







Priends of Boll Meadow



LASSEN FOREST PRESERVATION GROUP



December 18, 2023

SERAL Interdisciplinary Team Stanislaus National Forest, Attn: SERAL 2.0 19777 Greenley Road Sonora, CA 95370.

Submitted via: https://cara.fs2c.usda.gov/Public//CommentInput?Project=63557

Re: Scoping comments on Social and Ecological Resilience Across the Landscape 2.0 (SERAL 2.0) (https://www.fs.usda.gov/project/?project=63557)

To the Interdisciplinary Team,

We submit the following scoping comments on the Proposed Action (PA) for the SERAL 2.0 Project ("Project"). We support land management actions that reduce wildfire risk for people and nature while maintaining and protecting sensitive species and ecosystems. We are especially supportive of actions that restore the function of beneficial fire to landscapes, since it is through this natural disturbance process that resilience will be restored and biodiversity conserved. To this end, we very much appreciate the inclusion in the PA of prescribed fire over the project areas and that this also includes some areas with prescribed fire as the first entry.

We are concerned, however, that the PA as currently described does not strike the right balance between protecting sensitive resources and logging. We describe these concerns in our comments below.

I. Use of Emergency Situation Determination (ESD) for the Project

The letter announcing the opportunity to comment indicates that an ESD has been granted by the Secretary of Agriculture for this Project. This means that among other things, the predecisional objection process under 36 CFR 218 would be waived.

It is our understanding that due to the backlog of work related to SERAL 1, implementation of most treatments proposed by SERAL 2 is not possible for 2 to 3 years at least. This appears to be the case for both your agency and the private sector that would implement the project. We also note that many of the treatments cannot occur immediately. Some only can occur 5-7 years or 10-12 years after an initial action, and or will take 10-20 years to complete, given the current levels of funding, seedling supply, and workforce (both agency and private sector). These are long term actions that will take many years to implement and are not emergency actions.

Emergency authorities, as noted in the scoping letter truncate public involvement; they also limit the consideration of alternatives and limit judicial review. The PA includes many actions that are controversial, including mechanical fuel treatments in inventoried roadless areas (IRAs) and Wild and Scenic River Corridors (WSRC), forest plan amendments to allow habitat degradation for species at-risk, exemptions from these forest plan amendments that cover most of the project area and allow even more habitat degradation, and herbicide use to manage fuel breaks. Limiting the alternatives considered to the No Action and PA prevents the evaluation of alternatives that could achieve the project objectives and provide better protection for the sensitive resources, including those mentioned here.

The ESD process significantly limits public engagement. We object to your agency using emergency authorities for this project, especially since your agency and partners currently do not have the capacity to speedily implement the "emergency action" project and most of the actions themselves will be implemented over the long term.

II. California Spotted Owl

California spotted owl (CSO) is a Forest Service Sensitive Species and has been proposed for listing under the Endangered Species Act (88 FR 11600). Threats that compel the listing include habitat destruction and modification from logging, high severity wildfire, and climate change (USDI Fish and Wildlife Service 2022, p. iii).

A. The Project-Specific Forest Plan Amendments Provide Less Conservation than the Recently Adopted Forest Plans for the Sierra and Sequoia National Forests.

Your agency, the USDA Forest Service, recently adopted revised forest plans for the Sierra and Sequoia National Forests that are immediately adjacent to and south of the Stanislaus National Forest. Revision of these forest plans included plan components to implement the CSO strategy developed by your agency in 2019 (USDA Forest Service 2019). The Records of Decision issued in May 2023 for the Sierra and Sequoia National Forests find that the adopted plan components are required to "provide the ecological conditions necessary to maintain a viable population of each species of conservation concern in the plan area." (See for example USDA Forest Service 2023c, p. 20¹). The Records of Decision also found that the plans provide "both ecosystem-level plan components to improve forest resilience and maintain habitat, and species-specific plan

¹ For simplicity, we will refer to the revised forest plan for the Sierra National Forest in this comment section. We note that with respect to CSO the plan components adopted for the revised forest plans for the Sierra and Sequoia National Forests area the same.

components that avoid potential near-term adverse impacts to breeding spotted owls and their habitat." (See for example Ibid, p. 19.) Thus, your agency determined that the suite of adopted plan components was required to meet the National Forest Management Act as implemented using the 2012 Planning Rule.

Contrary to the revised forest plans, the project-specific forest plan amendment in the PA includes numerous plan components that are not consistent with the revised forest plans adopted in May 2023. The proposed plan components allow habitat to be degraded to a greater extent than the newly revised forests plans. The following are examples of key differences between the revised forest plans and the PA that result in less conservation and greater risk to CSO's viability under the PA compared to the revised forest plans.

