



Friends of the Clearwater

Keeping Idaho's Clearwater Basin Wild

June 15, 2023

Carolyn Upton, Forest Supervisor
Amanda Milburn, Revision Team Leader
Lolo National Forest

(Transmitted via email to: SM.FS.LFNRevision@usda.gov)

Dear Ms. Upton and Ms. Milburn:

I am writing to follow up on some of my remarks during the Draft Assessment Round Table Discussion held by the Forest Service on June 14. With this letter, Friends of the Clearwater (FOC) is expressing concerns over the use of science in the Lolo National Forest's forest plan revision process. I referred to a paper document the Forest Service was distributing at the round table discussion, entitled "Carbon Storage and Sequestration in Land Management Plan Revision" (Lolo National Forest, January 2023). I specifically cited one sentence in the document, but also criticized the paper as being full of propaganda and misrepresentations of science.

The Forest Service is required, under the National Environmental Policy Act, to insure the professional and scientific integrity of discussions and analyses in environmental impact statements. (40 CFR section 1502.24.) In multiple subsections, the 2012 Planning Rule requires that the Forest Service **identify the best scientific information, use it in preparation of the Assessment, and explain how that science was used:**

§ 219.3 Role of science in planning. The responsible official shall use the best available scientific information to inform the planning process required by this subpart. In doing so, the responsible official shall determine what information is the most accurate, reliable, and relevant to the issues being considered. The responsible official shall document how the best available scientific information was used to inform the assessment, the plan decision, and the monitoring program as required in §§ 219.6(a)(3) and 219.14(a)(4). Such documentation must: Identify what information was determined to be the best available scientific information, explain the basis for that determination, and explain how the information was applied to the issues considered.

§ 219.6 Assessment. (b) *Content of the assessment for plan development or revision.* In the assessment for plan development or revision, the responsible official shall identify and evaluate existing information relevant to the plan area for the following: (5) Threatened, endangered, proposed and candidate species, and potential species of conservation concern present in the plan area;

(3) Document the assessment in a report available to the public. The report should document information needs relevant to the topics of paragraph (b) of this section. Document in the report how the best available scientific information was used to inform the assessment (§ 219.3). Include the report in the planning record (§ 219.14).

Independent peer review

The Forest Service must meet the challenge of objectively and transparently weighing available scientific information to determine best available science. Recognizing the problems this raises, Ruggiero, 2007 (a scientist from the research branch of the agency) identified a fundamental need to demonstrate the proper use of scientific information in order to overcome doubts over decisionmaking integrity. Ruggiero, 2007 and Sullivan et al., 2006 comment on scientific integrity, and also the use and misuse of science.

In considering the role of science and other topics during the planning process, we believe it's a no brainer that the Forest Service use Committee of Scientists, 1999 (Sustaining the People's Lands. Recommendations for Stewardship of the National Forests and Grasslands into the Next Century. March 15, 1999). The Committee of Scientists (1999) recommend "independent scientific review of proposed conservation strategies..." The Committee of Scientists report was initiated as part of the original NFMA planning rule revision in the 1990s, as explained in its Synopsis:

In December 1997, Secretary of Agriculture Dan Glickman convened an interdisciplinary Committee of Scientists to review and evaluate the Forest Service's planning process for land and resource management and to identify changes that might be needed to the planning regulations.

Committee of Scientists, 1999 was even cited multiple times in the USDA's responses to comments on the NFMA Rule.

Fortunately, there are well-known and well-documented USDA/Forest Service sources that serve as guides for conducting a rigorous and healthy debate about science. The documents, "USDA-Objectivity of Regulatory Information" and "USDA-Objectivity of Scientific Research Information" are instructional on this topic, both stating:

If agency-sponsored peer review is employed to help satisfy the objectivity standard, the review process should meet the general criteria for competent and credible peer review recommended by OMB. OMB recommends that (a) peer reviewers be selected primarily on the basis of necessary technical expertise, (b) peer reviewers be expected to disclose to agencies prior technical/policy positions they may have taken on issues at hand, (c) peer reviewers be expected to disclose to agencies their sources of personal and institutional funding (private or public sector), and (d) peer reviews be conducted in an open and rigorous manner.

