April 28, 2023

**Reviewing Officer**

**Northern Regional Office**

**Attn: South Plateau Landscape Area Treatment Objection**

**26 Fort Missoula Road**

**Missoula, MT 59804**

**RE: South Plateau Area Landscape Treatment Project #57353**

Dear Reviewing Officer,

I am writing on behalf of Cottonwood Environmental Law Center (Cottonwood), a Bozeman-based conservation organization. For over 10 years, Cottonwood has worked to protect the people, forests, water, and wildlife of the American West. We represent our members in court to protect the places where we all love to fish, hunt, and recreate.

Cottonwood submitted a comment for the South Plateau Area Landscape Treatment project that raised concerns about the project’s reliance on the revised Custer Gallatin Land Management Plan (CMP), which fails to account for the body of science that indicates logged forests will not regenerate because of climate change. The Forest Service did not reference this body of science in its Environmental Assessment (EA) for the South Plateau Area Landscape Treatment Project (Project), and relies on the CMP, which also failed to consider this body of science. Consequently, Cottonwood objects to the Project and the CMP.

In 2017, the Proceedings for the National Academy of the Sciences (PNAS) published a peer-reviewed paper indicating flaws in traditional fire mitigation strategies in the face of climate change.[[1]](#footnote-1) This comprehensive paper cites a larger body of scientific literature that calls for changes to forest management to account for low regeneration rates, higher temperatures, and uncharacteristic wildfires due to climate change. Instead of analyzing this readily available body of science, the CMP and the Project EA rely only on antiquated fire mitigation strategies, such as widespread fuel reduction and thinning, which can exacerbate climate change and reduce the resilience of forests.

The CMP and the Project both heavily rely on thinning and regeneration harvests as management tools despite evidence indicating that these practices detract from their intended goals. The PNAS article describes how thinning, when combined with climate change temperature conditions, can be counterproductive:

*“Thinning may effectively restore more frequent, low-severity fire in some dry forests, but when thinning is combined with the expected warming, unintended consequences may ensue, whereby regeneration is compromised and forested areas convert to nonforest.” [[2]](#footnote-2)*

Fuels reduction is listed as an explicit purpose and need of the Project in the EA.[[3]](#footnote-3) The PNAS article’s discussion of fuel buildups in subalpine forests – the predominant forest type in the Project area – contradicts the Project’s purpose and need statement: [[4]](#footnote-4)

*“In contrast, cold/wet forests, such as high-elevation subalpine forests, are adapted to high-severity fire that historically recurred at relatively long (∼100–300 y) intervals…and have not experienced unprecedented fuels build-up in recent decades.” [[5]](#footnote-5)*

The PNAS article goes on to critique the strategy of forest treatment for wildfires as a whole, suggesting that localized treatment around private property is a more effective strategy to mitigate the negative effects of wildfires:

*“…roughly 1% of US Forest Service forest treatments experience wildfire*

*each year, on average. The effectiveness of forest treatments lasts about*

*10–20 y (75), suggesting that most treatments have little influence on wildfire.”[[6]](#footnote-6)*

The Montana Climate Assessment (MCA), a report with the intent to “synthesize, evaluate, and share credible and relevant scientific information about climate change in Montana,” was also left out of the EA and CMP, despite the fact that the MCA devotes an entire section to synthesizing studies on climate change’s impacts on regeneration in Montana’s forests.[[7]](#footnote-7)

Findings in the MCA contradict key assumptions made in the CMP and EA about the certainty of forest regeneration:

*“However, even with a lengthened window for establishment, warming temperatures alone may cause seedling mortality and failed regeneration as a result of seasonal mismatches in the timing of flowering and seed production.” [[8]](#footnote-8)*

The possibility of low regeneration rates due to climate change is repeatedly referred to in the MCA, but it is left out of the EA and CMP. In fact, the CMP relies on the false assumption that clearcut forests will regenerate and remain carbon sinks:

*“A key assumption, however, is that the forest land will not be converted to a non-forest condition after harvesting and will remain productive.” [[9]](#footnote-9)*

This assumption is challenged by the MCA, PNAS article, and the accompanying body of science (cited in the MCA and PNAS article) about climate change’s impacts on forest management.

