Beverly Compton, [redacted]

September 16, 2021

Cover Letter

Southern HDs Landscape Restoration Project EA Comments

Hello,
In general, I support the need to try and figure out how to lessen the threat of catastrophic fire. We cannot do so and end up causing as much harm. I have grave concerns about the increased heat and lack of moisture on all plants and trees and their ability to regenerate after this project has significantly disturbed the soil. There is plenty of current climate science that has raised the alarm about this issue including "As temperatures rise, the hotter, drier air and drier soil conditions are increasingly unsuitable for young Douglas firs and Ponderosa pines to take root and thrive in some of the region's low-elevation forests, scientists write in the Proceedings of the National Academy of Sciences." There is plenty of species specific, climate science available that must be used in this EA, science that speaks to address our warming, local environment. Climate Science and Climate Change is a **NOT** driving this document.

I am a non-paid volunteer, for the San Juan Citizens Alliance (SJCA), a nonprofit located in Durango Colorado, monitoring oil and gas wells in Bull Creek and the 3 other wells sites on Fossett Gulch Road before dropping down to the Piedra River, on the east side of the HD Mountains.

WE ARE AT THE TIPPING POINT OF IRREVERSABLE CLIMATE CHANGE
And this EA addresses none of the overwhelming problems we are faced with here nor provides few solutions. **IN GENERAL Climate Change** - No acknowledgement, modification, adjustment or any sense of concern or the need to do things differently by the SJNF staff in this EA.

LACK OF CURRENT CLIMATE SCIENCE

With climate crisis, the San Juan National Forest cannot continue to do what it has always done and expect a different outcome. The entire EA lists one potential impact after another but all will be been mitigated, or SJNF staff simply will no longer taking responsibility like the lack of noxious weed control or the harm will simply be allowed to happen. And yet, it is exactly the same way the Forest Service has mitigated in the past and the landscape continues to decline. This is the very planning and implementing that got us here to this moment of success or failure in saving our planet. At the end of the EA cover letter are many examples of current climate science that should be used. **If I can find climate science that applies to our landscape so can the staff at SJNF.**

OTHER MAJOR ISSUES WITH THIS EA THAT MUST BE ADDRESSES

1. **Lack of weed control** – the greatest chance of re-vegetation of all soil disturbing activities in this EA may be noxious weeds and highly invasive native plants. Look at all the disturbed areas on the east side of the HD's including all well pads and roads and see what is there – weeds. These weeds have move far into the forest and up all ATV trails. The SJNF staff has admitted failure in controlling noxious weeds and yet has not provided a new plan or on-the-ground different way of dealing with this overwhelming problem. This EA could be a monumental failure with so many disturbed areas revegetating with weeds that it becomes yet another serious fire threat – that of non-native weeds that die much sooner than native plants and become a serous fire threat. SJNF staff may be replacing one catastrophic fire danger with another. How can the SJNF staff admit in the same EA that "In general, we expect noxious weeds will continue to spread" page 25, admitting completely failure in controlling them and at the same time wanting to disturb 35,000 acres of public land and believe that noxious weeds will not become the dominate species? With a *warming climate and decreasing moisture these bare lands may never recover.*
2. **Soil disturbing activities** – all must be documented, acreage counted, and the SNJNF staff must be held accountable for the rehabilitation of these disturbed lands. Soil disturbing activities including: skid trails, landings, multiple stream crossings, slash piles, tracks created from the removal of slash piles. Mechanical vegetation management, prescribed fire lines/control lines/hand lines, rubber-tired or tracked skidder trails, forwarders, mechanical harvesters, stroke de-

limbers, hand thinning, trail to use chainsaws, hydro-mover, hydro-axe. Trails created by public firewood collection, small commercial firewood sales and all other soil disturbing activities that will need, into the future, carefully and consistent restoration efforts. Every opening, every disturbance will need highly active restoration, you cannot just leave it and think that nature will return. It has not everywhere on the forest including the well pads.