Additionally, the process known as "Science Consistency Review" was designed by the Forest Service (Guldin et al. 2003; also *see* Guldin et al. 2003b.) Guldin et al. 2003:

...outlines a process called the science consistency review, which can be used to evaluate the use of scientific information in land management decisions. Developed with specific reference to land management decisions in the U.S. Department of Agriculture Forest Service, the process involves assembling a team of reviewers under a review administrator to constructively criticize draft analysis and decision documents. Reviews are then forwarded to the responsible official, whose team of technical experts may revise the draft documents in response to reviewer concerns. The process is designed to proceed iteratively until reviewers are satisfied that key elements are **consistent with available scientific information**.

(Emphasis added.) In other words, the Forest Service may **cite** “best available science” in preparing the revised forest plan, but it’s another matter entirely whether or not the plan **is consistent with** the science being cited. Guldin et al., 2003 suggest the review seek answers to these four questions:

1. Has applicable and available scientific information been considered?
2. Is the scientific information interpreted reasonably and accurately?
3. Are the uncertainties associated with the scientific information acknowledged and documented?
4. Have the relevant management consequences, including risks and uncertainties, been identified and documented?

Similarly, independent scientific review team Hayes, et al., 2011 conducted a “Science Review of the United States Forest Service Draft Environmental Impact Statement for National Forest System Land Management” (the Planning Rule). The reviewers considered the following three questions:

1. Does the information accurately reflect the current peer-reviewed scientific literature and understanding? If not, what is missing or incorrectly presented?
2. Based on the current peer-reviewed scientific literature and understanding: does the documentation on environmental effects adequately respond to levels of uncertainty and limitations? If not, please describe what is missing or incorrect, and how the documentation can be improved.
3. What, if any, differing viewpoints should be included that are not mentioned in the DEIS regarding the effects of alternatives on climate change, restoration and resilience, watershed and water protection, diversity of plants and animal communities, sustainable use of public lands to support vibrant communities, forest threats, and monitoring.

Given the importance and potentially controversial nature of the revised forest plan, it is incumbent upon the Forest Service to undertake the Science Consistency Review process as

early as possible. Nie and Schembra, 2014 recommend that agencies solicit independent feedback on its use of science:

The 1997 (Tongass National Forest) Plan was written using an innovative process whereby scientists within the Pacific Northwest Research Station (an independent research arm of the USFS) were assembled into risk assessment panels “to assist decisionmakers in interpreting and understanding the available technical information and to predict levels of risk for wildlife and fish, old growth ecosystems, and local socioeconomic conditions resulting from different management approaches.” In this case, “science consistency checks” were used as a type of audit to ensure that the policy and management branch writing the Tongass Plan could not misrepresent or selectively use information in ways not supported by the best available science. The process, at the very least, facilitated the consideration of best available science when writing the Tongass Plan, even if parts of the Tongass Plan were based on factors going beyond science.

And in response to an appeal of its 1997 revised Forest Plan, the Black Hills National Forest was directed by the Forest Service Washington Office to re-evaluate their revised Forest Plan for its ability to meet diversity and viability requirements set in existing laws, and correct any deficiencies. In doing so, Forest Service biologists “interviewed accredited scientific experts to obtain information on Region 2 sensitive species for use during the Phase I Amendment” in order to remedy deficiencies in the revised forest plan. (USDA Forest Service 2000b.)

Similarly, the Boise National Forest consulted with an independent scientist to review portions of their “[Wildlife Conservation Strategy](#)” proposed to amend its revised forest plan. And a Science Consistency Review was undertaken by the Forest Service in the process of designing the [Sierra Nevada Forest Plan Amendments](#).