1. Desired Conditions for Territories

The revised forest plans establish desired conditions for CSO territories that target the highest quality habitat:

SPEC-CSO-DC 02

At least 40 percent (for dry vegetation type and site conditions) or at least 60 percent (for moist vegetation type and site conditions) of each California spotted owl territory **consists of the highest quality nesting and roosting habitat** (see definition above) in large enough patches to provide interior stand conditions, generally 1 to 2 tree heights from an edge. [Emphasis added]²

(USDA Forest Service 2023b, p. 62) In contrast, the PA conflates the ranking of habitat quality within the territory with the desired condition, mistakenly allowing lesser quality habitat to satisfy the desired condition in a territory.

This is a critical difference between the revised forest plans and the PA. If the desired conditions are not met in the territory, then there are limits to how logging can modify habitat. The PA allows lower quality habitat to satisfy the desired condition and allows habitat reduction and degradation. Even though over 90% of the territories within the project boundary have far less than 40% in highest quality habitat, limits to logging, as can be seen by reviewing the "notes" column of Table B.02-4 (PA, p. 57), are rarely invoked because the table concludes that desired conditions have been met.

2. Definition of "Maintain or Improve Habitat Quality"

Several plan components related to protected activity centers (PACs), territories, and survey requirements are linked to the requirement to "maintain or improve" habitat quality. The revised forest plans define maintain and improve as follows:

Management activities that maintain or improve habitat quality in the highest quality and best available nesting and roosting habitat would:

• Retain existing CWHR canopy cover class (e.g., do not reduce 5D to 5M);

² The latter portion of the desired condition was omitted for brevity.

- Retain clumps of the largest available trees greater than 24 inches diameter at breast height; and
- Retain at least two canopy layers at the stand/patch scale in areas where large trees occur.

(USDA Forest Service 2023, p. 59). In contrast, the PA defines "maintain or improve" to include actions that reduce habitat quality, e.g., reducing canopy cover class. For instance, our review of the data provided in the scoping package for the SERAL project suggests that CWHR 5D would be reduced to CWHR 5M, a reduction in canopy class, on over 800 acres in territories. And, roughly 250 acres in territories could be reduced from CWHR 5M to CWHR 5P.

The definition of "maintain or improve" in the PA also affects another plan component in ways that exposes CSO to more risk and habitat degradation or loss. The PA includes a standard about surveys indicating that pre-implementation surveys are not required for actions planned outside of PACs that "maintain or improve" habitat (PA, p. 64, SPEC-CSO-STD-01). This means for the PA that pre-implementation surveys are not required for actions that reduce habitat quality, e.g., change canopy cover class. This increases the risk that occupied owl sites will be negatively affected by logging either from disturbance or habitat alteration and destruction.

3. Standard for Management in a Territory

The desired condition in the revised forest plans is linked to a standard that directs how habitat within the territory is to be maintained if desired conditions are not met. This standard requires that if desired conditions are not met, then highest quality habitat must be maintained (USDA Forest Service 2023b, p. 63, SPEC-CSO-STD-03). Further, the standard requires that for territories with pair status, best available habitat must be maintained to meet desired conditions with CWHR 4D prioritized over 4M (Ibid.).³

The standard in the PA (PA, p. 64, SPEC-CSO-STD-07) only requires the retention of highest quality habitat if the desired condition that includes lower quality habitat has not been met. The standard in the PA also does not address retention of the next best habitat available, CWHR4D, if there is insufficient highest quality habitat. The omission of retaining CWHR 4D habitat is especially concerning, since there is so little CWHR 5M and 5D habitat in the project area and CSO are likely depending on CWHR 4D to a much greater extent to meet reproductive requirements.

The combined effect of the misstated desired condition for the territory and the more liberal standard for territory management in the PA is to reduce the quality and quantity of reproductive habitat. To get a sense of the potential for habitat degradation under the PA, we examined the habitat quality in territories under Forest Service ownership with at least 600 acres within the project boundary. Of the 44 territories we examined using the data provided in the scoping package (PA, Table B.02-4), only 4 meet the desired conditions as stated in the revised forest plans. In contrast, 42 of the 44 territories meet the desired condition as stated in the PA. This

³ See revised forest plan for Sierra National Forest for a comprehensive table describing how the plan components work together (USDA Forest Service 2023, p. 61, Table 8).

means that the PA will result in greater reduction in habitat quality and less constraint on habitat reducing activities compared to the revise forest plans.

