

June 6, 2019

Custer-Gallatin NF Revision Team
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Sent via email to: cgplanrevision@fs.fed.us

Dear Planning Team:

Please accept the following comments for the Custer-Gallatin National Forest Plan re-vision process on behalf of Montana Ecosystems Defense Council, Inc. and the Alliance for the Wild Rockies, Inc.

Let me repeat from earlier comments: “Since the game is rigged in favor of man-made valuation, laws and regulations, government-created vessels used to engineer man-made forests, create “re-sources” out of all that exists from one source (perfectly-created nature), valued only in money (mammon), let us continue with the “conversion game” – the only cards being dealt here today.”

Okay then, let’s play the “forest planning” game.

The NFMA (National Forest Management Act of 1976) is the product of a bitterly-fought battle to reign in Forest Service timber sales, especially the expanded use of clearcutting. The NFMA established an uneasy “compromise” between national (“top-down”) and “local” (bottom-up), or forest unit/district management theories, policy goals, and funding priorities for managing national forests. This second round of forest planning has significantly weakened that compromise/balance in favor of top-down RPA (Resource Planning Act of 1974) Program objectives, or in other words “targets.” This is the practical result of the 2012 (2015 Amended) Planning Rule, which guides this current forest-planning process.

The 2012 Rule has eliminated most “standards” that had any “teeth” when commodity-production objectives were confronted with other multiple-use objectives, like logging, grazing, mining, and other commercial uses. It’s money that matters to Congress, who writes the checks, and the Forest Service, which depends on executive-branch annual budgeting and annual congressional appropriations to fund every activity from road-building to the janitorial service that mops the floors and cleans the restrooms. Top-down is clearly dominating the management of national forests today.

Forest Plans do not make budget decisions. Should Congress emphasize specific programs by appropriation, a redistribution of priorities would follow, regardless of the alternative implemented. DEIS, p. 5., Emphasis added.

The Forest Service lacks a clear and unambiguous mission in the management of the National Forest System. Objectives are unclear. Paying lip service to the core tenet(s) of “sustainability” and “resilience” is fundamentally in opposition to the concept of management for the “sustainable production of multiple outputs,” which encapsulated the

current, legislation – the RPA and NFMA – which governs the management of the National Forest System. The Forest Service and the American people deserve clearly focused overall standards and guidelines that define the agency’s mission and overall management objectives of the National Forest System.

This is not possible as long as management structure attempts to serve two independent planning processes: 1) forest planning as called for in the (RPA/NFMA) legislation; and the congressional (national) budgeting process, which budgets on a project basis, which involves annually-authorized appropriations for the Forest Service. Congress funds programs and projects, not forest plans. There is scarcely any relation between the forest plans generated by the planning process and budgets being formulated and funded annually.

Congress is typically appropriating less than what is required to finance forest plans. This tends to negate the “balance” across uses and levels of activities promised in forest plans. Without balance, plans are rendered meaningless. Plans without projected funding cannot be implemented. Given these truths, how can the Forest Service or the American public have any degree of confidence in what is written in forest plans?

The Custer Gallatin NF did not in its Draft Revised Plan or DEIS “form one integrated plan,” as required by the National Forest Management Act of 1976 (NFMA).

NFMA Sec. 6

"(f) Plans developed in accordance with this section shall-

"(1) form one integrated plan for each unit of the National Forest System, incorporating in one document or one set of documents, available to the public at convenient locations, all of the features required by this section;

One, unified Plan.

This simple, legal mandate has been breached in the DEIS and Draft Plan. What does “one integrated plan” mean? Why are exceptions and exclusions made for the following issues/uses: 1) livestock grazing; 2) oil and gas; 3) “travel planning;” and 4) climate risk assessment. This is not a complete list, but prime examples of major areas of public interest and controversy that are not adequately analyzed and disclosed in the plan revision process. Each example has its own direct and cumulative impacts that have not been “integrated” into the forest-wide environmental impacts analysis.

