



Sierra Nevada

Forest Protection Campaign



March 24, 2006

John Battles
Department of Environmental Science, Policy and Management
University of California Berkeley
137 Mulford Hall
Berkeley, CA 94720-3114

Re: Comments on "A draft workplan: Learning how to apply adaptive management in the Sierra Nevada Forest Plan Amendment" (February 28, 2006)

Dear Mr. Battles and the UC Research Team:

The Sierra Nevada Forest Protection Campaign is a coalition of 98 conservation organizations united in our focus on land management planning and implementation on national forest lands in the Sierra Nevada. We are seriously concerned about management on national forest lands that compromises species and ecosystem needs.

We strongly endorse the application of management practices that are supported by science. We also take a conservative view toward sensitive natural resources and believe that the precautionary principle is often best applied in management settings where decisions to act are based on assessments of risk to species and ecosystems – sensitive species and ecosystem must bear less of the burden of risky management actions.

Context for the Adaptive Management Program

In planning documents, the Forest Service has repeatedly identified how little it knows about the effects of the treatments proposed in the 2004 Framework on wildlife and other resources. The Forest Service has statutory requirements to protect and conserve resource values. In an attempt to satisfy these requirements, the Forest Service has invoked the use of adaptive management in its effort to ensure that resources will be adequately protected.

The reality of land management on the national forests, however, undermines the notion of adaptive management. The Forest Service has been implementing the 2004 Framework plan on 11 national forests for over two years. Many thousands of acres have been or are proposed for treatment in a setting where the outcome is highly uncertain. The monitoring of the effects of these treatments on resource values outside of the Plumas Lassen Administrative Study (PLAS) is haphazard or non-existent and the PLAS itself is hampered in its effectiveness by its failure as an experimental study. Already, the very treatments that this workplan proposes to study experimentally are being implemented broadly across the national forest landscape. Results

from this study are not expected for 5-7 years. Thus, there will be no opportunity to apply knowledge gained from this study to the risky and uncertain treatments on the tens of thousands of acres that will be treated by the end of this study.

The appropriate context for a study such as proposed in this workplan is the 2001 Framework. This plan adopted management direction to implement a multi-scaled approach to fire and fuels management and species conservation. The plan also adopted an adaptive management and monitoring approach designed to learn more about those practices deemed risky before they were applied on a wide scale. The analogy here is that the 2001 plan proposed to do the drug testing prior to broad scale application of “the cure,” whereas the 2004 plan includes the drug testing as an after thought with no control on the use of a drug with unknown or risky outcome.

We support the use of targeted research, as proposed in the workplan, only in the context of the 2001 Framework decision. Absent the prudent approach to management adopted in the 2001 Framework, the risk and potential adverse cumulative effects of this proposal are unacceptable.

Design/Site Selection

Treatment to be implemented

It is not clear from the work plan what the actual treatments will be. The 2004 Framework provides a minimum set of retention standards and desired conditions for specific land allocations. The ROD does not establish a specific prescription that must be followed. A case in point is the harvest of medium to large sized trees. Recent environmental analyses completed by the Forest Service indicate that desired conditions in fire resiliency and forest health can be achieved without removing the maximum amount of timber allowed under the 2004 Framework. Thus, a legitimate treatment to study is one that addresses meeting the desired condition for improving fire resiliency and forest health while minimizing adverse modification to habitat for sensitive species, for example by maintaining higher canopy cover or by reducing the logging diameter limit from 30” to 20”.

What are the specific treatments that will be applied in the experimental watersheds? For this study design, the treatments are meant to be replicated over each study area. How will these treatments be defined and implemented so as to ensure that they function as replicates?

Selection of treatment units and implementation of treatments

Ongoing studies conducted by the Forest Service have been compromised by the inability of the research group (in this case PSW) to have adequate control over the treatment that is to be implemented, i.e. where it occurs, what it is, and when it is conducted. This compromised study design has been discussed in the study plans for the Plumas Lassen Administrative Study and the Kings River Administrative Study. In particular, the design adopted for both studies lacks randomization of control and treatment units and treatments occur dispersed over time. The result is a passive approach that substantially weakens the ability to make inferences about cause and effect. In the design of both studies, the Pacific Southwest Research Station failed to compel

the Forest Service to follow rigorous experimental designs with the outcome being two large case studies with low levels of inference.

