

Record of Decision

Sierra Nevada Forests Management Indicator Species Amendment

USDA Forest Service Pacific Southwest Region

Alpine, Amador, Butte Calaveras, El Dorado, Fresno, Inyo, Kern, Lassen, Madera, Mariposa, Modoc, Mono, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Tulare, Tuolumne, and Yuba Counties in California and Douglas, Esmeralda, and Mineral Counties in Nevada

The Forest Service must select species as Management Indicator Species (MIS), one of a variety of elements to address National Forest Management Act (NFMA) requirements related to diversity of plant and animal communities. Species are selected as MIS because their population changes may indicate the effects of land management activities. The purpose of this amendment is to correct deficiencies in the current MIS lists to improve the effectiveness of those lists to meet their intended purpose, and to improve economic efficiency to make MIS monitoring affordable, and hence, more implementable.

This Record of Decision (ROD) documents my decision to improve the MIS lists and associated monitoring for 10 National Forests in the Sierra Nevada: the Eldorado, Inyo, Lassen, Modoc, Plumas, Sequoia, Sierra, Stanislaus, and Tahoe National Forests and the Lake Tahoe Basin Management Unit. The area affected includes all lands administered by these ten National Forests. This decision amends each Forest's Land and Resource Management Plan (forest plan).

Why is a change needed?

The current MIS lists and associated monitoring are simply not working. This section briefly describes the issues. If you would like additional information, please refer to the Final Environmental Impact Statement (FEIS). Deficiencies in the current MIS lists have become apparent through trial and error over the past 15 to 20 years. In addition, recent Court cases have highlighted considerable confusion regarding the purpose and application of MIS. We have found that species meeting the following conditions make the most appropriate MIS:

- Species selected for inclusion on the MIS list must occur in and rely on the habitat they are intended to represent. MIS population changes must be related to habitat changes that might result from forest management. The current list includes several species whose population changes are not clearly related to habitat changes on National Forest System lands, for example, Canada goose, largemouth bass, peregrine falcon, and rainbow trout.
- Our experience implementing forest plans shows that many management issues transcend individual Forest boundaries. To more clearly examine and understand the effects of our management activities, MIS should range across multiple forests. Originally, each Forest created its own MIS list, which was often unrelated to the MIS lists on neighboring Forests. The result is a lack of coordination and standardization among the Forests.

- Species selected as MIS must occur on National Forest System lands in sufficient numbers to allow collection of meaningful information. For example, rare species are often difficult to find and monitor. The current lists include several species that occur in low numbers on National Forest System lands and, therefore, poorly serve their intended function as MIS. Some examples are Sierra Nevada red fox, wolverine, willow flycatcher, and great grey owl.
- Proven monitoring protocols must exist for each MIS selected. Current MIS lists include several species that do not have proven monitoring protocols, such as prairie falcon and red-naped sapsucker.
- Selected MIS must not be significantly affected by human influences outside the management prerogative of the Forest Service. The purpose of MIS monitoring is to evaluate the effectiveness of forest management in maintaining habitat for fish and wildlife species. Species with populations primarily affected by other human influences, such as fish that are stocked by the State, do not necessarily reflect consequences of forest management, and hence do not serve their intended MIS function.

As shown by the examples above, a change is needed in the existing set of MIS lists.

Decision

Based upon my review of all alternatives, I have decided to implement Alternative 6, the Modified Proposed Action, which identifies eleven (11) terrestrial habitats and ecosystem components with twelve (12) associated Management Indicator Species. The alternative also identifies aquatic macroinvertebrates as the Management Indicator Species for lakes, rivers, and streams. Table 1 shows a summary of Alternative 6; a more detailed description is in Chapter 2 of the FEIS.

Alternative 6 was developed based on comments and information received during the comment period for the Draft Environmental Impact Statement (DEIS). Habitats and ecosystem components remain the same as in the Proposed Action. Changes to the selected MIS are described in detail in Chapter 2 of the FEIS. In general, this alternative differs from the Proposed Action in that it includes more hunted species, relatively fewer bird and small mammal species, a large mammal, and an amphibian. Monitoring strategies are similar to the Proposed Action with the practical difference that more species populations are monitored by the State than in the Proposed Action. Distribution population monitoring will track changes in the distribution of each MIS at the Sierra Nevada scale by monitoring the changes in the presence of the species across a number of sample locations. Habitat monitoring will track the status and trends at the Sierra Nevada scale of each of the CWHR habitat types.

This alternative meets the 1982 Planning Rule (1982: 36 CFR 219.19) and the Forest Service Manual (FSM) (FSM 2621.1) requirements for MIS. The species were selected as MIS because their population changes are believed to indicate the effects of land management activities (1982: 36 CFR 219.19 (a)(1)).