“One, unified land management plan” is a stated “purpose and need.” DEIS, p. 1; p. 4. “Address gaps in current planning direction” is another stated purpose and need. *Id.* What gaps? Where are “gaps” defined, listed, located, discussed in the DEIS or Draft Revised Plan?

There is little or no explanation for why “replacing tactical, prescriptive language with strategic language is needed to provide more efficient project planning.” What does that even mean? There should be more than a passing mention of a total overhaul of the language being spoken, and what consequences to the various values and lifeforms may ensue. This is a totally unacceptable, sub-par level of analysis and disclosure (NEPA).

This kind of (NEPA) piecemealing categorically underestimates cumulative impacts at the programmatic level. NEPA piecemealing also underreports the controversy and actual damage to forest ecosystem structure and function, in violation of the spirit and letter of the NEPA, NFMA, APA and Multiple-Use, Sustained-Yield Act of 1960 (MUSY).

There is an RPA plan, a USDA Forest Service National Strategic Plan, a USDA strategic plan, but no in-depth discussion or analysis of the relationship between these “higher” plans and the Custer Gallatin Draft Revised Plan process. Are we expected to believe there is no direct link, or top-down mandate, or undue influence in the alternatives considered, or the short list of “related” outcomes and objectives? DEIS, p. 7. So much has already been decided by the 2015 “final planning directives” (January 30, 2015) that the revised unit plans seem to amount to nothing more than a fill-in-the-blanks exercise. Where does that leave any meaningful public participation? It’s little wonder that most issues raised by the commenting public failed to “drive the alternatives.” DEIS, p. 9. Words are rendered meaningless by idiotic actions.

Is there any limit to the destruction of forest ecosystems? Most national forests are already suffering from catastrophic levels of ecological fragmentation, extensive road systems, and a near total lack of public oversight. Too many people still confuse forest management and conservation; this is a big, unresolved problem on the Custer Gallatin National Forest.

Logging a stand of trees destroys that stand of trees and has long lasting, widespread impacts on the ecological intactness and function of the surrounding landscape. Gone is everything that existed there for the past 200-plus years. All the interactive parts change, the interaction changes, ecological (symbiosis) relationships change. The adverse consequences ripple through the entire ecosystem and continue to do so for a century or more. It forces changes on watershed function; surface flow is often severed and redirected. Snow accumulation, and rate and time of melt change. Local climate changes, allowing in more light and exposing vegetation to winds. Soils are disturbed, and weeds grab hold. Human use changes; in come the off-road vehicles, hunters and campers, and up goes fire risk.

The wildlife community is forcefully reconstructed. Human community values, like recreation sites, are degraded and in fact destroyed. There is no “right” way to destroy forest values. Each time logging hits a watershed it imposes a severe ecological cost on the site, and on the people, citizens, that own the landscape and depend on it for a wide range of benefits and “services.” This begs the question which has been on the minds of many, and is now even more acutely: How much of this abuse can an ecosystem stand before it is degraded to an entirely different physical and biological role? The DEIS and Draft Revised Plan do not attempt to answer this key question. It should be answered before we move on to implementation.

NFMA Sec. 6

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"(1) form one integrated plan for each unit of the National Forest System, incorporating in one document or one set of documents, available to the public at convenient locations, all of the features required by this section;

Climate Change Alternative is (desperately) needed.

The Custer Gallatin's assumptions about forest resilience and desired future condition are overly optimistic when fully considering the "foreseeable future." A growing body of knowledge about climate trends, influenced by heat, drought and wind, are being largely ignored in the planning (revision) process. Climate risk will test conventional perspectives on "resilience." Rapidly changing natural conditions, exacerbated by "management objectives" and unrealistic expectations will dominate the next planning cycle.

Increased wildfire frequency and intensity is a **symptom** of drought and heat. Emphasis added. This is a very reasonable characterization. The Forest Service's use of its "Hot, Dry and Windy Index" confirms this simple reality. In addition, when the agency references snowpack data it is essentially reflecting both heat and drought. If snow cannot persist, drought is usually the root cause. If we are to take the shift to 'adaptive management' seriously, the Forest Service must first put action to the words. "The human environment" is NEPA "bread and butter." New environmental conditions (heat and drought) will drive instability and change in individual lives, and in rural communities. For the benefit of the affected public, this is where the agency can shine. This is no time for a severe case of misoneism.

miso·ne·ism | mi-sə-□nē-□i-zəm

Definition of misoneism: *a hatred, fear, or intolerance of innovation or change*

A climate risk/change alternative is certainly a most "reasonable" and "viable" alternative that could have been analyzed along-side the others.