How will this program overcome the barriers that the Pacific Southwest Research Station could not?

Adaptive Management

Commitment to change management direction

The essential step that distinguishes an adaptive management program from a traditional study or monitoring program is listed in the workplan (page 3) as step 6: “Adjust management as indicated by results, evaluation, and re-assessment of project goals.” The Forest Service has consistently resisted defining any limits to their decision making space. This is evidenced most recently by their failure to define a management approach in the 2004 Framework that identifies the triggers or conditions that indicate management direction is not achieving the desired outcomes and to commit to a process to adjust management based on the specified triggers. Such an approach was outlined in an early version of the 2004 Framework¹ but was abandoned in the final decision.

As proposed, the workplan appears to passively offer information from the studies to the Forest Service and others. There is some reference to the application of new information to management decisions, but it is ambiguous or unresolved at best.² Please explain further the level of commitment you have from the Forest Service to respond affirmatively to the results from this study.

Implementing changed management

If the Forest Service commits to change management in response to the study results, what then will be the triggers or thresholds against which the need to change management direction will be measured? When will these thresholds be developed? Who will develop them? How will it be agreed that management should change?

Wildlife

Adequate Funding

The work plan clearly identifies that fisher in the Sierra Nevada are highly vulnerable to population losses and further extirpation. The US Fish and Wildlife recently found that the

¹ See the proposed action in the draft supplemental environmental impact statement for the Sierra Nevada Forest Plan Amendments (USDA Forest Service 2003. Sierra Nevada Forest Plan Amendment Draft Supplemental Environmental Impact Statement, pages 56-57) and the biological opinion (US Fish and Wildlife Service 2003. Formal Endangered Species Consultation and Conference on the Biological Assessment for the Sierra Nevada Forest Plan Amendment Supplemental Environmental Impact Statement, pages 104-110).

² See workplan (page 25) stating “one goal is to better understand how new information can impact Forest Service adaptive management decisions. This is needed to define the decision space available to stakeholders.”

listing of fisher under the Endangered Species Act is warranted and cited habitat destruction and modification from timber harvest as factors of concern. We agree with these conclusions. The high vulnerability of fisher and the current threats to its habitat are precisely the reasons why a robust and meaningful assessment of the effects of management on fisher must be completed regardless of the cost. Beyond this, if funding for the fisher element of the work plan is reduced to the extent that the monitoring component is inadequate, the adaptive management plan will not be legitimate.

Prioritization of species to address in the research study

We agree that research focused on fisher is a priority at this time. For those species of slightly lesser priority (i.e. northern goshawk and California spotted owl), we believe that California spotted owl should be considered a priority for research over northern goshawk. We come to this conclusion for the following reasons.

First, the method used to determine priority does not clearly distinguish California spotted owl from northern goshawk. We note that the vulnerability ratings listed in the 2001 Framework are all the same for northern goshawk, California spotted owl and marten. The vulnerability ratings do not distinguish one species in this group from the other two. The second method used to set priority depends on the use of habitat models in the CWHR database. It is not clear from the statement of results if there was a distinction in reduced habitat quality among California spotted owl and northern goshawk. These findings suggest to us that the priority ranking between northern goshawk and California spotted owl is somewhat blurred.

Second, assessing population trends and the effects of management on California spotted owl remains a high priority for the Forest Service. Data from a study such as proposed in this workplan would complement research being undertaken elsewhere in the Sierra Nevada. Presently, there is only one habitat study (i.e. the canopy cover study in the Eldorado study area) that commits to implementing an experimental study design. The remaining studies whether proposed or being undertaken (i.e. Plumas Lassen Administrative Study and Kings River Administrative Study) are case studies lacking randomization of treatments units and other controls for confounding factors. An additional experimental study such as proposed in this workplan would be a substantial contribution to the body of research being undertaken on this species.

We ask that if the opportunity to include other species in this workplan arises in the future that the determination of which species to include be evaluated again.

