

Species Categories Objection Issue
Sierra Club/Alliance for the Wild Rockies

- 1. Objectors contend the selection of surrogate species also act as management indicator species, however the term “MIS” or “management indicator species” does not occur anywhere in the LMP, only surrogate species is used. This creates confusion.**

Response

1982 Planning Rule (sec 219.19 Fish and Wildlife Resources) states that MIS should be identified “to estimate the effects of each alternative on fish and wildlife populations, certain vertebrate and/or invertebrate species present in the area”. Regarding identification of MIS, the 1982 Rule states,

“These species shall be selected because their population changes are believed to indicate the effects of management activities. In the selection of management indicator species, the following categories shall be represented where appropriate: Endangered and threatened plant and animal species identified on State and Federal lists for the planning area; species with special habitat needs that may be influenced significantly by planned management programs; species commonly hunted, fished, or trapped; non-game species of special interest; and 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.”

The 1982 Rule also instructs that “Planning alternatives shall be stated and evaluated in terms of both amount and quality of habitat and of animal population trends of the management indicator species.” The purpose is to reveal the affect different alternatives have on management indicator species (MIS) viability and persistence (to maintain diversity required in the NFMA) and make that information known to the public and decision maker.

In addition, the 1982 Rule instructs that “Population trends of the management indicator species will be monitored and relationships to habitat changes determined.” It is important to note that MIS requirements for *monitoring* are no longer relevant because **the 2012 Rule** required all national forests and grasslands to use the 2012 Rule provision for monitoring by 2017. (219.12(c)).

Forest Service Manual 2620 includes further direction for selection of MIS (2621.1) and requirements for MIS in land management planning process.

There is no law, regulation, or policy that directs identification or use of surrogate species in analysis related the USFS land management planning process.

The Colville Plan was completed using the 1982 Planning Rule regulations in a time when the USFS was transitioning from the 1982 Rule to the 2012 Rule. While the Colville had started to develop their plan, the 2012 Planning Rule and its Preamble were published in the Federal Register. The preamble clearly described the MIS approach, or the “ability of a species or species group, on its own, to adequately represent all associated species that rely on similar habitat conditions” as “no longer supported by the best available scientific information” (2012 Planning Rule Preamble, Fed Register Vol. 77, No. 68, 4/9/12, page 21169).

The Colville reflects how the agency’s understanding of best available scientific information has evolved in the FEIS. The aquatics section explicitly states (p. 209),

“The surrogate species were chosen to assess current aquatic species status and to assess the potential effects of alternatives on species viability. In a sense, the surrogate species, bull trout, WSCT, and interior redband trout, *are used in a similar manner as the MIS* under 1982

planning rule in the development of the FEIS and subsequent revised forest plan. *The three surrogate species will be carried forward as both surrogate and MIS (hereafter referred to as MIS/surrogate species)*”. [emphasis added]

The wildlife section instead discusses that surrogate species (not MIS) are considered a more appropriate approach in addressing species and ecosystem viability.

(FEIS, ch3, p445-446) *“Considerable new science has developed since the 1988 forest plan concerning the viability of a wide array of wildlife species that are present within the planning area (Lehmkuhl et al. 1997, Wisdom et al. 2000, Raphael et al. 2001). In addition, methods for assessing species’ viability have evolved (Soule 1987, Marcot et al. 2001, Beissinger and McCullough 2002, Suring et al. 2011), and choosing which species to assess that best represent other species has changed considerably. [...] The use of MIS was considered a means of evaluating the effects of management actions on a suite of species whose population trends were assumed to reflect changes in habitat amount and quality due to the effects of the management actions (Suring et al. 2011). This assumption and the MIS concept have been called into question in the past two decades since its inception (Landres et al. 1988, Andelman et al. 2001). As a result, the MIS concept evolved to the more robust concept of surrogate species, including focal species, in the late 1990s (Lambeck 1997). Surrogate species are now considered a more appropriate approach in addressing species and ecosystem viability (Wiens et al. 2008, Suring et al. 2011).”*

The FEIS Chapter 3 Wildlife section and explains that “surrogate species are intended to represent ecological conditions that generate sustainable ecosystems, and it is not expected that the population dynamics of a surrogate species would necessarily represent the population dynamics of another species.” The wildlife section (p450) also highlights that R6 surrogate species were formerly called “focal species”.