While many effects of climate change are anticipated to be gradual, there is also the potential for interacting disturbances such as insects, drought and fire to drive systems towards sudden large-scale transformations (Millar and Stephenson 2015). For example, dry forests that already occur at the edge of their climatic tolerance are increasingly prone to conversion to non-forests after wildfires due to regeneration failure (Stevens-Rumann et al. 2018). This trend is likely to continue in the future across all forest types as large wildfires remove local seed source and suitable climate space for tree regeneration becomes increasingly rare (Bell et al. 2014, Harvey et al. 2016b, Andrus et al. 2018).
DEIS, pps. 150-151

This theme is repeated at DEIS, p. 222:

Dry forests, such as these that already occur at the edge of their climatic tolerance, are increasingly prone to conversion to non-forests after wildfires due to regeneration failure (Stevens-Rumann et al. 2018). This trend is likely to continue in the future as suitable climate space for tree regeneration becomes increasingly rare (Bell et al. 2014).

What part of this warning does not register with agency managers? Is "climate denial" the dominant mindset within the agency? Or, is there a feeling that all this climate science is "speculate," and therefore can be ignored until more overwhelming signs force fundamental change in management strategies and tactics? It is unclear from reading the Draft Plan

and accompanying DEIS just what the Custer Gallatin NF, or the U.S. Forest Service – U.S.D.A. is thinking about a proper accounting of the increasing climate risk and what to do about it.

“Resilience” is a word that appeared over, and over, again in the Draft Plan and DEIS. It is a core tenet of the Custer Gallatin NF Plan Revision process. Nothing messes with resilience like a rapidly-changing climate – drought, heat, low humidity, wind etc.

One might ask: Why was there no “Climate Change Alternative?” Why wasn’t climate change selected as an issue driving the selection of Alternatives? Why wasn’t it even included on the list of issues raised “that Did Not Drive Alternatives?” DEIS, p. 14.

RESIL'ENCY, *noun* s as z. [Latin *resiliens*, *resilio*; *re* and *salio*, to spring.

The act of leaping or springing back, or the act of rebounding; as the *resilience* of a ball or of sound. Webster's Dictionary (1828) - Online Edition

Forest resilience is a desired future condition of the forest. Without resilience, the desired future condition depends is unachievable.

When is the Forest Service planning to alert the public that resilience is fundamentally at risk now, not at some time in the unforeseeable future? This risk is “reasonably foreseeable” and therefore must be included as a significant element of the “hard look” required by the EIS/NEPA process. If resilience is at risk, desired future conditions must be reexamined and adjusted according to the “best available science.”

So significant is the risk to resilience, we firmly believe that a climate change/declining forest resilience alternative **must** be analyzed and disclosed before proceeding with implementation of the Revised Custer Gallatin Forest Plan. The consequences of climate-driven forest loss (conversion to non-forest) is not something that that can be simply swept under the rug. Regeneration (restocking) is a key requirement of NFMA and RPA. Congress did not equivocate when it comes to addressing regeneration failure and “(habitat) type conversion.”

The NEPA requires a “hard look” at climate issues, including cumulative effects of the “treatments” when added cumulatively to the heat, drought, wind and other impacts associated with increased climate risk.

Regeneration/Restocking failure following wildfire, prescribed fire and/or mechanical tree-killing has not been adequately analyzed or disclosed. There is a considerable body of science suggesting that regeneration following fire is increasingly problematic.

NEPA requires disclosure of impact on “the human environment.” Climate risk presents important adverse impacts on cultural, economic, environmental, and social aspects of the human environment. – people, jobs, and the economy – adjacent to and near the forest lands managed under Revised Forest Plan direction.