3. **Cultural resources** The Bull Creek-Piedra River watershed includes lands found in the Chimney Rock National Monument. The Bull Creek landscape is the same and so are the potential cultural resources. Both the LRMP and the NSJB CBM FEIS speak to the potential of many more sites to be discovered on the HD's with "the southeastern portions of the APE there is an increase in sites at higher elevations. There is little, on the ground commitment in this EA to the finding and protecting new sites. Cultural Resources in this EA is based on old language used again from previous documents and none of it is a real commitment to having the staff Archeologists in the field while the land is being disturbed insuring before it is done that there are not new sites. Listing current sites is meaningless in protecting what might be out there that has not been found before. Providing field staff with written information is asking a layman to do the work of a professional, in this case an Archeologist. How many culture sites have been identified using this method?
4. **Post treatment soils moving down Bull Creek into the Piedra River**
   This is a real and potential ecological disaster and must be thoroughly described, analyzed and a planned for to prevent soil moving indefinitely down Bull Creek into the Piedra River because the disturb soils have not revegetated.
5. Adding the **total acreage to be managed in Bull Creek** as described in the Northern and Southern Landscape Restoration EA's is a grand total of 71%. List what science supports altering 71% of a small, sub-watershed that will not dramatically change, forever, the health of this creek.
6. **The arbitrary use of the term "LANDSCAPE"** The arbitrary use of the term "landscape" to describe this EA is based on subjective boundaries not the science of landscape ecology or management. Only managing the lower half of Bull Creek in this EA is an example of arbitrary and subjective drawing of boundaries no based on science. What has been done in the past – including the plans for upper portion of Bull Creek in the Northern HD's restoration project does not preclude a change of thinking, using better and more current science and include all of Bull Creek in this EA. No one does a restoration project in half of a watershed. Landscape science must include those actions/alternations and failures outside of

the project area and how they will affect this project including current and proposed well sites, areas that have been altered and have not recovered, potential new roads and ATV trails.

7. **"Most stream systems currently fall into the at risk or diminished classes** Page 35, Bull Creek is assessed as Functioning at Risk – clearing 71% of vegetation by prescribed fire and mechanical treatment will only harm the creek and this watershed, not improve it. The actions in this EA could very well be a noxious weed ecological disaster equal to a soil sterilizing, crown fire out of control. SJNF has allowed the creeks on HDs to fall into risk but there's nothing in this EA that clearly demonstrates what will be done to improve them. Removing vegetation in and around these streams will only harm them. Doing the same types of treatment and expecting a different outcome will not happen unless there are new ways of controlling the noxious weeds otherwise all the EA will do is create an endless noxious weed seed source.
8. **Extinction of plants and animals** Extinction happens one plant or animal at a time until so many are lost the species is finally eliminated. Fourteen years ago in the NSB CBM EIS the statement "this project will affect individuals but not the species" This same language and lack of species science is used in this EA. Thousands of species have been lost using this non-science method. If this same language of "affecting individuals not species" and "no impact" is used in every SJNF project, across the landscape, every year, then species are being lost and there is no commitment by SJNF to be the leaders in our need, right now, to stop extinction. It is critical that SJNF protect species. Climate change is doing everything to ensure we lose them. Let's not help that happen. Botanists and wildlife biologists and other field scientists must be on the ground when all of these planned disturbances are happening, finding and inventorying all species that might lost and protecting those that need it. Giving guides to those on the ground doing the disturbance is not science and is no guarantee that anything will be found, recorded and protected. This is asking a layman to do the work of a professional in this case field scientists. Have field scientists in the field or don't do the project.
9. **Lack of Wildlife field inventories The** SJNF plan says ""The San Juan Forest Plan contains no obligation to conduct monitoring or surveying within a proposed project area. **Great habitat is meaningless if nothing inhabits it.** No field surveys for many plants and animals – "none seen or reported" in the EIS is the determination – this is not science. This EA list of wildlife says "no impact" or "may impact individuals". There is no way to know if you are or not impacting

individuals or entire species if you do not do real field inventories/counts to know what's out there. This language in this EA is a clerical "cut and paste" from one EA to another. This is not science, it is not climate science and nothing is going to help slow down climate change and the loss of species in this EA.