The PA also exempts compliance with this standard within WUI, fuel breaks and Priority PODs 1-10. The exempted areas cover more than half of the project area and would exempt upwards of 75% of the territories from meeting this standard. In contrast, the standard for management in a territory in the revised forest plans is exempted only from the community buffer (USDA Forest Service 2023b, p. 63, SPEC-CSO-STD-03), an area that is close to communities and infrastructure (Ibid., p. 184). If this exemption for territory management was only applied in community buffers in the PA, only a modest portion of the SERAL 2.0 project area and only a few territories would be affected.

4. Landscape Analysis: Moist Mixed Conifer Versus Dry Mixed Conifer

For both the PA and the revised forest plans, a landscape analysis is needed to determine if territories are dominated by moist or dry conditions and to establish the range of 40% to 60% of the territory in a specific desired condition. The revised forest plans include an appendix that establishes a method for assessing conditions and assigning the desired condition for each territory (USDA Forest Service 2023b, Appendix H, p. 181-182). This method uses the Sierran Mixed Conifer and Red Fir (RF) WHR types established in the Existing Vegetation (EVEG) along with topographic position data to assign a territory to "Moist Mixed Conifer" or "Dry Mixed Conifer." The distinction between "moist" and "dry" is primarily based on topographic position, i.e., moist = drainage bottom, northeast slope; dry = ridge, southwest slope.

In contrast, the PA relies on an analysis that assigns "Moist Mixed Conifer" or "Dry Mixed Conifer" to the landscape, but does not specifically identify the criteria that were used to distinguish "moist" from "dry." A close examination of the GIS data included in the scoping package indicates that determination of mixed conifer as "moist" or "dry" is not dependent on topographic position. For example, there are many areas identified as "dry mixed conifer" that are Sierran Mixed Conifer WHR types located in drainage bottoms and northeast facing slopes. These are locations that would be considered "moist mixed conifer" using the methods adopted in the revised forest plans. A rough comparison of the data provided indicates that the extent of the "moist mixed conifer" is underestimated in the PA and scoping package (PA, p. 49, Table B.01-4). This underestimation of "moist mixed conifer" translates into desired conditions for territories that provide less suitable habitat compared to the approach used for the revised forest plans.

5. Failure to Provide for Conservation Consistent with the Recently Revised Forest Plans is Arbitrary

The project-specific forest plan amendments in the PA provide for less conservation for CSO compared to the recently revised forest plans for Sierra and Sequoia National Forests. The team working on the SERAL 2 project is aware of the newly adopted forest plans, but chose to ignore them. Forest Service decision makers have made findings that the revised forest plans were based on the best available science information and that the plan components were necessary to provide for the ecological conditions to support viable populations of CSO. The PA disregards

forest plan components and analytical approaches found to be essential to CSO conservation in the revised forest plans. The PA is inconsistent with recently adopted forest plan components and is arbitrary. The PA also results in less conservation and greater risk to this species that has been proposed for listing under the Endangered Species Act.

B. Increased Conservation for CSO is Needed

Additional conservation measures for this at-risk species to reverse its decline. We ask that you include the following in the PA as revised plan components or design measures to provide for the ecological conditions necessary to maintain viable populations of this species:

- Adopt the following definition, plan components, explanatory table, and analysis approach from the newly revised forest pan for the Sierra National Forest:
 - Definition of "maintain and promote" habitat in USDA Forest Service 2023 (p. 61)
 - SPEC-CSO-DC-02
 - SPEC-CSO-STD-03
 - **§** USDA Forest Service 2023b, p. 61, Table 8
 - **§** USDA Forest Service 2023b, p. 181, Appendix H and revise Table B.01-4. Restoration Needs, accordingly
- Limit the exception in SPEC-CSO-STD-07 to the Community Buffer, as defined in USDA Forest Service 2023b (p. 184)
- Maintain at least 50% canopy cover in treated units within PACs to improve suitability
- Maintain and promote, as defined in USDA Forest 2023b (p. 61), highest quality habitat wherever it occurs in the project area (not just in territories to meet desired conditions), because it is in such low abundance in the project area.
- Retain CWHR 4D in PACs with low amounts of highest quality nesting and roosting habitat to provide for required nesting and roosting habitat
- Retain CWHR 4D in territories of all occupancy status (not just pairs) to satisfy desired conditions when highest quality habitat is not available.
- Retain 60% or higher amounts of highest quality and best available habitat in all territories to compensate for such low amounts of higher quality habitat across the landscape

If these measures are not included in the PA, we ask that you evaluate them in an alternative in the DEIS.