Challenges in predicting responses of individual tree species to climate are a result of “species competing under a never-before-seen climate regime – one forests may not have experienced before either.” Achievable future conditions as a framework for guiding forest

conservation and management, *Forest Ecology and Management* 360 (2016) 80–96, S.W. Golladay et al. (Please, find attached)

In an uncertain future of rapid change and abrupt, unforeseen transitions, adjustments in management approaches will be necessary and some actions will fail. However, it is increasingly evident that the greatest risk is posed by continuing to implement strategies inconsistent with and not informed by current understanding of our novel future.... Id.

Stands are at increasing risk of conversion from forest to non-forest, even without the added risk of “management” as proposed in DEIS and Draft Revised Plan. The Custer Gallatin National Forest has not yet accepted that the effects of climate risk represent a significant issue, and eminent loss of forest resilience already, and a significant and growing risk into the “reasonably foreseeable future.”

It is now time to speak honestly about unrealistic expectations relating to desired future condition. Forest managers have failed to disclose that at least five common tree species, including aspens and four conifers, are at great risk unless atmospheric greenhouse gases and associated temperatures can be contained at today’s levels of concentration in the atmosphere. (See attached map). This cumulative (“reasonably foreseeable”) risk must not continue to be ignored at the project-level, or at the programmatic (Forest Plan) level.

In the face of increasing climate risk, growing impacts of wildfire and insect activity, plus scientific research findings, the FS must disclose the significant trend in post-fire regeneration failure. Eastern portions of the forest have already experienced considerable difficulty restocking areas that have been subjected to the combination (cumulative effects) of wildfire, prescribed fire, clear-cut logging, post-fire salvage logging and other even-aged management “systems” and livestock grazing.

NFMA requires restocking in five years. Forest managers must analyze and disclose the fact that the current conditions make old assumptions about natural regeneration obsolete. The FS can no longer “insure that timber will be harvested from the National Forest system lands only where...there is assurance that such lands can be restocked within five years of harvest?” (NFMA§6(g)(3)(E)(ii)).

The goals, objectives and expectations assumed by the DEIS are no longer automatically consistent with NFMA’s “adequate restocking” requirement. Scientific research can no longer be ignored.

At dry sites across our study region, seasonal to annual climate conditions over the past 20 years have crossed these thresholds, such that conditions have become increasingly unsuitable for regeneration. High fire severity and low seed availability further reduced the probability of postfire regeneration. Together, our results demonstrate that climate change combined with high severity fire is leading to increasingly fewer opportunities for seedlings to establish after wildfires and may lead to ecosystem transitions in low-elevation

ponderosa pine and Douglas-fir forests across the western United States.
Wildfires and climate change push low-elevation forests
across a critical climate threshold for tree regeneration, PNAS (2018),
Kimberley T. Davis, et al. (Please, find attached)

Forests are already experiencing emissions-driven deforestation on both post-fire and post-logging acreage. Areas where the cumulative effects of wildfire, followed by salvage logging on the same piece of ground are error upon error, with decades of a routine that can rightfully be described as willful ignorance and coverup. Where is the hard look at restocking in an era of increasing climate risk? What new monitoring systems are being employed to gather data and improve proactive analysis? If monitoring has been done appropriately, where is the programmatic disclosure documenting the scope and probability of post-fire regeneration failures? NFMA requires documentation and analysis that accurately estimates climate risks driving regeneration failure and deforestation – all characteristic of a less resilient, less sustainable forest ecosystem.

In the US Rocky Mountains, we documented a significant trend of post-fire tree regeneration, even over the relatively short period of 23 years covered in this analysis. Our findings are consistent with the expectation of reduced resilience of forest ecosystems to the combined impacts of climate warming and wildfire activity. Our results suggest that predicted shifts from forest to non-forested vegetation.
Evidence for declining forest resilience to wildfires under climate change, Ecology Letters, (2018) 21: 243–252, Stevens-Rumens et al. (2018). (Please find attached)

The Revised Forest Plan is based on assumptions largely drawn from our past that no longer hold true. Many of these assumptions made decades ago must be challenged, and amended, where overwhelming evidence demonstrates a change of course is critical. It is time to take a step back, assess the present and future and make the necessary adjustments, all in full public disclosure to the Congress and the American people. Many acres of conifers have not shown “resilience” enough to spring back from disturbance. Regeneration is **already** a big problem. (Emphasis added).