Table 1. Summary of Alternative 6.			
Habitat or Ecosystem Component	Management Indicator Species	Scientific Name	Monitoring Strategy (all at the Sierra Nevada scale)
Riverine & Lacustrine	aquatic macroinvertebrates	n/a	Index of Biological Integrity (IBI) and Habitat
Shrubland (west-slope chaparral types)	fox sparrow	<i>Passerella iliaca</i>	Distribution Population and Habitat
Sagebrush	greater sage-grouse	<i>Centrocercus urophasianus</i>	Habitat
Oak-associated Hardwood & Hardwood/conifer	mule deer	<i>Odocoileus hemionus</i>	Distribution Population and Habitat
Riparian	yellow warbler	<i>Dendroica petechia</i>	Distribution Population and Habitat
Wet Meadow	Pacific tree frog	<i>Pseudacris regilla</i>	Distribution Population and Habitat
Early Seral Coniferous	mountain quail	<i>Oreortyx pictus</i>	Distribution Population and Habitat
Mid Seral Coniferous	mountain quail	<i>Oreortyx pictus</i>	Distribution Population and Habitat
Late Seral Open Canopy Coniferous	blue grouse	<i>Dendragapus obscurus</i>	Distribution Population and Habitat
Late Seral Closed Canopy Coniferous	California spotted owl	<i>Strix occidentalis occidentalis</i>	Distribution Population and Habitat
	American marten	<i>Martes americana</i>	Distribution Population and Habitat
	northern flying squirrel	<i>Glaucomys sabrinus</i>	Distribution Population and Habitat
Snags in Green Forest	hairy woodpecker	<i>Picoides villosus</i>	Distribution Population and Habitat
Snags in Burned Forest	black-backed woodpecker	<i>Picoides arcticus</i>	Distribution Population and Habitat

My staff considered all known plant and animal species present on the 10 National Forests. Consideration included 692 terrestrial vertebrate species occurring in California. This assessment is documented in Appendix B of the FEIS. From the group of species that met the definition and the Purpose and Need, my staff then considered species within each of the 5 categories listed under 1982: 36 CFR 219.19(a)(1), as well as Forest Service Sensitive (FSS) species. The following sections explain how my decision addresses these categories.

Threatened and Endangered (TE) plant and animal species identified on State and Federal lists. All federally and state listed TE plant and animal species occurring in the planning area were considered. None were selected as MIS because the only TE species that was determined to meet the Proposed Action MIS Criteria is a rare species. For detailed discussion, see Chapter 2 of the FEIS, pages 8 and 9.

In addition to TE species, the Forest Service Manual (FSM) (Interim Directive FSM 2621.1, 2620-2007-1) indicates that it is Forest Service policy to consider Forest Service Sensitive (FSS) species for designation as MIS. The following three (3) MIS selected in my decision are also Forest Service Sensitive (FSS) species: greater sage-grouse, California spotted owl, and American marten.

Not listing TE species as MIS will not adversely affect any TE species. Federally listed status assures appropriate consideration of these TE species at the plan and project levels. In addition, consultation with US Fish and Wildlife Service (USFWS) and/or National Marine Fisheries Service (NMFS) provides additional review and protection for these species. Further, we are partners with USFWS and NMFS in developing and implementing recovery plans for federally listed TE species.

In California, most state listed TE species that occur on National Forest System lands are also Forest Service Sensitive (FSS) species, and FSS status assures appropriate considerations of state listed TE species at the plan and project levels. Forest Service policy is to manage FSS species such that they do not become threatened or endangered because of Forest Service management activities. It is also Forest Service policy that habitat for FSS species remains well distributed throughout the species geographic range on National Forest System (NFS) lands (FSM 2670.22). In addition, as forest plans are implemented through projects, Forest Service policy (FSM 2670.32) states that all programs and activities will be reviewed as part of the National Environmental Policy Act (NEPA) process to determine the potential effect of such proposed activities on FSS species. Further, policy requires that impacts of such activities on FSS species must be avoided or minimized and that any permitted activities must not result in a loss of viability or create significant trends toward Federal listing for these species. Monitoring of FSS species occurs in preparation for, and implementation of, conservation strategies and plans for FSS species. In addition, inventory of FSS species often occurs during project planning.

Species with special habitat needs that may be influenced significantly by planned management programs. Two species under this category were selected as MIS in my decision, the hairy woodpecker and black-backed woodpecker.

Species commonly hunted, fished, or trapped. Four species under this category were selected as MIS in my decision, the greater sage-grouse, mule deer, mountain quail, and sooty (blue) grouse.

Non-game species of special interest. This category includes species that are of interest to the public but are not hunted; examples include neotropical migratory birds, amphibians, and rare species. Six species under this category were selected as MIS in my decision, the fox sparrow, yellow warbler, Pacific tree frog, California spotted owl, American marten, and northern flying squirrel.

Additional plant or animal species selected because their population changes are believed to indicate the effects of management activities on other species of selected major biological communities or on water quality. Aquatic macroinvertebrates are the MIS in this category.

Since none of the alternatives have tangible on-the-ground effects, there was no need to adopt measures to mitigate environmental effects.

Many commentors expressed questions or concerns regarding how this decision relates to the 2004 Sierra Nevada Forest Plan Amendment (SNFPA), and I want to clarify that relationship.

This decision modifies Appendix E of the of the 2001 SNFPA FEIS, as adopted by the 2004 SNFPA ROD, in the following manner: this decision removes the “X” in the MIS column in Tables E-9, E-10, and E-11 of Appendix E. This decision drops these species as MIS.

Tables E-9, E-10, and E-11 were intended to be informational only and were not meant to indicate required monitoring. As indicated in the header of each table, “Checkmarks in the population monitoring column indicate species for which population trend data is expected to be obtained” if the multi-species monitoring approach described on page E-21 is implemented. Therefore, the checkmark under “Population Monitoring” for species listed in Tables E-9, E-10, and E-11 of Appendix E was not intended to indicate any required monitoring but only indicated an expectation that sufficient robust data would be collected to develop population trends over time as opposed to simple changes in distribution over time.