The FEIS and 2018 Wildlife Specialists Report explains that the surrogate species approach was used following direction and guidance provided by Region 6 Planning citing a 2006 USFS publication titled, “Species viability assessments in support of Forest Plan revision.” This document was updated in 2010 and retitled “Viability Procedures for Use in Forest Plan Revision.” The 2010 version does not include any discussion of surrogate species or MIS, but does outline an 8-step approach to implementing species viability provisions in land management planning:

1. Description of the ecological context;
2. Identification of species for which there is a viability concern;
3. Collection of information on species for which there is a viability concern;
4. Identification of species groups;
5. Description of conservation approaches;
6. Development of LRMP alternatives;
7. Evaluation of effects on viability of the LRMP alternatives, and
8. Monitoring.

The FEIS additionally states that “the approach used to evaluate the ecological conditions capable of sustaining viable populations of wildlife species within the Forest planning area is described in detail in Suring et al. (2011) and Gaines et al. (2017).” In evaluating the 2017 Gaines publication, “Terrestrial Species Viability Assessments for National Forests in Northeastern Washington,” it is clear that this represents a further refinement of the 2010 guidance—an updated 8-step process for assessing viability that includes use of surrogate species—as well as the application of the regional guidance to the Colville and Okanogan-Wenatchee National Forests. The updated 8-step process is as follows:

1. Identifying species of conservation concern,

2. Describing source habitats, and other important ecological factors,
3. Organizing species into groups,
4. Selecting surrogate species for each group,
5. Developing surrogate species assessment models (to assess response of surrogate species to changes in habitat conditions and risk factors resulting from proposed management actions)
6. Applying surrogate species assessment models to evaluate current and historical conditions,
7. Developing conservation considerations, and
8. Designing monitoring and adaptive management.

FEIS Chapter 3 Aquatic Resources references a similar but different process outlined in Reiss et al (2008).

Step 1(a) - Create a list of all known fish species and other aquatic species found on lands managed by the Forest and adjacent to the Forest.

Step 1(b) - Determine species of concern

Step 2 - Identify applicable spawning and rearing habitat associations for each species

Step 3 - Categorize the species-at-risk identified above into habitat associations

Step 4 - Choose species from each association as surrogate to serve as indicators of other species occupying the same habitat.

This surrogate species assessment process for wildlife in the 2017 Gaines publication, “Terrestrial Species Viability Assessments for National Forests in Northeastern Washington,” determined baseline conditions for each of the surrogate species and identified risk factors that influence the viability of surrogate wildlife species. The FEIS describes (p. 454) that “these risk factors were addressed to varying degrees in each of the alternatives and used to evaluate how well each alternative contributes to the viability of surrogate wildlife species.” This evaluation of how well each alternative contributes to the viability of surrogate wildlife species as well as the recovery of federally listed and proposed species, and the sustainability of species of management interest is captured in the FEIS (replicated from wildlife specialists report.)

It is not clear how the FEIS has stated and evaluated planning alternatives in terms of both amount and quality of habitat and animal population trends of MIS as required in the 1982 Rule. Until recently, the typical approach for Forests going through Forest Plan revision was to report the amount of MIS habitat in terms of acres. The quality of MIS habitat is often reported as acres of source habitat (fundamental to maintaining the species) by condition class (poor, fair, good etc.) or simply presence/absence of habitat. Whereas the FEIS speaks to general population trends of surrogate species for each alternative, the FEIS did not report the amount and quality of habitat for each alternative as required by the 1982 planning rule.