C. Analysis in the Draft Environmental Impact Statement

To evaluate the impacts of the PA on CSO, we ask that you complete a PAC-by-PAC and territory-by-territory analysis comparing pre- and post-treatment conditions to evaluate: 1) the degree to which logging reduces dense canopied forests, i.e., reduces CWHR 6, 5D or 4D to lower cover classes; and 2) other changes to CWHR types 4M and 5M. These analyses should evaluate the changes to specific CWHR classes and not aggregate the classes into more generalized types like foraging habitat or nesting/roosting habitat.

The DEIS should also assign a specific desired condition to each territory and use this threshold to make adjustments to actions to ensure that desired conditions are maintained. This assignment should be based on the approach adopted in the recently revised forest plans for the Sierra and Sequoia National Forests.

III. Pacific Marten

Pacific marten is a Forest Service Sensitive Species and a Species of Conservation Concern on the adjacent Sierra National Forest. Marten populations decline and become extirpated in areas where canopy cover is managed below 65-75% (Hargis et al. 1999; Potvin et al. 2000; Moriarty et al. 2011). Moriarty et al. (2016) tracked 22 Pacific marten for four years with GPS collars to examine their habitat requirements. The researchers describe marten home ranges with 40-80% structurally complex stands and 24-33% simplified stands (i.e., recently treated DFPZ fuel reduction treatments at 40% canopy cover) and 4-10% openings (meadow, talus, group selection on public lands and clear cuts on private lands). They found that these habitat conditions are not ideal for marten because the mortality rate (mostly bobcat and coyote predation) during the study was the highest ever recorded for marten. The study concluded that these habitat conditions may be at a critical threshold beyond which marten may not survive.

The PA resembles the logging projects evaluated in Moriarty's studies. In light of this, the DEIS should specify how marten persistence is supported during mechanical treatments in marten habitat.

IV. Use of Herbicides to Maintain Fuel Breaks

The PA includes the application of herbicide to control shrubs and other plants on up to 13,000 acres in fuel breaks. The herbicides and associated surfactants proposed for use are known to be hazardous to humans and wildlife. For example, glyphosate has been identified by the World Health Organization as a potential carcinogen and a ban on its sales and use has been proposed by the European Union (Agathokleous 2022).

The proposed fuel breaks are features that you intend to use to manage fire for the indefinite future, and we object to the use of herbicides for their ongoing maintenance. We ask that maintenance treatments be designed to minimize the use of herbicides and maximize the use of non-chemical control methods. For instance, we ask that the creation of fuel breaks be sequenced with prescribed fire as a follow up treatment to maintain desired fuel profiles and begin the process of reintroducing fire to the landscape.

V. Logging Trees Up to 40" Diameter at Breast Height (DBH)

We are especially concerned about the removal of trees up to 40" DBH for meadow and aspen restoration. The extent and location for meadow and aspen restoration has not been described in the PA. Trees of this size provide important habitat structure and carbon storage. Trees of this size are also not common on the landscape.

To address our concerns, we ask that you include the following in the DEIS:

- Map and summarize the locations of the proposed meadow and aspen restoration;
- Estimate the number of trees by restoration location targeted for logging that are over 30" DBH;
- Include a design measure to girdle large and very large trees, leaving them as standing dead trees, or fell these trees and leave in place as large wood or move to a site with low levels of large wood

VI. Treatments in Inventoried Roadless Areas (IRAs) and Wild and Scenic River Corridors (WSRCs)

The PA mentions conducting treatments IRAs and WSRCs, but does not identify the IRAs or WSRCs affected or the area to be treated. The draft EIS should disclose the specific locations for treatment in the IRAs and WSRCs and describe in detail the logging or mechanical treatment to be conducted.

In general, we support management in IRAs, consistent with the Roadless Area Conservation Rule (RACR), to accomplish fuel reduction that focuses on stand-alone prescribed fire and the removal of small diameter trees. We also support management in WSRCs to reduce fire hazard while protecting the outstandingly remarkable values for which the area was designated. Because the PA does not provide any detail about the approach to be taken in the IRAs or WSRCs in the Project, we are unable to tell if the activities proposed would be consistent with the RACR or comply with the WSR Act.

For any action proposed in an IRA or WSRC, we ask that design measures to achieve the following be included in the PA:

- Limit the removal of trees to those less than 16" DBH;
- Ensure that the overstory remains intact;
- Ensure that surface and ladder fuels are reduced compared to existing conditions;
- Ensure that the use of existing roads does not result in obvious visual disturbance to the treated area;
- Ensure that ground disturbance from timber operations is remediated and trails and other scars are not visible;
- Ensure that within the season after treatment, any roads that were used are decommissioned, remediated and removed; and
- Place and maintain barriers to prevent the use of roads in IRAs and WSRCs during operations and until roads can be decommissioned.