Ongoing monitoring of the selected species identified in Alternative S2 (2004 SNFPA Final Supplemental Environmental Impact Statement (FSEIS), pages 71-88) will not be changed by this decision. The “Species-at-risk” identified in Tables E-9, E-10, and E-11 are not part of a current monitoring program and this decision does not change that status. The full text of Appendix E is available on line at: http://www.fs.fed.us/r5/snfpa/library/archives/feis/vol_4/appn_e.pdf

My decision does not drop the adaptive management approach developed in the Sierra Nevada Forest Plan Amendment Record of Decision (SNFPA ROD 2004). Indeed, it is a part of adaptive management, since we have learned that some of the originally selected species are not adequate MIS, a condition this decision rectifies.

Decision Rationale

Alternative 6 will ensure that MIS are strongly associated with habitats we are currently affecting with our management in the Sierra Nevada. In addition, it selects MIS that we know we can monitor, because each is currently being monitored or has been monitored in the past. We currently have meaningful information on these MIS, which is an important consideration for moving forward.

Alternative 6 has a better balance of taxa and species groups than Alternative 1. It includes representatives from amphibians, large and small mammals, herbivores and carnivores, upland game birds, landbirds, and an owl. Harvest (game) species were added in response to the comments on the DEIS.

Alternative 6 has a lower monitoring cost without sacrificing quality of data because current monitoring of some of these MIS is being done by partners (California Department of Fish and Game).

I believe the Final Environmental Impact Statement (FEIS) presents an objective and well-documented disclosure of the relative strengths and weaknesses of the alternatives. My conclusion is based on a review of the record that shows consideration of the best available science. Appendix B of the FEIS, Species Reviews, is a thorough review of relevant scientific information. Appendix G of the FEIS, Response to Comments, documents a careful consideration of responsible opposing views. Scientific criticism of the MIS concept is considered and disclosed in Chapter 1 and in the Response to Comments.

Other Alternatives Considered

In addition to the selected alternative, I considered eight other alternatives which are described briefly below. A detailed description and comparison of these alternatives can be found in the FEIS, Chapter 2.

Alternatives Analyzed in Detail

Alternative 1 – Proposed Action

This alternative identifies eleven (11) terrestrial habitats and ecosystem components and sixteen (16) associated Management Indicator Species. The alternative also identifies aquatic macroinvertebrates as the Management Indicator Species for lakes, rivers, and streams. With the exception of greater sage-grouse, both habitat and distribution population monitoring are required for terrestrial species. Aquatic macroinvertebrates are monitored by Index of Biological Integrity (IBI) and habitat trend monitoring.

Public feedback indicated that this alternative has too many birds, not enough harvest species, and no amphibians. Internal and external comments provided new information regarding other species that could effectively serve as MIS for the identified habitats. I did not select this alternative primarily because it did not have as broad a taxa representation as Alternative 6.

Alternative 1R – Proposed Action, Retroactive Application

Please note that Alternative 1R has been removed from the list of alternatives in the FEIS.

Alternative 1R alerted the public that portions of my decision might apply to pre-existing projects. In considering public comment and our response to those comments, it became clear that Alternative 1R was not an alternative way to meet the purpose of this amendment, but instead a potential means of implementing my decision. Therefore, the concerns and issues that Alternative 1R was meant to address are discussed in the Implementation section of this decision document.

Alternative 2 – No Action

For forest plan amendments, the No Action Alternative is defined as the existing management direction. During the original plan development, each forest identified vegetation types, seral stages, and special habitat elements for MIS. There are nearly thirty (30) different habitats identified, many of which have no relationship to the California Wildlife Habitat Relationship (CWHR) System or any other standardized system. For these habitats and special features, almost sixty (60) individual species or species assemblages and groups were selected. Each Forest Plan has a monitoring plan. Examination of those plans shows that monitoring for Management Indicator Species was well thought out in some cases and combined with other needs in other cases. Standardization of monitoring for efficiency is challenging.

This alternative was not selected because it does not meet the Purpose and Need of the amendment. Only 63% of the MIS are clearly linked to habitats or ecosystem components affected by National Forest activities in the Sierra Nevada. There is no consistency. There are no opportunities to coordinate monitoring across forest boundaries, which is inefficient. Monitoring results cannot be compared at a multi-forest scale, resulting in a loss of meaningful information.

Alternative 3 – SNFPA Appendix E

Members of the public wanted the Sierra Nevada Forest Plan Amendment Appendix E monitoring strategy to be fully implemented. I decided to develop an action alternative showing the consequences of implementing the MIS portion of Sierra Nevada Forest Plan Amendment (SNFPA) Appendix E (USDA Forest Service 2001). This alternative identifies three (3) habitats and forty-six (46) associated Management Indicator Species. Monitoring of MIS is a mixture of population distribution, relative abundance, and that agreed to in recovery plans.

Sixty seven percent (67%) of the MIS are clearly linked to habitats or ecosystem components affected by National Forest activities in the Sierra Nevada. Only 33% of the MIS are linked to the effects of Forest Service management activities in the Sierra Nevada. As shown in Appendix B of the FEIS, many species, especially the aquatic species, do not meet the objectives for MIS. Only three habitats are represented. Protocols do not exist for all the MIS. For these reasons, I did not select this alternative.