Reintroduction of fisher

We support the comments on reintroduction made by Cynthia Wilkerson with Defenders of Wildlife. We appreciate your team's response that any reintroduction program "would be consistent with current standards and methodologies." Nonetheless, we remain concerned about the feasibility of reintroduction and its potential for negative impact on the source population.

We also are concerned about the ability to establish cause and effect in a reintroduction study. If reintroduced animals fail to thrive, how will we know that this is not the result of capture and release effects as opposed to habitat effects? How will the potential effect of weather be controlled? Also, the length of the study becomes an issue. Is the study duration sufficient to detect the success or failure of reintroduction?

If the reintroduction aspect of this workplan is adopted, we ask that a feasibility assessment be completed. We also ask that an additional evaluation of confounding factors be undertaken and a study plan be drafted to address these factors.

Fire & Forest Health

Canopy Cover and Fire Resiliency

In our ongoing review of Forest Service timber projects, claims are made repeatedly that canopy cover must be significantly reduced (often to less than 40 percent) and that tree canopies must not be touching in order to prevent the movement for wildfire from an adjacent untreated stand into a treated stand. The Forest Service analyses generally recognize that treating the surface and ladder fuels achieves the stated fuel objectives for the stand, but then claim that more timber must be removed to stop the movement of wildfire from adjacent stands. There appears to be no empirical or study information to support this claim; the Forest Service relies only on their judgment. This is an area of increasing controversy in treated areas coincident with species dependent on dense canopies, e.g. fisher and California spotted owl, and in the management of old forests in general.

Will the fire and fuels component of this study provide information that addresses this issue?

Public Participation

Time frame for comments

We appreciate the time constraints under which your team developed this workplan and your commitment to meeting previously agreed upon deadlines. We also want to emphasize that as stakeholders we too have numerous commitments and deadlines to meet. We also seek to meet our obligations in a timely fashion. Given our mutual interest in broad participation in this process, we ask that in the future you provide more than a few days to review and comment on a document as detailed at this workplan. This will only serve to strengthen the relationships among those participating. We do appreciate that you are accepting comments continuously and have no reason to doubt that our comments now submitted will be thoughtfully considered.

The roles of the stakeholders are not clearly defined

The role the UC scientists play is fairly clear – conduct research, involve the public in data collection when feasible, report results, reach consensus on the impacts of the prescribed management regime. However, the roles of the MOU partners and other stakeholders are not defined. The workplan makes reference to a “community of collaboration” in the public

participation section. This section gives the impression that a more active role for non-Forest Service stakeholders is proposed, but the specific setting for this involvement is not defined. Absent a clearly defined role in the process, the stakeholders will become passive participants focused largely on observing the collection of data from the research studies.

The plan further emphasizes a passive approach by identifying as a goal “understanding how new information is used in an adaptive management process, and how it influences decision-making and management.” There presently is no structure established to implement adaptive management on the Sierra Nevada national forests. Our expectation was that this workplan would propose the creation of an organizational structure and process that would implement an adaptive management program if not for the entire Sierra Nevada, then at least for the two study areas identified. Such a structure would identify the decision makers and the types of decisions they would make, the roles of non-decision making stakeholders, the process by which information that was generated would be considered by decision makers and a timeline for the adaptive management process.

Many view the regulation of water fowl harvest as a good example of effective adaptive management. Researchers involved with that program have identified three critical components linking management, assessment, and natural resource response: “(1) a process of decision making with clear, focused management objectives; (2) a monitoring program that periodically determines the status of the resource; (3) a process by which the effects of management decisions on the resource can be assessed.”³ We recommend that the adaptive management and public participation aspects of this workplan focus on defining these critical components for the study areas in addition to establishing the roles and responsibilities of all the players.

We appreciate the opportunity to review and comment on the draft workplan. Please feel free to contact me if you have additional questions.

Sincerely,

A handwritten signature in black ink that reads "Susan Britting". The signature is written in a cursive, flowing style.

Susan Britting
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³ Williams, B. K. and Johnson, F. A. 1995. The Wildlife Society Bulletin, Vol. 23(3):430-436.