DRAFT - MIS Analysis and Documentation in Project-Level NEPA[1]
R5 Environmental Coordination

Forests should analyze and disclose effects to Management Indicator Species (MIS) as part of the NEPA process for projects implementing Forest Plans prepared under the 1982 planning rule (36 CFR 219.19, Source: 47 FR 43037, Sept. 30, 1982). In analyzing the effects of the proposed project on each MIS affected by the project, the Forest must comply with the terms in the Forest's LRMP relating to MIS. This generally entails examining the impacts of the proposed project on MIS habitat and MIS populations. However, the method of determining these impacts depends on the terms in the LRMP. Under the 2005 planning rule, Forests with plans developed under the 1982 planning rule "may comply with any obligations relating to MIS by considering data and analysis relating to habitat unless the plan specifically requires population monitoring or population surveys for the species" (Source: 70 FR 1060, January 5, 2005). In other words, when the governing LRMP requires population monitoring or population surveys, the MIS effects analysis for the project must be informed by population monitoring data. When the governing LRMP does not require population monitoring or surveys, the MIS effects analysis for the project may be informed by habitat monitoring and/or analysis.

Adequate analysis of project effects to MIS, including Threatened, Endangered, and Sensitive (TES) species which are also MIS, requires the following steps:

1. **Select Project-Level MIS**. The MIS used for project-level analysis are selected from the list of forest-wide MIS identified in the LRMP using the process described below. *Disclose the rationale for their selection or <u>non-selection</u> in the NEPA document.*
   - Identify all the MIS on the Forest and assign to one of three categories:
     (1) MIS whose habitat is not in or adjacent to the project area and would not be affected (either directly or indirectly) by the project.
     (2) MIS whose habitat is in or adjacent to the project area, but would not be affected (either directly or indirectly) by the project, with an explanation of why there is no effect.
     (3) MIS whose habitat would be affected (directly or indirectly) by the project.
   - All the MIS placed in category (3) should be carried forward in the NEPA analysis to evaluate the direct, indirect, and cumulative effects of the proposed action and alternatives on those MIS. These are considered the "selected project-level MIS."
2. **Determine What Your LRMP Requires for MIS.** Generally, this direction is found in the monitoring section of the LRMP, but can also appear in the Forest-wide standards and guidelines, or elsewhere. MIS requirements usually call for forest-level population monitoring, habitat monitoring, or a combination of the two. However, your plan may have specific requirements related to project planning as well. For Sierra Nevada forests, refer not only to your Forest LRMP, but also to the MIS listed in the tables in Appendix E of the Sierra Nevada Forest Plan Amendment FEIS, January 2001. It is important to know your LRMP MIS monitoring requirements because they have a bearing on how project-level MIS analysis will be conducted.

[1] Due to the current uncertainty of MIS law and the evolving nature of regional procedures, this guidance paper is subject to change. This paper presents one approach to analyzing MIS in project-level NEPA documents, but should not be viewed as the only valid approach. This paper provides internal management guidance, and does not establish legally binding procedures that can be enforced by third parties.

3. Conduct Project-Level MIS Effects Analysis Based on Habitat Impacts. For each selected project-level MIS, analyze habitat impacts, document the analysis, and provide rationale for conclusions in the NEPA document. Your analysis should include the following components:

- Identify habitat/species relationship: Provide information in the NEPA document that demonstrates there is reliable and accurate knowledge of the quality and quantity of the habitat required by the species, and document the methodology used to measure the quality and quantity of suitable habitat in the project area. Provide citations to references that support this information.

- Estimate the effects (direct, indirect, and cumulative) of each alternative on affected MIS habitat: For each selected project-level MIS, analyze the number of acres or miles of suitable habitat affected, or discuss the extent to which habitat quality is altered. Compare the condition (e.g., amount and distribution) of suitable habitat pre-project to post-project, and indicate the relationship of these conditions to baseline, threshold, and/or desired conditions. Cumulative effects analysis must include the appropriate boundary for the analysis, sound rationale for the selected boundary, the effects of all relevant past, present, and reasonably foreseeable future actions, and the time span over which cumulative effects will be measured. {Reference the R5 Cumulative Effects Paper (8-4-05)}.

4. Determine the Forest Scale[2] Habitat, Population Attributes, and/or Trend for Each Selected Project-Level MIS. Examples of population attributes include relative abundance, reproductive status, and density. For MIS requiring population monitoring, make this determination using population data. If data exist for various points in time, estimate the MIS's trend over that time period. Include, or incorporate by reference, information important in determining MIS population attributes and/or trend. Also, disclose important assumptions or limitations on the estimates of habitat, population attributes, and/or trend.

5. Relate Project Impacts to MIS Population Attributes and/or Trend at the Forest Scale[2]. In addition to disclosing impacts on the habitat of each MIS at the project level, it is important to disclose the relationship and magnitude of these effects at the Forest scale[2]. The manner in which project level impacts will be related to the Forest scale[2] depends on the type of MIS monitoring required in the LRMP:

- For MIS Requiring Population Monitoring or Analysis: If possible, estimate project impacts to MIS *individuals* based on the extent of habitat affected, survey data, or other information. Disclose the likely effect of the project on Forest scale[2] MIS population attributes and/or trend based on the estimated number of individuals affected by the project. If it is not possible to estimate project impacts to MIS individuals, disclose the likely effect of the project on MIS populations based on the amount of habitat affected.

- For MIS Requiring Habitat Monitoring or Analysis: Disclose the effect of the project on selected project-level MIS based on the amount of habitat affected. Compare habitat impacts at the project level to habitat available for each MIS at the Forest scale[2]. Also disclose the likely effect of the project on Forest scale[2] MIS population attributes and/or

[2] Generally, habitat, population attributes, and/or trends should be determined at the Forest scale. However, for some species, it may be appropriate to use a larger scale such as species range, bioregion, or other appropriate scale.

trend based on the amount of habitat affected as determined by scientifically valid habitat/species relationships.

- For MIS Requiring Both Habitat and Population Monitoring or Analysis: If possible, estimate project impacts to MIS *individuals* based on the extent of habitat affected, survey data, or other information. Disclose the likely effect of the project on Forest scale[2] MIS population attributes and/or trend based on the estimated number of individuals affected by the project. If it is not scientifically valid to estimate project impacts to MIS individuals, simply disclose the likely effect of the project on MIS population attributes and/or trend based on the amount of habitat affected. In addition, compare habitat impacts at the project level to habitat available for each MIS at the Forest scale[2].

Finally, identify any changes in Forest scale[2] habitat or population attributes and/or trends that would be caused by the project and its cumulative impacts.