Alternative 5 – Economically Efficient Alternative

Some responses to the DEIS requested developing the most economically efficient combination of habitat, MIS, and monitoring strategies that would still meet the regulatory intent of MIS. This alternative identifies six (6) terrestrial habitat/ecosystem components with six (6) associated Management Indicator Species. The alternative also identifies aquatic macroinvertebrates as the Management Indicator Species for lakes, rivers, and streams. With the exception of greater sage-grouse, both habitat and distribution population monitoring are required for terrestrial species. Aquatic macroinvertebrates are monitored by Index of Biological Integrity (IBI) and habitat trend monitoring.

This alternative was not selected because it did not have as broad a taxa representation as Alternative 6 and had fewer habitat types than any alternative except Alternative 3. I felt strongly that this alternative was less responsive to much of the public comment.

Alternatives Eliminated from Detailed Study

Alternative 4 – PSW Research Station Method

Alternative 4 was offered by the scientists at the Pacific Southwest Research Station (PSW) during scoping. PSW suggested that the MIS list be developed in a manner that would be useable in the next round of forest planning, and, on June 8, 2007, my staff received PSW's written outline of this method.

My staff believed that it was PSW's intent to submit this method as an alternative to the proposed action, and it was included in the DEIS as an alternative considered but eliminated from detailed study.

However, on closer examination of the narrative, and after consideration of the comments offered by PSW on the DEIS, it became apparent that Alternative 4 is not an alternative list of MIS and associated monitoring strategies, but rather a method for choosing ecosystem indicators, not just MIS.

The steps proposed by PSW, while having a different order and emphasis, are generally the same my staff used in developing the Proposed Action and action alternatives. These steps include:

- Identify how you want to stratify communities (if at all): for example by vegetation types, elevation bands (life zones), terrestrial vs. aquatic, etc.
- Identify a basic sampling design and survey methods that will be employed to gather information on species. Typically, ecosystem indicators are simple measures of richness or abundance or rankings based on richness and/or abundance across multiple metrics. At this point costs can be calculated and methods and design adjusted as necessary to meet budgetary constraints.
- Identify which species are likely to be detected by the design and methods selected, and determine the representation of the indicator species and species groups selected above. If representation is poor, adjust design and methods and indicators as necessary to optimize objectives.
- Discuss how these indicators contribute to informing management about the sustainability of ecosystems, and what other measures complement these indicators, such as vegetation conditions (e.g., through FIA and remote sensing), management activities (tracked by management), and monitoring of individual species of concern (e.g., project monitoring, adaptive management projects, ecoregional monitoring, etc).

More detailed discussion can be found in the FEIS, on pages 41 and 42.

In summary, PSW's method is more applicable to developing complete forest plan monitoring, as is done in forest plan revision. It is my intent to continue to work with PSW, especially during forest plan revisions, to develop comprehensive forest plan monitoring programs that meet the planning rule in effect at the time of revision.

PSW's method is more in tune with the 2000 and 2005 Planning Rules. It is my decision to focus this amendment on meeting the 1982 Planning Rule for MIS. For these reasons, PSW's method was considered but eliminated from detailed study.

Alternative 7 – Combined Alternatives 1 and 3

In their comments on the DEIS, Environmental Protection Agency (EPA) suggested combining the efficiency and large-scale applicability benefits of Alternative 1 with Alternative 3 and the associated collaboration built under the Sierra Nevada Forest Plan Amendment (SNFPA, or Framework), but without providing details. The SNFPA collaboration continues under the Sierra Nevada Adaptive Management Project (SNAMP) currently being lead by University of California at Berkeley (<http://snamp.cnr.berkeley.edu/>). The collaborative benefits of the SNFPA are continued in the adaptive management effort. Both Alternatives 1 and 3 are analyzed in detail in the FEIS, and since there were no details on the specifics of a combined alternative, Alternative 7 was not analyzed in detail.

Alternative 8 – Regional Landbird Monitoring Approach

One commentor suggested the Regional Landbird Monitoring Approach as an alternative. The approach is valuable for broadscale monitoring of landbirds and associated habitats. A key component of this

approach is that MIS are not identified up front. Not identifying species up front would make it difficult or impossible to meet the requirement to provide that habitat for species chosen is maintained. In addition, many commentors on the DEIS expressed concern with using mostly birds as MIS. For these reasons, this alternative was not analyzed in detail.

The Regional Landbird Monitoring Approach is being used by USFS Northern Region (Region 1) to meet their partnership landbird monitoring objectives. Region 1 is not using this approach to meet their MIS obligations. The Pacific Southwest Region is implementing a variety of monitoring actions in partnership with California Partners in Flight to meet our combined landbird monitoring objectives, including Breeding Bird Surveys, Monitoring Avian Productivity and Survivorship (MAPS) stations, and site-specific monitoring efforts (for further information, see <http://www.prbo.org/calpif/data.html>). Data collected from California Partners in Flight landbird monitoring programs were part of the information used to identify the most appropriate bird MIS for the Proposed Action.

Alternative 9 – Combined Alternatives 1 and 2

One commentor stated that there should be an alternative that adds the species proposed as MIS in the Proposed Action to the list of current MIS in the No Action Alternative. Both alternatives are analyzed in detail in the FEIS. Therefore, this alternative was considered (see Chapter 2) but was eliminated from detailed study.