Conclusion

The Colville approach to surrogate species seems to meet the some of the MIS requirements of the 1982 rule (Aquatics highlighted on FEIS p 205, wildlife, FEIS, p 445-448, Wildlife Report 2018 in the Project Record) while using best available science to determine their methodology for estimating the effects of each alternative on fish and wildlife populations. Whereas the FEIS speaks to general population trends of surrogate species for each alternative, the FEIS did not report the amount and quality of habitat for each alternative as required by the 1982 planning rule.

It is reasonable that objectors may have been confused by terminology as there was change in terminology (wildlife section formerly using “focal species” and now using “surrogate species,” and aquatic section using “MIS/surrogate.”)

Potential Recommendations

- EIS errata, “For the purposes of this plan we consider the surrogate species as MIS to comply with 1982 Rule.”
- Include in FEIS errata an evaluation of planning alternatives in terms of amount and quality of habitat for surrogate species.
- In the ROD (page 12-13?), clarify how surrogate species meets the regulatory requirements around MIS for both aquatic and wildlife section, and in addition clarify terminology used. Be sure to specifically address how the Colville approach meets the 1982 requirements “Planning alternatives shall be stated and evaluated in terms of both amount and quality of habitat and of animal population trends of the management indicator species.”

2. Objectors are confused about the different species categories and what role they play in the planning process

Response

The Colville used several different species categories some of which are typical under 1982 Rule plans, others are not found in regulation and policy, and others are drawing from species categories used in the 2012 Rule plans. Here’s a basic explanation for what species categories were used and how they relate to each other:

Colville started by identifying “**species of concern**” that includes Region 6 **sensitive species, state-listed species**, or other species for which the published literature has identified a concern for their viability. Then they looked at all the species together and divided them into groups/families based on habitat needs or similar risk factors. Then they identified **surrogate species** to represent these groups of species. **Focal species** are a subset of the surrogate species that will be used for monitoring.

FEIS (Appendix E, p1059) tries to clarify the different species categorizations. Here is an excerpt:

“Several terms are used to categorize species. The 1982 planning rule requires us to identify management indicator species, while other processes such as the Endangered Species Act (ESA) and the Region 6 Species Viability Assessment Processes also have categories of species. In addition, the 2012 planning rule requires a list of focal species to be identified for use in monitoring. The proposed revised forest plan was developed under the 1982 planning rule, but will follow the monitoring requirements of the 2012 planning rule. Table E-1 provides a list of the categories of species and how they were used in the forest planning process for clarification.”

It makes sense that the LMP Table C-1 has separate columns for surrogate species, Region 6 sensitive species, and "Management interest" species. The table highlights that there are cases where a surrogate species is also a sensitive species or a management interest species. The Wildlife report shows the relationship between surrogate species and the other species of concern including sensitive and management interest species. The column in LMP Table C-1 simply lists the Federal and WNHP State rank which reflects the condition of the species or ecological community across its entire range.

Conclusion

There is no violation of law, regulation, or policy.

3. Objectors contend the LMP does not contain plan components for “Region 6 sensitive species, state-listed species, or other species for which the published literature as identified concerns for their viability?”

Response

The LMP (p 58) explains that it focuses on four groups of terrestrial wildlife species: threatened, endangered, and proposed, surrogate species, focal species, and species of management interest, and explains that in addition, “some plan components address general wildlife habitat issues and enhance viability of all species.”

Sensitive species are not listed but are represented by surrogate species that share similar habitat and risk factors. The Plan (p 58) further explains that:

“Several desired condition statements within this Plan refer to ‘habitat effectiveness’ or ‘zone of influence.’ Methods to address habitat effectiveness and zone of influence can be found in Gaines et al. (2003); however, during the life of the Plan these methods may be replaced by new scientific/research developments.”

Conclusion

There is no explicit discussion that explains how providing plan components for surrogate species will provide for sensitive species. The plan could be strengthened by making this clearer.