Action	Alternative 3 – Reduction in Harvest Tree Size
<i>Calyptridium pulchellum</i>	Federal Threatened	no effect	no effect
Various species	Forest Service Sensitive	may affect individuals but is not likely to cause a trend to federal listing or a loss of viability	may affect individuals but is not likely to cause a trend to federal listing or a loss of viability

The determinations for wildlife species in the KRP area are as follows:

Species	Status	Alternative 1 – Proposed Action	Alternative 3 – Reduction in Harvest Tree Size
California spotted owl	Forest Service Sensitive Management Indicator Species	may affect, but is not likely to lead to federal listing or loss of viability	may affect, but is not likely to lead to federal listing or loss of viability
Marten	Forest Service Sensitive Management Indicator Species	may affect, but is not likely to lead to federal listing or loss of viability	may affect, but is not likely to lead to federal listing or loss of viability
Fisher	Federal Candidate Forest Service Sensitive Management Indicator Species	may affect, but is not likely to lead to federal listing or loss of viability	may affect, but is not likely to lead to federal listing or loss of viability
Wolverine	Forest Service Sensitive	may affect, but is not likely to lead to federal listing or loss of viability	may affect, but is not likely to lead to federal listing or loss of viability
Sierra Nevada red fox	Forest Service Sensitive	may affect, but is not likely to lead to federal listing or loss of viability	may affect, but is not likely to lead to federal listing or loss of viability
Northern goshawk	Forest Service Sensitive	may affect, but is not likely to lead to federal listing or loss of viability	may affect, but is not likely to lead to federal listing or loss of viability
Great gray owl	Forest Service Sensitive	may affect, but is not likely to lead to federal listing or loss of viability	may affect, but is not likely to lead to federal listing or loss of viability
Pallid bat	Forest Service Sensitive	may affect, but is not likely to lead to federal listing or loss of viability	may affect, but is not likely to lead to federal listing or loss of viability
Townsend's big-eared bat	Forest Service Sensitive	no effect	no effect

Based upon the effects of the alternatives, the responsible official will decide which action alternative to implement as described or take no action at this time.