The Environmentally Preferred Alternatives

The Council on Environmental Quality (CEQ) regulations for implementing the National Environmental Policy Act (NEPA) require that the ROD specify “the alternative or alternatives which were considered to be environmentally preferable” (40 CFR 1505.2(b)). According to the CEQ’s 40 Most Asked Questions concerning NEPA, this direction has been generally interpreted to be “the alternative that will promote the national environmental policy as expressed in NEPA’s Section 101.” Ordinarily this means the alternative that causes the least damage to the biological and physical environment. Since my decision is purely an administrative decision, none of the alternatives, including the No Action Alternative, cause any physical or biological damage and, in the normal context, all these alternatives are equally environmentally preferred. When I examine the alternatives, however, I see that Alternatives 1 and 6 will provide information that will be better at informing management decisions and better serve the fundamental MIS purpose. Alternatives 1 and 6 are the environmentally preferred alternatives.

Public Involvement

The analysis of the proposed action originally was expected to be documented in an Environmental Assessment. In response to comments, I decided to document the analysis for this proposal in an Environmental Impact Statement (EIS), although my decision has no ecological effects. By completing an EIS, the analysis was provided a wider review, including the Environmental Protection Agency (EPA). No environmental consequences were raised as concerns or issues in EPA’s comment to the DEIS.

Formal scoping for this analysis began on February 21, 2007, when a scoping letter was sent to over 4,000 addresses. After my decision to use an EIS, a Notice of Intent (NOI) was published in the Federal Register on April 30, 2007. The NOI offered the opportunity to comment on this same proposed action to a larger audience. The NOI asked that comments be received by May 21, 2007, to be most useful. Seventy-five (75) documents were received from individuals, agencies, and organizations in response to scoping. The Notice of Availability (NOA) of the DEIS was published in the Federal Register on July 13,

2007, with the comment period ending on August 27, 2007. Approximately 30 individuals, agencies, and organizations provided comments on the DEIS.

In addition, as part of the public involvement process, the Forest Service made contact by phone, personal visits, and/or e-mail with regulatory agencies and other state and federal agencies and institutions with expertise in this area. This included coordination with California Department of Fish and Game by phone, email, and at a meeting on August 15, 2007. In addition, informal consultation for Threatened and Endangered species was conducted with US Fish and Wildlife Service and National Marine Fisheries Service.

Forest Supervisors consulted with tribal entities, resulting in some written and oral responses during the scoping period, but no written comments on the DEIS. Formal documentation is in the project record.

Using the comments from the public and other agencies, the interdisciplinary team identified several concerns regarding the ramifications of the proposed action. To address these concerns, the Forest Service created the alternatives described above.

Findings Required by Other Laws and Regulations

This decision complies with the 1982 NFMA Planning Rule as it applies to amending forest plans. I have read the analysis on pages 60 and 61 of the FEIS entitled “Is this plan amendment significant?” I agree with the analysis, and I have determined that this decision is a non-significant forest plan amendment to each of the ten National Forests’ Land and Resource Management Plans.

This decision is also in conformance with the National Environmental Policy Act (NEPA), as set out in 40 CFR 1502 and the implementing direction in Forest Service Handbook 1909.15, Chapter 20. The Environmental Protection Agency (EPA), which is required to review all EISs, did not express environmental concerns on the DEIS. EPA did not request or recommend changes to the environmental analysis presented in the DEIS (Federal Register Vol. 72, No. 173, September 7, 2007).

Consultation requirements under Section 7 of the Endangered Species Act (ESA), as amended, have been completed with the US Fish and Wildlife Service and the National Marine Fisheries Service. Both agencies reviewed the Biological Assessment for the Threatened and Endangered species under their regulatory jurisdiction and concurred with the finding of “No Effect.” Copies of correspondence with each agency are included in the record.

Since there are no ecological effects, my decision also complies with the Clean Water Act, the Clean Air Act, the National Historic Preservation Act, and the Migratory Bird Treaty Act, as well as Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. Because of the absence of ecological effects, my decision also complies with laws, regulations, and policies pertaining to Research Natural Areas, Inventoried Roadless Areas, Wilderness Areas, Wild and Scenic Rivers, and municipal watersheds.

Other Important Clarification

I would like to provide additional explanation for several concepts discussed in the comments made during public involvement.

The Management Indicator Species (MIS) concept.

Many comments indicated a misinterpretation of MIS monitoring. Many commentors believe that MIS monitoring is the overall umbrella, or equates to the sum total, of forest plan monitoring. In fact, MIS monitoring is actually only one small piece of the forest plan level monitoring conducted by the Forest Service, as discussed in Chapter 1 of the FEIS. Other monitoring conducted by the Forest Service includes, but is not limited to: monitoring of key ecological conditions; monitoring of management activity levels; monitoring of species of local interest, including watchlist species; cause and effect monitoring; and change detection of vegetation structure and species composition. In addition, the Forest Service works with Pacific Southwest Research Station and others to conduct longer-term resource studies. Specific examples of non-MIS-associated monitoring currently being conducted in the Sierra Nevada are presented in Appendix F of the FEIS.

Appropriately, all MIS monitoring is at the planning area level, not at the project level. For this Amendment, the planning area is the 10 Sierra Nevada National Forests. The regulations require that "population trends of the management indicator species will be monitored and relationships to habitat changes determined" (1982: 36 CFR 219.19(a)(6)); this monitoring, as with all actions identified in 1982: 36 CFR 219.19, are required at the planning area level. There are no MIS monitoring requirements in the project area or at the project level.

I want to acknowledge the problems with the MIS concept and the associated difficulties with implementing this concept to meet the continued requirement to use MIS until forest plans are revised or new NFMA regulations permit otherwise. Until revision occurs or new planning regulations permit otherwise, each of these National Forests will be required to use MIS. My decision selects MIS for these forests that meet the 1982 Planning Rule requirements in a meaningful and efficient way during this interim period.