Both RPA and NFMA mandate long-range planning which impose numerous limitations on commodity production, including grazing, timber harvesting practices and the amount of timber sold annually. These long-range plans are based on assumptions, which are based on data, expert opinion, public participation and other factors that all, well almost all, view from a historical perspective. Assumptions that drove forest planning guidance decades ago, when climate risk was not known as it is today, are now obsolete. Present and future climate risk realities demand new assumptions and new guidance.

A proper reexamination of the assumptions relating to resilience and sustainability contained in the Forest Plan is necessary.

Sec. 6. of the National Forest Management Act states:

(g) As soon as practicable, ... the Secretary shall ... promulgate regulations, under the principles of the Multiple-Use, Sustained-Yield Act of 1960...

The regulations shall include, but not be limited to-

(3) specifying guidelines for land management plans developed to achieve the goals of the Program which-

(E) insure that timber will be harvested from National Forest System lands only where-

(i) soil, slope, or other watershed conditions will not be irreversibly damaged;

The DEIS fails to acknowledge the likelihood that "...high seedling and sapling mortality rates due to water stress, competing vegetation, and repeat fires that burn young stands," which will likely lead to a dramatic increase in non-forest land acres.

Looking to the Future and Learning from the Past in our National Forests: Posted by Randy Johnson, U.S. Forest Service Research and Development Program, on November 1, 2016 at 11:00 AM <http://blogs.usda.gov/2016/11/01/looking-to-the-future-and-learning-from-the-past-in-our-national-forests/>

Excerpt:

"Forests are changing in ways they've never experienced before because today's growing conditions are different from anything in the past. The climate is changing at an unprecedented rate, exotic diseases and pests are present, and landscapes are fragmented by human activity often occurring at the same time and place.

"When replanting a forest after disturbances, does it make sense to try to reestablish what was there before? Or, should we find re-plant material that might be more appropriate to current and future conditions of a changing environment?"

"Restoration efforts on U.S. Forest Service managed lands call for the use of locally adapted and appropriate native seed sources.

The science-based process for selecting these seeds varies, but in the past, managers based decisions on the assumption that present site conditions are similar to those of the past.

"This may no longer be the case."

Suggested remedies: A Climate Change Alternative is needed to establish standards and guidelines which acknowledge the significance of climate risk to other multiple-uses. Amendments must not only analyze forest-wide impacts, but the regional, national and global scope of expected environmental changes. All assumptions and analysis should be science-based, leading to management decisions that cause the least habitat damage and cost the least in taxpayer support. Based on scientific research, the existing and projected irretrievable losses must be estimated. Impacts caused by gathering climate risk (heat, drought, wind, etc.) – including all its **symptoms**, including wildfire, insect activity, and regeneration failure and mature tree mortality must be analyzed cumulatively. Emphasis added.

The selected scientific research presented above is only a sampling of the growing body of evidence that supports the need to disclose the consequences of the proposed action in a

proper context – a hotter forest environment, with more frequent drought cycles. This evidence brings into question the Purpose and Need and assumptions made. It also requires the FS to reconsider the assumptions, goals and expected desired future condition expressed in the Draft Revised Forest Plan and DEIS. Plan expectations must be amended at the programmatic level before proceeding with proposed project-level action(s). According to best available science, implementing project-level actions will most likely accomplish the opposite of the desired future condition. We can adjust as we monitor and learn more. However, to willfully ignore what we do know and fail to disclose it to the public is a serious breach of public trust and an unconscionable act against nature, and the laws governing the US Forest Service-USDA. Climate risk is upon us. A viable alternative to the proposed action is not only reasonable and prudent, but it is the right thing to do.

Thank you for the opportunity to comment on this important planning exercise.

Sincerely,
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