The Forest Service’s reliance on uninformed management strategies renders the EA’s impact analysis arbitrary and capricious. The project’s analysis of Canada lynx wrongly assumes that the clearcut lynx habitat will regenerate in ten years:

*“If clearcut harvest was implemented on all 4,600 acres, then 14.7% of lynx habitat will be* ***regenerated*** *in a ten year period in the South Madison LAU…,”* (emphasis added). *[[10]](#footnote-10)*

The EA’s analysis of the Project’s impacts on grizzly bear denning habitat similarly assumes that the impact of clearcutting will only be “temporary”:

*“Where clearcut harvest is applied in suitable denning habitat, habitat will become* ***temporarily*** *unsuitable for denning due to loss of cover,”* (emphasis added). [[11]](#footnote-11)

The Forest Service is making highly consequential determinations about critical habitat in the EA based on the flawed premise that forests will grow back. Scientists are telling us this may no longer be the case because of climate change’s impacts on regeneration rates. The Forest Service needs to account for this information in its CMP and EA for the Project. Failure to do so puts millions of acres of critical habitat at risk and perpetuates the vicious cycle of climate change by permanently eliminating crucial carbon sinks.

By failing to account for up-to-date, peer-reviewed science concerning climate change’s impacts on forest management, the Forest Service is not fulfilling its responsibilities under the National Environmental Policy Act (NEPA). NEPA states that:

*“Agencies shall ensure the professional integrity, including scientific integrity, of the discussions and analyses in environmental documents. Agencies shall make use of reliable existing data and resources.”* [[12]](#footnote-12)

To fulfill its NEPA responsibilities, the Forest Service must revise its CMP to include “reliable existing data and resources,” like the PNAS article and MCA. The South Plateau Area Landscape Treatment Project must be withdrawn due to its reliance on this inadequate management plan.

Please don’t hesitate to contact Cottonwood with any questions you may have about our objection to this Project and the CMP. Thank you for your time and consideration.

For the wild,

/s/ John Meyer

John Meyer

Executive Director

Cottonwood Environmental Law Center

1. Schoennagel, Tania, et al. “Adapt to More Wildfire in Western North American Forests as Climate Changes.” Proceedings of the National Academy of Sciences, vol. 114, no. 18, 2017. https://doi.org/10.1073/pnas.1617464114. [↑](#footnote-ref-1)
2. Schoennagel, et al. p. 17. [↑](#footnote-ref-2)
3. Final Environmental Assessment, p. 4. [↑](#footnote-ref-3)
4. Final Environmental Assessment, p. 30. [↑](#footnote-ref-4)
5. Schoennagel, et al., p. 17. [↑](#footnote-ref-5)
6. Schoennagel, et al., p. 16. [↑](#footnote-ref-6)
7. Whitlock C, Cross W, Maxwell B, Silverman N, Wade AA. 2017. 2017 Montana Climate Assessment. Bozeman and Missoula MT: Montana State University and University of Montana, Montana Institute on Ecosystems. 318 p. doi:10.15788/m2ww8w. [↑](#footnote-ref-7)
8. Whitlock et al., p. 164. [↑](#footnote-ref-8)
9. Final Environmental Impact Statement for the Custer Gallatin Land Management Plan, Volume 4, p. 18. [↑](#footnote-ref-9)
10. Final Environmental Assessment, p. 64-64. [↑](#footnote-ref-10)
11. Final Environmental Assessment, p. 70 [↑](#footnote-ref-11)
12. § 1502.23 Methodology and scientific accuracy. [↑](#footnote-ref-12)