Project-level versus planning-area-level MIS requirements.

Some comments also indicated I need to clarify what the MIS requirements are at the planning area level versus at the project level. As discussed in Chapter 1 of the FEIS, most of the MIS requirements set forth in the 1982 Planning Rule apply to the planning area during forest plan development, as well as monitoring of MIS population trends and determining relationships to habitat changes at the planning-area scale during forest plan implementation.

The sole MIS requirement that is applied at the project-level is the assessment of habitat for MIS. Further, there are no monitoring requirements for MIS at the project level. All monitoring is required at the planning level scale. The regulations require that "population trends of the management indicator species will be monitored and relationships to habitat changes determined" (1982: 36 CFR 219.19(a)(6)); this monitoring, as with all actions identified in 1982: 36 CFR 219.19, are required at the planning area level. For this Amendment, the planning area is the 10 Sierra Nevada National Forests. There are no MIS monitoring requirements in the project area or at the project level.

MIS Categories.

Some comments indicated additional clarification is needed regarding how the Forest Service applies the MIS categories identified in the 1982 Planning Rule (1982: 36 CFR 219.19(a)(1)) and in the Forest Service Manual (FSM 2621.1). The 1982 Planning Rule states that species are to be selected as MIS because their population changes are believed to indicate the effects of land management activities (1982:

36 CFR 219.19 (a)(1)). The 1982 Planning Rule, as well as the Forest Service Manual (Interim Directive FSM 2621.1, 2600-2003-1, 2600-2005-1, and 2620-2007-1), suggest that several categories be represented where appropriate, or be considered, when selecting MIS. The 1982 Planning Rule (36 CFR 219.19 (a) (1)) specifies that all 5 categories of MIS be considered, but also emphasizes that MIS "shall be selected because their population changes are believed to indicate the effects of management activities."

In addition, the FSM (Interim Directive FSM 2621.1, 2620-2007-1) indicates that it is Forest Service policy to consider Forest Service Sensitive (FSS) species for designation as MIS. There is no requirement or compelling need to choose one or more species from each category. Instead, the categories provide a universe from which appropriate MIS may be selected.

Breeding Bird Surveys (BBS).

The North American Breeding Bird Survey (BBS) is a cooperative effort between the U.S. Geological Survey's Patuxent Wildlife Research Center and the Canadian Wildlife Service's National Wildlife Research Centre to monitor the status and trends of North American bird populations. The BBS, which has been conducted annually since 1966, consists of a continent-wide array of roadside point-count routes. Each route is 39.4 km (24.5 miles) long, and includes 50 3-minute point counts at 0.8 km (.5 mile) intervals. Expert observers conduct point-counts once each year during the peak of the breeding season (June in the Sierra Nevada), recording numbers of every bird species detected within a 0.4 km (.25 mile) radius. BBS routes occur on each of the National Forests in the Sierra Nevada.

BBS data provide the most extensive, long-term data set available on landbird population trends, and have been used in a wide variety of management and scientific applications. More than 270 scientific publications have relied heavily, if not entirely, on BBS data. However, BBS data have some limitations. The most reliable information is produced only for the more common species. BBS point counts are conducted exclusively at roadsides, which may not be representative of the larger habitat matrix. Nevertheless, BBS data are a tremendously valuable resource for conservation planning.

BBS data at the California and North America scales can provide good information to help interpret MIS avian monitoring information that will be obtained through implementation of this Amendment. In addition, BBS routes located on National Forest System lands can provide useful data to inform distribution population monitoring (monitoring changes in the distribution of a species by monitoring the changes in the presence of the species across a number of sample locations) at the Forest and Sierra Nevada scales. This is especially true given that most BBS routes have been monitored for decades. BBS provides one of the largest and longest scale species monitoring data sets available for any species.

Because of both the strengths and limitations of BBS data, I have chosen to use BBS data as only part, but not the whole, of the information to be used to monitor avian species I selected as MIS.

Appendix E.

Appendix E is a comprehensive monitoring program that the 2004 SNFPA ROD adopted subject to prioritization based on management priorities and budget realities. It was not adopted in its entirety. The prioritization can be found in the 2004 SNFPA Final Supplemental Environmental Impact Statement (FSEIS), pages 71-88.

Appendix E of the 2001 SNFPA FEIS contains an Adaptive Management Strategy including a Monitoring Plan. Both the 2001 and 2004 SNFPA Records of Decision (RODs) adopted this Strategy

(2001 ROD, pp. 11-12; 2004 ROD, pp. 12-13 and 70). The 2001 ROD expected full implementation of the Adaptive Management Strategy in 5 years (or by 2006) pending available budgets (2001 ROD, pg. 12), while the 2004 ROD established “realistic expectations for adaptive management and monitoring” (2004 ROD, pg. 12) by setting priorities as described in the Adaptive Management and Monitoring component of Alternative S2. Item F in Appendix A of the 2004 SNFPA ROD (pg. 70) quoted in its entirety states, “This Decision adopts the Monitoring Plan presented in Appendix E of the SNFPA FEIS. See Chapter 2 of the Final SEIS for the focus of and priorities for monitoring under the selected alternative (Alternative S2).” Thus, the 2004 SNFPA ROD adopted the monitoring program described in Appendix E of the 2001 FEIS subject to priorities identified in Alternative S2 described on pages 71-88 of the 2004 SNFPA FSEIS.