In the environmental analysis, we ask that you discuss how the project would impact, either positively or negatively, the ecological condition and characteristics associated with IRAs in the context of possible future conservation designations, including wilderness. For the WSRC, we ask that you evaluate the impacts of the outstandingly remarkable values for the WSRC.

VII. "Speculative" Decision for Future Salvage Logging

The PA includes post-disturbance logging to salvage trees affected by fire, insects and disease. Management requirements are noted for this salvage logging. This speculative decision making is referred to as condition-based management (CBM). The salvage logging aspect of the PA is nearly identical to the speculative management that was included in SERAL 1. We object to the use of this controversial approach to management for the same reasons we raised in our comments on SERAL 1. And as we noted in our comments on SERAL 1, there are many other environmental decision-making processes that can be used to expeditiously address the desire to salvage dead or dying trees including categorical exclusions and environmental assessments combined with shortened decision-making time lines that can be requested of CEQ.

We are concerned about a trend in Forest Service projects to use CBM as part of the NEPA process. The idea of CBM has been circulating in the Forest Service for several years. In 2019 a definition was proposed for inclusion in Forest Service regulations on implementing the National Environmental Policy Act (NEPA; 36 CFR Part 220), but was abandoned in the final rulemaking. The American Bar Association recently reviewed the status of CBM and offered the following as a description of CBM:

CBM projects use an overarching set of "goal variables"—predetermined management criteria that guide implementation—that Forest Service staff apply to on-the-ground natural resource "conditions" encountered during the course of project implementation, a period that can span years or even decades: essentially, when the Forest Service finds X resource condition on the ground, it applies Y timber harvest prescription. However, basic information regarding the project's details—such as unit location, timing, road building, harvesting methods, and site-specific environmental effects—is not provided at the time the Forest Service conducts its NEPA environmental review (when the public can weigh in), nor when it gives its final approval to a project (when the public can seek administrative review). Instead, site-level disclosures are made after NEPA environmental and administrative review is complete, depriving the public of opportunities to comment and influence the decision based on localized conditions.

(Cliburn et al. 2021) Management frameworks that establish goals and approaches to achieving them can make project planning more efficient. This is what a well-designed forest plan can provide. This type of guidance also can be provided by "left-side analysis" that has formed the basis of landscape planning completed by the Forest Service for the past 25 years.

The problem, however, comes with the Forest Service's attempt to marry CBM with the requirements of the National Environmental Policy Act (NEPA). NEPA requires federal agencies to disclose to the public and in advance of environmental decision making the likely site-specific impacts of project related activities. In a recent legal case, the courts held that the Forest Service's Prince of Wales Landscape Level Analysis Project—a 15-year logging project on Prince of Wales Island in the Tongass National Forest using CBM—violated NEPA because it failed to provide the site-specific analysis that was needed to satisfy NEPA's "hard-look" standard. See *Se. Al. Conservation Council v. U.S. Forest Serv.*, 413 F. Supp. 3d 973 (D. Alaska 2019).

Central to our concern is the identification of the locations for the proposed treatments and disclosure of the site-specific impacts of the proposed treatments on the affected resources. NEPA requires such analysis and disclosure. This is recognized in the draft document on CBM developed by the Forest Service. Importantly, that document states "It is incumbent upon the Forest Service to provide enough site-specificity in the proposed action, existing conditions, and effects analysis in order to comply with NEPA" (USDA Forest Service 2023a, included as Attachment A). We expect any NEPA documents completed for the Project to meet this standard regarding site-specificity.

Thank you for the opportunity to provide comments on the PA. Please add the individuals listed below to your email circulation list for this project. If you have specific questions about these comments, please contact Susan Britting (britting@earthlink.net).

Sincerely,

Swan Elli

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Attachment A: USDA Forest Service 2023a. Condition-Based Management. Frequently Asked Questions. Ecosystem Management Coordination. February 2023 (draft)

References

Agathokleous, E. 2022. European Union's imminent ban on glyphosate: Hormesis should be considered in new chemical screening and selection. *J. For. Res.* **33**, 1103–1107 (2022). https://doi.org/10.1007/s11676-022-01474-5

Cliburn, A, Quackenbush, P., Prokott, M., Murphy, J. and Overstreet, M. 2021. The U.S. Forest Service's Expanding Use of Condition-Based Management: Functional and Legal Problems from Short-Circuiting the Project-Planning and Environmental Impact Statement Process. Forest Resources, American Bar Association. May 10. 2021.