Everest et al., 1997 participated in a science consistency review. They state:

The authors participated as scientists on the Tongass Land Management Planning Team, and were asked to assure that credible, value-neutral, scientific information was developed independently without reference to management decisions. They examined how scientific information was used in making management decisions relative to the Tongass land management plan and examined and evaluated whether the decisions were consistent with the available information. They also displayed the likely levels of risk to resources and society associated with various management options.

The authors developed and used a set of criteria to evaluate the way in which managers used scientific information in formulating decisions:

A. A management decision was considered to be consistent with available scientific information if the following three conditions were met:

1. All relevant scientific information made available to managers was considered in the decision.

2. Scientific information was understood and correctly interpreted.
3. Resource risks associated with decisions were acknowledged and documented.

All three criteria had to be met before a decision could receive a summary rating of being consistent, in our assessment, with available scientific information.

B. A management decision was considered to be inconsistent with available scientific information if any of the following circumstances occurred:

1. Managers misrepresented or reinterpreted information in ways not supported by the original information.
2. Managers selectively used information such that a different decision was reached than would have been made if all available information had been used.
3. Decisions were stated and documented in such a way that implementation effects could not be predicted.
4. Projected consequences of management actions were not consistent with scientific information.

Failure to meet any of these criteria resulted in a summary rating of being inconsistent, in our assessment, with available scientific information.

Station Director of the Pacific Northwest Research Station Thomas J. Mills states in the Preface of Everest, et al., 1997:

Any reasoned decision about the management of natural resources must be based on a sound foundation of scientific information. The complexity of natural systems and their importance to people depending on them demand this. Scientists ...should determine whether the decision is consistent with the science information.

Everest et al., 1997 described their participation:

We joined the planning team as full members but maintained separate and distinct roles from National Forest System members. We worked in cooperation with other resource experts from the Forest Service, state and other Federal agencies, and universities to assemble the most complete base of information ever developed for Forest planning in the Tongass National Forest. We were asked to assure that credible, value-neutral, scientific information was developed independently without reference to management decisions. Emphasis was placed on acquisition, assessment, and synthesis of available information. **We displayed options and the likely levels of risk to resources and society associated with various decisions.** (Emphasis added.)

Everest et al., 1997 recognize that “All policy decisions concerning the use of natural resources contain some level of risk to resources as a result of long-term implementation. Potential risks associated with decisions can be numerous and might affect, for example, community stability, wildlife viability, or long-term sustainability of resources.”

The Forest Service must acknowledge the levels of risk to resources and issues evaluated, associated with alternatives. In effect the Forest Service will be analyzing the tradeoffs involved with the potential adoption of any alternatives considered. The use of largely qualitative, subjective terminology would obstruct the public’s ability to evaluate agency integrity as policy decisions are made, which would render the final decision highly arbitrary.

In evaluating risks, Everest et al., 1997 further state:

When making decisions, managers strive to **balance the array of risks** associated with their decisions with the values of goods and services flowing to society from National Forest lands. Such management decisions almost always include compromises for one or more resources. **The appropriate level of risk to accept in management of the National Forests is a policy decision** determined by managers. It is not an issue that can be answered by the scientific method.

(Emphases added.) To emphasize, FOC is asking the Forest Service to objectively: **evaluate the risks of the alternatives; disclose the tradeoffs; and most importantly, provide a window into the way these policy decisions are made by utilizing a process the agency has frequently employed—the Science Consistency Review.**

We don't believe the Forest Service can comply with the 2012 Planning Rule and NEPA in revising the forest plan without conducting an independent peer review such as the Science Consistency Review.

Thank you for your consideration. I will be happy to provide a copy of anything cited in this letter, upon request.

Sincerely,



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Literature cited:

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USDA-Objectivity of Regulatory Information. <https://www.ocio.usda.gov/policy-directives-records-forms/guidelines-quality-information/regulatory>

USDA-Objectivity of Scientific Research Information. <https://www.ocio.usda.gov/policy-directives-records-forms/guidelines-quality-information/scientific-research>