The 2004 SNFPA ROD did not modify or supplement the lists of MIS identified in the forest plans. Further, the 2004 ROD did not adopt any monitoring requirement for the Species at Risk (SAR) listed in Tables E-9, E-10, and E-11. There are no other legal requirements for monitoring SAR.

The full text of the SNFPA FSEIS and ROD is available on line at: <http://www.fs.fed.us/r5/snfpa/final-seis/>. The full text of Appendix E is available on line at: http://www.fs.fed.us/r5/snfpa/library/archives/feis/vol_4/appn_e.pdf.

“Monitoring” versus “Surveys” versus “Inventory” versus “Analysis.”

Many comments indicated that clarification was needed surrounding these terms. These terms often get used as synonyms. For purposes of this amendment, I wish to clarify that these terms are used as follows:

Monitoring refers to the systematic collection of information about a species, habitat, ecosystem component, or vegetation type over time.

In contrast, **survey** refers to a one-time search of an area for observations of a species, habitat, ecosystem component, or vegetation type. Within the Forest Service, “survey” commonly refers to inventories performed at a small spatial scale, usually for an individual project. Surveys are distinguished from field checks, site visits, and other casual inspections of an area or a condition because surveys typically have written, systematic protocols for data collection.

Inventory refers to collecting data to describe the size, status, or distribution of a population. It can also refer to a survey designed to develop a list of species in a particular area.

Analysis is critical interpretation and evaluation of factual information or data.

Implementation

The effective date of this decision will be seven (7) calendar days following the legal notice of the decision in the Sacramento Bee newspaper.

There are two components of implementing this decision: (1) plan-level monitoring, and (2) project-level analysis.

Plan-level Monitoring

The selected alternative sets forth the basic plan-level monitoring for MIS in the Sierra Nevada by determining which species will serve as MIS and how those species will be monitored (i.e., population and/or habitat monitoring). For the monitoring to be fully effective, administrative and technical

guidance for implementation must be developed. Therefore, as part of this decision, I am directing my staff to prepare a monitoring implementation package.

The monitoring implementation package will provide specific guidance to aid in implementing this decision, and will include subjects such as: planning and design of specific monitoring protocols, sample design, data collection, data storage, data analysis, reporting, and how results will be used in adaptive management. Input from the Pacific Southwest Research Station and other monitoring partners will be solicited in preparing the implementation package.

The plan-level monitoring adopted by this decision will formally take effect on the date the monitoring implementation package is completed, which I expect to be April 15, 2008 or before. Until the monitoring implementation package is completed, any monitoring of current MIS identified in programs of work will continue.

Given the fact that species information, scientific protocols, and administrative capabilities are constantly in flux, the monitoring implementation package is intended to be a working document and may be modified as necessary without forest plan amendment. The monitoring implementation package is not intended to be a legally enforceable document, but rather is meant to be an internal agency guidance document to facilitate implementation of this decision. The Regional Forester will retain authority over the implementation package.

Project-level Analysis

Forest Service project-level NEPA documents routinely disclose the potential impacts of Forest Service management on MIS habitat. There are no specific project-level MIS analysis requirements in either NFMA or the 1982 Planning Rule, and the depth and complexity of such analyses have varied over time based on agency practice and case law. The following project-level standards shall apply after the effective date of this decision.

Covered Projects Subject to MIS List in Alternative 6

Disclosure and analysis for covered projects is as follows: every project record shall contain a discussion of the effects of the alternatives on the MIS habitat(s) that will be directly affected by the Forest Service action. The level of detail in such discussions will be commensurate with the significance of the impact upon MIS habitat. Therefore, for projects with minor impacts, the level of analysis will be less than that for actions with potentially significant impacts. The discussion of MIS impacts in the project record will solely address those MIS and associated habitat types set forth in Alternative 6; no discussion of past MIS or superseded habitat types is required.

“Covered projects” are those projects for which:

- A Notice of Availability of a Draft Environmental Impact Statement has not been published on or before the effective date of this decision, or
- A legal notice of the availability to comment on an Environmental Assessment has not been published on or before the effective date of this decision, or
- A legal notice of the availability to comment on a Categorical Exclusion has not been published on or before the effective date of this decision;

- Additionally, all decisions made after January 15, 2009, regardless of the date of the Notice of Availability of a Draft Environmental Impact Statement or a legal notice of the availability to comment for an Environmental Assessment or Categorical Exclusion.

To assist in the preparation of project-level analyses for covered projects, I am directing my staff to prepare a project analysis package. The project analysis package will include: species accounts for the newly adopted MIS, a Sierra Nevada bioregion MIS report, and new MIS project analysis templates. The project analysis package is intended to provide general guidance and may be adapted to suit the needs of particular projects. It is not intended to be legally enforceable.

Exempted Projects Subject to Alternative Standard

The project-level MIS requirements described above for covered projects will not apply to any projects for which:

- A Notice of Availability of a Draft Environmental Impact Statement has been published before the effective date of this decision, or
- A legal notice of the availability to comment on an Environmental Assessment has been published before the effective date of this decision, or
- A legal notice of the availability to comment on a Categorical Exclusion has been published before the effective date of this decision, or
- A decision has been made before the effective date of this decision.