https://www.americanbar.org/groups/environment_energy_resources/publications/fr/20210510-the-us-forest-services-expanding-use-of-condition-based-management/

Hargis, C. D., Bissonnette, J. A., and Turner, D. L. 1999. The influence of forest fragmentation and landscape pattern on American martens. Journal of Applied Ecology 36:157-172. https://besjournals.onlinelibrary.wiley.com/doi/pdfdirect/10.1046/j.1365-2664.1999.00377.x

Moriarty, K.M., Zielinski, W.J. and Forsman, E.D., 2011. Decline in American marten occupancy rates at Sagehen Experimental Forest, California. *The Journal of Wildlife Management*, 75(8), pp.1774-1787. <u>https://www.fs.usda.gov/pnw/pubs/journals/pnw_2011_moriarty001.pdf</u>

Moriarty, K.M., Epps, C.W. and Zielinski, W.J., 2016. Forest thinning changes movement patterns and habitat use by Pacific marten. The Journal of Wildlife Management, 80(4) pp.621-633. <u>https://ir.library.oregonstate.edu/downloads/ht24wm34z</u>

Potvin, F., Bélanger, L. and Lowell, K., 2000. Marten habitat selection in a clearcut boreal landscape. Conservation Biology, 14(3), pp.844-857. https://conbio.onlinelibrary.wiley.com/doi/abs/10.1046/j.1523-1739.2000.99036.x

USDA Forest Service 2019. Conservation Strategy for the California Spotted Owl in the Sierra Nevada. Version 1.0. Pacific Southwest Region. R5-TP-043. April 2019. <u>https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd624135.pdf</u>

USDA Forest Service 2023a. Condition-Based Management. Frequently Asked Questions. Ecosystem Management Coordination. February 2023 (draft). Attachment B to this letter.

USDA Forest Service 2023b. Land Management Plan for the Sierra National Forest. Pacific Southwest Region. R5-MB-331-A. May 2023. <u>https://usfs-public.app.box.com/v/PinyonPublic/file/1224226105088</u>

USDA Forest Service 2023c. Record of Decision for the Land Management Plan for the Sierra National Forest. Pacific Southwest Region. R5-MB-331-A. May 2023. <u>https://usfs-public.app.box.com/v/PinyonPublic/file/1224238933149</u>

USDI Fish and Wildlife Service 2022. Species Status Assessment Report for the California Spotted Owl (Strix occidentalis occidentalis). https://ecos.fws.gov/ServCat/DownloadFile/227751



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Condition-Based Management

Frequently Asked Questions

What is Condition-Based Management (CBM)?

CBM is a management approach which supports responsiveness and flexibility between planning and implementation in natural resource management. Condition-based management allows for proposed treatments to be aligned—post-decision but prior to implementation—with current conditions on the ground. It does this by focusing on collecting the right data at the right time and selecting the right management activity to move toward desired conditions. Validation surveys completed prior to implementation will determine the current precise site conditions and the best treatment(s).

Here is how it works. At the onset of project planning, known or expected environmental conditions are examined as well as a range of possible management activities. This is done by using mid-scale and site-specific data of current conditions to propose a variety of appropriate treatments to meet the purpose and need and move toward desired conditions. This framework of expected environmental conditions, possible management activities, and likely outcomes are what is disclosed and assessed throughout the NEPA environmental analysis process. Then, once a NEPA decision is made but prior to implementation, current site conditions are confirmed where implementation is to occur. The appropriate management activities are assigned for the site conditions at that time according to the selection criteria and range of management activities in the NEPA analysis and decision. If adjustments are needed to what was proposed, these are made within the constraints of the identified and analyzed range of possible management activities and design features.

NEPA Requirements and CBM

Condition-based management is a method to meet NEPA's requirements, not to avoid or shortcut them. The increased flexibility CBM offers requires additional work in developing the proposed action, analyzing effects, and engaging the public, and is designed to implement the right treatment in the right place.

CBM projects must meet the site-specificity and public involvement requirements of NEPA. There is no get-outof-NEPA-free card with CBM. CBM is both front-loaded (NEPA) and back-loaded (validation). The courts ultimately decided that NEPA is a procedural statute with twin aims requiring agencies to (1) consider the environmental impacts of their proposed actions and (2) inform the public that they (the agencies) considered environmental concerns in their decision-making process.