10. President Biden issued an executive order to tackle the climate crisis. In it, he established a national goal to conserve at least 30 percent of U.S. lands and freshwater and 30 percent of U.S. ocean areas by 2030, in an initiative commonly referred to as 30x30. The SJNF has an outstanding opportunity with this EA to plan to close a few ATV trail and roads and create a much bigger Roadless area on the HDs providing the best opportunity to protect the area from climate change. This is the forward thinking we need right now with the real threat of climate change here.

Clear, comprehensive responses to these concerns would be greatly appreciated.
Thank you,
Beverly Compton

REGIONAL CLIMATE SCIENCE EXAMPLES

Rocky Mountain Climate Organization – Union of Concerned Scientists. More wildfires, more heat and dryness tree-killing insects. . Sudden Aspen decline and Pinon Pine massive die-offs, 46 million acres of bark beetle killed trees. Sudden ecosystem crash in response to climate change.

NRC Research Press article, Double whammy: high-severity fire and drought in Ponderosa Pine forests of the Southwest. "our body of ecological knowledge suggests that regeneration will be poor when drought and high-severity fires are coincident.

Climate Drive Episodic Conifer Establishment after Fire in Dry Ponderosa Pine Forests of the Colorado Front Range, USA. Biogeography Lab, U of Colorado, Boulder. "We found that tree establishment was largely concentrated in years of above-average moisture availability in the growing season. Climate change may result in fewer occurrences of abundant ponderosa pine regeneration both before and after fire.

Drought-induced shift of a forest-woodland ecotone: rapid landscape response to climate variation, USGS. Climate changes are expected to produce large shifts in vegetation distribution at unprecedented rates in large part due to mortality. Woody vegetation contains 80% of the world's terrestrial carbon.

An Assessment of Forest Ecosystem Health in Southwest Colorado - Is adequate provision being made for the conservation of biological diversity? 2. Is ecosystem integrity and resilience being maintained in the long term? 3. Are humane needs for ecosystem resource use and landscape occupancy being adequately accommodated? One of the forest Service's national priorities is to restore or rehabilitate deteriorated ecosystems.

CNHP San Juan/Tres Rios Climate Change Ecosystem Vulnerability Assessment Page 54 Ponderosa Pine "high temperatures are likely to reduce ponderosa pine regeneration, especially in drier, lower elevation levels. Page 58 - Pinyon-Juniper Pinyon growth was strongly dependent on sufficient precipitation prior to the growing season (winter through early summer) and cooler June temperatures." "Substantial reduction in area suitable for pinyon pine." "Vulnerable to increased pest attacks – high rating". Page 72 – Riparian/Wetland/Fen "lower elevation riparian/wetland: highly vulnerable" Page 74 – Vulnerable to increased invasive species "Low elevations most vulnerable".

San Juan National Forest, Land and Resource Management Plan Appendix G Climate Change Trends and Management Strategy Page G-1 "Sudden Aspen Decline". "Aspen in the planning areas has exhibited widespread, severe, rapid dieback and mortality at a landscape level over just a few years." "The onset of spring snowpack melt and river snowmelt runoff to occur 2 to 3 weeks earlier in southwest Colorado." Page G-2 "Of particular concern are seasonal springs, seeps, small ponds, and small wetlands that occupy less than 1% of the SJNF." "Maintaining the health, diversity, and productivity of the SJNF and TRFO is a primary mission"

CNHP Pinyon-juniper landscape: San Juan Basin, Colorado Social-Ecological Climate Resilience Page 1 - "Fire, drought, insect infestations, and invasive species present pervasive challenges to the conservation and management of western lands."

Page 22 - Goals: 1. Protect and maintain large, interconnected, functional, and resilient pinyon-juniper landscapes. 2. Maintain and restore desired hydrologic functions and vegetation in riparian areas, wet meadows to benefit wildlife. 3. Maintain pollinators. 4. Enhance the resiliency by maintain ecological processes, and restoring and/or improving the conditions of the pinyon-Juniper communities. 5. Manage human use 6. Reduce the impacts of stressors. Page 25 – Strategy 1: Identify and protect persistent ecosystems, Strategy 2: Proactive Management for Resilience, Strategy 3: Assist and Allow Transformation.