For such projects, obligations relating to MIS will have been met if the project record discloses impacts the project may have on MIS habitat or populations, using the MIS list in effect at the time the MIS analysis was conducted. No other project-level analysis or disclosure requirements shall apply to these projects, including any particular requirements related to MIS set forth in Appendix E of the 2001 Sierra Nevada Forest Plan Amendment FEIS or the individual forest plans covered by this amendment. All such requirements are superseded by this direction.

The alternative project analysis requirements described above also apply to the following projects, unless the decision date for any such project is after January 15, 2009, in which case the project-level analysis requirements for “covered projects” would apply:

Eldorado National Forest

MisFire
Fred's Fire Reforestation
Marshall Mine Fuels Reduction
Oski Bear

Modoc National Forest

Cedar Pass Forest Health
Rush 2

Plumas National Forest

Watdog

Sequoia National Forest

Ponderosa Fuels Reduction

Tahoe National Forest

Designation of Roads, Trails
and Areas for Motor Vehicle Use

Notwithstanding the alternative project-level standard set forth above, a Forest Service deciding officer for an otherwise exempted project may, at his or her discretion, elect to apply the new project-level analysis requirements for “covered projects.”

Retroactivity

By providing an alternative MIS analysis standard for project decisions already made, this decision has a retroactivity component. The rationale for establishing a retroactive MIS standard is set forth in the DEIS under the discussion of Alternative 1R, and is also discussed in the Response to Comments section of the FEIS.

Based on public input, the retroactive application of this decision has been modified from the approach set forth in the DEIS. Under Alternative 1R, all project-level analysis requirements would have been eliminated for projects with decisions already made. Under this decision, project-level analysis is still required, as described in the previous section -- Exempted Projects Subject to Alternative Standard. This alternative standard preserves the important requirement that impacts to MIS be examined, without imposing some of the impractical and scientifically flawed requirements related to MIS found in prior forest plans.

Like Alternative 1R, this decision is only retroactive in part, since it does not retroactively apply the new MIS list for “covered projects.” I have decided to take this phased approach as a means of ensuring a smooth transition to the new system, without requiring costly and time-consuming new analysis for projects with decisions already made (or for projects significantly along in the planning process).¹

Retroactively applying the alternative analysis standard to projects with decisions already made will not affect the environmental consequences of any such projects. This is because retroactive application of the alternative analysis standard will only modify the gauge by which the adequacy of past analysis is judged. The management actions approved in prior decisions will be unaffected by this decision, and adopting an alternative analysis standard will not present any significant changed circumstances or new information that has a bearing on the environmental consequences of projects with decisions already made.

Therefore, no supplemental NEPA analysis is necessary for those projects. See 40 CFR 1502.9(c)(1).

Relationship between plan-level monitoring and project implementation

Complete fulfillment of the plan-level monitoring program outlined in this decision and through the forthcoming monitoring implementation package is not a precondition to project approval and implementation. While the results of plan-level monitoring are expected to contribute useful information for project analysis, project implementation is not predicated upon the accomplishment of the plan-level monitoring program. Therefore, if the Forest Service or one of its monitoring partners is unable to fully achieve the monitoring goals set forth in this amendment for a particular MIS, a project affecting habitat for that MIS may nonetheless proceed, assuming the project has complied with all other legal requirements.

¹ Certain members of the public have asserted that a retroactive decision would be illegal. While the agency does not agree with this position, if a court were to conclude that retroactivity were illegal, the agency believes that the retroactivity component of this decision should be severed. As a result, projects with decisions made before the effective date of this decision would be evaluated based on the forest plan MIS standards in place at the time the project decision was made.

Appeal Opportunities

This decision is subject to appeal pursuant to 36 CFR Part 217 by filing a written notice of appeal within 45 days of the date the legal notice of this decision is published in the Sacramento Bee. The appeal must be filed with the Chief of the Forest Service as the Reviewing Officer.

For delivery by the U. S. Postal Service:

USDA Forest Service
Attn: EMC Appeals
Mail Stop 1104
1400 Independence Avenue, SW
Washington, D. C. 20250-1104

NOTE: Regular mail is still irradiated before delivery and may be delayed by several days. Appellants may want to use ground delivery.

Use the following address for ground delivery:

USDA Forest Service
Ecosystem Management Coordination
Attn: Appeals
Yates Bldg., 3CEN
201 14th St., SW
Washington, D. C. 20250

NOTE: This zipcode is assigned by the USPS for Forest Service mail. Some private carriers may not accept this zipcode for this street address.

Appeals may also be hand-delivered to the above address during regular business hours, 8:00 a.m. to 4:30 p.m. EST, Monday through Friday, excluding federal holidays; sent by fax to (202) 205-1012; or transmitted by email to appeals-chief@fs.fed.us. Emailed appeals must include the decision name in the Subject line.

A copy of the appeal must be simultaneously sent to:

Regional Forester
US Forest Service
Pacific Southwest Region
1323 Club Drive
Vallejo, CA 94592

The notice of appeal must include sufficient narrative evidence and argument to show why this decision should be changed or reversed. For a period not to exceed 20 days following the filing of a Notice of Appeal, the Reviewing Officer shall accept requests to intervene in the appeal from any interested or potentially affected person or organization.

Contact Person

For additional information concerning this decision or the Forest Service appeal process, contact Diana Craig, 1323 Club Drive, Vallejo, CA 94592; (707) 562-8930; or dcraig01@fs.fed.us.

BETH G. PENDLETON

Deputy Regional Forester
Pacific Southwest Region

[DATE]

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