It is incumbent upon the Forest Service to provide enough site-specificity in the proposed action, existing conditions, and effects analysis in order to comply with NEPA. A CBM project needs to define and analyze the effects from a range of management activities for defined site conditions in the project area. Using common

and easy-to-measure selection criteria (e.g., stand density, level of mistletoe, amount of invasive species) and filters (e.g., vegetation type, critical habitat, nesting habitat) to delineate site-specific conditions for proposed management activities are ways to establish site-specificity. This also gives flexibility to implementers (for example; avoiding important new TES species habitat, putting the right treatment in the right place to move toward desired conditions, and revising stand boundaries if needed to reflect current site conditions).

The following components are recommended in a CBM project:

- Describe the rationale/reasoning for using the CBM approach for the project in the Purpose and Need section. See "When and where should condition-based management be used" section below.
- Use best available site-specific data, for example stand-level data (or data on groups of stands) to describe existing conditions.
- Define a range of treatments/prescriptions needed to move the project area toward desired conditions.
- Based on site-specific data, develop selection criteria (e.g., vegetation/habitat conditions) that will be used to determine which management activities, or range of treatments, should be prescribed, as well as habitat or other filters that will control where treatments will NOT be considered (i.e., condition-management pairings, if-thens).
- Develop design features to be used in alternatives, including those connected to the habitat and other filters described (areas you won't treat). Include "caps" on number of acres for each management activity/treatment.
- Map anticipated treatment areas by alternative in as much detail as possible.
- Analyze the impacts/effects from the most anticipated treatments for each alternative. Don't analyze the worst-case scenario, but the "expected," "anticipated," or "most likely" scenario or alternative. Clearly and carefully set out all assumptions and methods used in the analysis. Conduct the analysis at the stand or groups-of-stands scale to make the analysis as site-specific as possible. Make the ecological benefits clear.
- Be transparent with the public in identifying the agency's expectations and anticipated scheduling/timing for implementation. Develop an estimated implementation plan in the NEPA documents and share with the public.
- Identify in the implementation plan and in the decision how the agency will conduct the required "validation" prior to implementation, such as in a validation checklist. The Responsible Official must ensure that all validation work occurs.

Science informs CBM in the proposal, in the selection criteria used, and in the proposed management activities that will be used with certain site conditions to move them toward desired conditions and make forest ecosystems more resilient to disturbances such as climate change and insect and disease infestations. CBM, as in any other NEPA, uses the best available science to determine what treatments may be needed to do so, to support your effects analysis, and relay uncertainties, but allows the flexibility to determine what is best for site-specific conditions at the time of implementation (rather than a preset prescription based on what is expected).

Why use condition-based management?

Condition-based management allows managers to make decisions with the flexibility to respond to changes in on-the-ground conditions and confirm the right treatment is prescribed and conducted at the right time. This is important because site conditions may change by the time management activities are implemented, they may

change rapidly due to disturbance, or a certain order or timing of implementation may be needed. Using a CBM approach works well when there is enough known information to conduct a reasonably detailed analysis and fulfill the twin aims of NEPA. CBM assures that the assigned management activity is responsive to any changes in environmental conditions and is the appropriate treatment to move toward desired conditions. With the focus on conducting the right treatment(s) for the current condition, more precise implementation choices can be made and there is more certainty in meeting the project purpose and need.

When and where should condition-based management be used?

The CBM management approach is best used when vegetation management activities are being assessed in a landscape where there is a need for flexibility in assigning treatments due to the potential for environmental changes over time. The rationale for this approach and the process for how CBM will be implemented is best described clearly and upfront in the project NEPA document as well as in the decision.

Some situations that indicate when and where CBM may be applicable include:

- When site conditions are dynamic and unpredictable due to reasonably foreseeable environmental stressors, such as insect and disease outbreaks, invasive plant encroachments, and climate change.
- When implementation may take place over a long period of time after the decision, such as in larger, landscape-scale projects.
- Where existing or current data is sufficient to predict effects and outcomes from treatments, but additional site-specific surveys may be needed to confirm the precise current conditions and assign activities at the time of implementation.

These situations are independent of each other and all of them do not need to be present for the potential use of CBM. Condition-based management is not needed when site conditions are predictable and site-specific information and field data are robust and comprehensive for fine-grained analysis. It is recommended that you don't use CBM if it's not needed.

How does condition-based management work with adaptive management?

Adaptive management (AM) and CBM both account for environmental analysis with responsiveness and flexibility; however, with AM, adjustments to management activities occur after their initial implementation and are based on monitoring results. If the action is not having its intended effect, it is modified to improve outcomes. With CBM, appropriate management activities are determined prior to initial implementation based on field reviews which validate the current location-specific resource conditions. A CBM project can incorporate AM, but it is not required.