Memorandum of Understanding between the State of Colorado and the United States Department of Agriculture Shared Stewardship Investment Strategy
Page 2

> Federal, state, tribal, local, and private managers of forests and rangelands face a range of urgent challenges, among them catastrophic wildfires, invasive species, degraded watersheds, loss of developed recreation areas and recreational connectivity, and epidemics of insects and disease, all exacerbated by the long-term impacts of climate change and pressures from population growth. The conditions fueling these circumstances are not improving. In Colorado, concerns include the loss of fish and wildlife habitat, impacts from recreation and population growth, loss of forest and rangeland productivity, longer fire seasons, watershed health, the rising size and severity of wildfires, and the expanding risk to our communities, natural resources, economies, and our citizens and firefighters.

Page 4 – "making our forest less vulnerable to wildfires, insects, disease, and drought. Projecting and enhancing our priority watersheds and protecting and enhancing wildlife habitat and wildlife corridors. Page 6 – protect sacred sites and preserve cultural resources.
Climate Change in Colorado, Colorado Water Conservation Board Page 1 - "In the past 30 years, Colorado's climate has become substantially warmer." "The risk of decreasing precipitation appears to be higher for the southern parts of the state" "decreasing streamflow, particularly in the southern half of the state." Page 2 – "temperatures have increased in all seasons" "Snowpack has been mainly below-average since 2000." "The time of snowmelt and peak runoff has shifted earlier in the springs by 1-4 weeks across Colorado's river basins. Page 4 – "The peak of the spring runoff is projected to shift 1 – 3 weeks earlies by the mid-21st century.

SAN JUAN NATIONAL FOREST LAND AND RESOURCE MANAGEMENT PLAN
4.1.1 the NFMA requires "continuous monitoring and assessment in the field", "geographic scale broader than one plan area" "measurable changes on the plan area related to climate change". "Progress towards meeting the desired conditions and objectives in the plan" A monitoring evaluation report is to be produced and made available to the public every two years.
Page 246 – 2.13.8 Miles of roads decommissioned. Page 247 DC 2.8.3 Acres of noxious weeds inventoried, treated and monitored? Page 249 DC 2.3.1 how many active of habitat conditions have been maintained or improved for TE&S? Page 253 DC 2.2.2. Climate change and other stressors: Have road densities been reduced? Have species compositions reports been done, have sand exams been done? What is the extent of insect and disease outbreaks, has vegetation

monitoring being done, are tree line monitoring? Page 255 DC 2.16.1 Heritage/cultural resources – maintained in good to excellent physical condition?

This proposed project must have a foundation of conservation biology, climate science and comprehensive field inventories and surveys. This EA does not. We cannot continue to use old science, old methods and old thinking and continue to tell us, the public that everything will be ok when this EA states, clearly, it is not.

IN GENERAL Climate Change - No acknowledgement, modification, adjustment or any sense of concern or need to do things differently by the Forest Service in the NSJB CBM EIS to address the needs/changes because of climate change

1. On the ground climate change protection for ecosystems and species conservation. For what plants/animals?
    a. ID, protect areas and manage that will survive – what is the plan?
    b. Proactively manage for resilience – where and for what species
    c. What landscape linkages are critical to protect?
    d. What hydrologic features will be protected?
    e. What rare plant and animal species will be protected?
    f. Accept transformation where/what species
    g. What will be the species composition impact?
    h. What will be the forest structure impact?
2. No adjustment made for habitat needs because of climate change.

The Monitoring plan in the San Juan National Forest Plan 4.1.1 states:

1. The NFMA requires “continuous monitoring and assessment in the fields.”
2. “Address monitoring questions at a geographic scale broader than one plan area”.
3. “Measurable changes on the plan area related to climate change and other stressors.
4. “Monitoring evaluation report every 2 years” – nothing concerning field inventories of species.
5. “Maintain or improve habitat conditions” don’t we also want to know the species are still there each year that we are “improving habitat”
6. “Species composition reports” every 2-4 years. Is this counting species in the field? Has it been done?