Adaptive management has an official definition and can be found in 36 CFR 220.3: "A system of management practices based on clearly identified intended outcomes and <u>monitoring</u> to determine if management actions are meeting those outcomes; and, if not, to facilitate management changes that will best ensure that those outcomes are met or re-evaluated."

Condition-based management includes proposing and analyzing a suite of management activities to be applied across the project area where there are specific resource conditions. Field reviews prior to initial implementation confirm specific site conditions that guide selection of the most appropriate treatments to move resources toward desired conditions.

Both CBM and AM provide the flexibility to respond to changes in environmental conditions, either before (CBM) or after (AM) initial implementation. AM changes the treatment after initial implementation and monitoring, whereas CBM allows reassignment before implementation. Both approaches must meet the requirements of NEPA, must document the reasoning for using them, and must analyze the effects from proposed treatments. If AM is used explicitly, NEPA requires that the effects from both the initial activity as well as the adaptive management activity be analyzed.

How is condition-based management different from programmatic NEPA analysis?

Most often, programmatic NEPA analysis refers to broad or high-level NEPA reviews that address the general environmental issues relating to broad policy or strategic decisions. As such, programmatic NEPA reviews generally do not authorize on-the-ground activities or implementation of projects but provide large-scale analyses to which subsequent NEPA for site-specific management activities can be tiered. Programmatic NEPA analysis is commonly used for development or revision of land management plans.

The scale of some CBM projects share some of the large-scale nature of programmatic plans, but differ in the level of action that the decision commits to and the specificity of the effects analysis. CBM is used in project-level NEPA analyses, often for larger projects implemented over a longer time period, and is not meant to cover all future needed management activities. The CBM project NEPA analysis and decision will analyze and authorize on-the-ground management activities. As a result, the NEPA analysis for a project using CBM must be specific enough to address issues associated with the proposed action and satisfy NEPA's site-specificity and sufficient analysis requirements.

How do you analyze environmental effects for a condition-based management project?

To support informed decision-making and demonstrate sufficient analysis, the environmental analysis must examine current conditions as well as the anticipated effects from the suite of management activities being proposed in the project area. The analysis must disclose the selection criteria or detailed site conditions that trigger the specific treatments to apply and the thresholds for those treatments. It must analyze the potential environmental effects from the management activities expected to be implemented.

There should be a sufficient level of certainty about the suite of management activities that will be needed for any expected site conditions and their potential effects. While there is flexibility in actual treatments, the level of uncertainty should be addressed by applying basic effects analysis best practices, such as:

- spelling out any assumptions,
- clearly disclosing analysis methodologies,
- incorporating the best available science,
- focusing on the significant issues, and

• clearly spelling out cause-effect relationships.

The upper-bounds effects analysis should provide sufficient clarity and be as site-specific as possible by describing and mapping where activities are expected to occur, the specific design features to be applied, and how locations and treatments will be prioritized.

The effects analysis for condition-based management should disclose the process by which site-specific conditions will be verified prior to implementation (validation).

What sort of public involvement is required or appropriate before a condition-based management decision or implementation?

Public involvement cannot be deferred to the implementation phase for CBM projects. Along with the sitespecific disclosure and analysis aim of NEPA, CBM projects need to inform the public prior to decision and to aid the decision. Additional public involvement is encouraged during a CBM project's validation and implementation phases. Implementation plans can help outline the appropriate level of treatment and inform public involvement.

Condition-based management benefits from additional public interaction by building understanding of
this management approach and trust in its implementation. Use of a collaborative or stakeholder group,
like those common with Collaborative Forest Landscape Restoration Program projects, is not required
for all CBM projects. However, certain NEPA authorities may require a collaborative process. Because
of the increased flexibility built into CBM, there should be an emphasis on transparency and
accountability with Tribes, stakeholders, and the public. Of course, it is always good to build public
support for your project.

What does the validation phase of condition-based management look like?

Condition-based management adds the step of subsequent validation to the project management triangle. After the decision but before implementing management activities, validation entails:

- assessing/confirming the current site conditions with interdisciplinary surveys,
- selecting the appropriate management activities based on the analyzed selection criteria, and
- confirming those site conditions and the potential effects from those activities are accounted for in the environmental analysis decision.

CBM provides the flexibility to account for a variety of site conditions and a range of management activities if they are analyzed in, and their effects disclosed within, the NEPA document. If conditions change within the scope of the analysis (i.e., the selection criteria and range of treatments still apply), there is no need to consider a SIR or new NEPA. However, any conditions encountered, management activities needed, or effects identified which were not analyzed and disclosed in the initial analysis may require supplementation and a new decision.

Below is a diagram of the steps involved in validation prior to implementation.

