Response to Advanced Notice of Proposed Rulemaking Request for Comment FS 2023-0006

The National Association of Forest Service Retirees (NAFSR) is a national nonprofit membership organization that represents thousands of US Department of Agriculture (USDA) Forest Service retirees who are dedicated to: sustaining the heritage of caring for the National Forests and Grasslands, partnering with the Forest Service (FS), and helping understand and adapt to current and future challenges.

Background

This letter is an expansion of the National Association of Forest Service Retirees' (NAFSR) previous response to the Forest Service's request for comments on the Advanced Notice for Proposed Rulemaking (ANPR) issued on April 21, 2023. Our previous comments and the NAFSR Climate and Climate Science Position Statements are attached in the comment portal as separate files.

Our previous comments focused primarily on our concerns about future management of mature and old- growth forests proposed by the groups involved in <u>Climate Forests</u>. In this expansion of our previous comments, we provide answers to the questions asked by the Forest Service in the ANPR based on our unique histories and experiences as former Forest Service employees.

Mature and Old-Growth Forests

Mature and old growth forests are critical for wildlife, carbon sequestration and storage, watershed and other environmental values. They also hold tremendous spiritual, cultural, and recreational significance for human beings. They are sources of firewood, food, botanicals and other non-traditional forest products, as well as wood products. Like all forests, mature and old-growth forests are dynamic and susceptible to threats, which may have unique impacts of scale, severity, and frequency based on mature and old-growth forest structures.

At the same time, early successional forests are also essential to supporting food, shelter, reproduction, and habitat for a variety of wildlife species, and some tree species require openings to regenerate. Biodiversity of fauna and flora is greater when there are forests of different successional stages throughout a landscape. Efforts to retain and expand mature and old growth must take into account shifting successional stages and their patterns across a landscape over time.

We support managing mature and old-growth forests for resilience to climate change and other stressors, including wildfires, native and introduced insects and diseases, and excessive recreation pressure. Given the increasing speed at which climate and other changes are taking place and impacting forests, we believe that it is important to give the Forest Service both the funding and the flexibility they need to deal with these stressors as they intensify.

Advancing Climate Resilience

In answering the questions that the Forest Service raised about planning and managing for climate resilience, we would like to present some general themes.

Streamline Processes and Procedures:

The Forest Service has experience and hiring gaps at the current time—both in management experience on the ground and in support staff who are vital to effective and efficient management. It is also under pressures from changing climatic patterns; wildfire numbers, sizes, and intensities; and recreation popularity, as well as pressure from Congress to fulfill commitments in the IRA and BIL for hazardous fuel treatments. We believe that it is important to reduce unnecessary complications and work that have accrued in the Forest Service over time and focus on the specific on-the-ground challenges of climate resilience. One example is that in 1990, the Synthesis of the Critique of Land Management Planning recommended that planning rules and directives be reduced and clarified. Thirty years later, they have only been added to and complexified. This is likely to have been equally the case for many Forest Service programs and policies. We recognize that many of these complexities are the result of Congressional engagement and litigation. In the 1980's, the Forest Service Pilot Program was successful in cutting some red tape. Streamlining does not seem to have been a specific focus for the Forest Service since. We recommend that the FS take opportunities to streamline processes and procedures to help free up time to respond to today's challenges.

Is the 2012 Planning Rule Capable of Dealing with The Increasing Rates of Change?

Adaptive management is key to dealing with future uncertainty and changes. Perhaps mending a fifty year old statute, in this kind of emergency, should not be off the table.

The 1999 Committee of Scientists suggested that the plans be more like a loose-leaf notebook of decisions

"... the land-and resource-management plan should be in the form of a loose-leaf notebook that contains all of the policy directions, strategies, and implementation proposals from decisions that have been made at all levels of the planning process. ... It must also contain the monitoring methodologies that will be implemented as well as the evaluation results from monitoring. ... Rather than a formal process involving review and comment, these loose-leaf plans are dynamic and evolving, readily reflecting and accommodating the outcomes of adaptive management. Thus, as decisions are revisited and revised in response to changing social understanding, natural and social events, and policy priorities, the loose-leaf notebook immediately reflects those changes. Consequently, any "amendments" made to these plans reflect decisions that have been made and reviewed elsewhere."

What we have today is not the loose-leaf notebook. But to ensure that the Forest Service has the flexibility to respond quickly to changes, the Forest Service might consider moving in that direction. By its very nature (once every 15 or more years), the current plan revision process can't keep up with the latest scientific information nor conditions on the ground. Litigiousness— often based on process flaws rather than scientific ones—has also contributed to the current situation. Has the urgent nature of change today brought the essential unwieldiness of what we currently think of as forest planning into focus?

We felt that the Environmental Analysis and Decision Making (EADM) model and outcomes were a useful approach to improving environmental analysis and decision making, and perhaps the same kind of approach could be used for ongoing monitoring and adaptive management of the plan revision process.

We support a 10-year review of the implementation of the 2012 Planning Rule, involving participants in planning efforts completed and not completed, and asking how the process might be improved or streamlined. A difficulty with previous efforts such as the Committee of Scientists is that they envisioned what planning could be under the best conditions. It's equally important to follow up, via adaptive management, with how it is actually working in practice. This would include Forest Service employees, interest groups, and average citizens' experiences with the process.

Strengthen Support for Resource Professionals Including Ongoing Climate Education

The second focus should be on hiring, training and supporting natural resource professionals. Clarify that it is their role to synthesize evolving and up-to-date information, including that on climate change, and to apply that information to any landscape-scale planning or project planning. Those on the ground resource professionals, along with researchers, are the bedrock and the foundation of bringing science to National Forest management. And perhaps most importantly, local resource professionals will interact directly with other people, Tribal members, neighbors and visitors to the forest, interest groups, the media, and so on via talks, answering questions, and field trips Human beings build trust far more readily than a dataset or a GIS overlay. And trust is definitely required for climate adaptation treatments such as prescribed fire and wildland fire use.

Chief Jack Ward Thomas supported resource professionals, and recommended that excellent resource specialists be promoted in place so that expertise would not be lost. Climate change has brought into focus the need for the Forest Service to "up its game" in terms of support for resource professionals to actively participate and engage with their respective professional societies, and foster continuing education.

We suggest that recentering the role of resource professionals as experts and as links to the broader scientific community is a key to "continual learning and organizational improvement" as discussed in the ANPR. Each of the natural resource disciplines from hydrology to recreation to vegetation to wildlife to soils to fire to social science has its own unique set of climate literature.

Resource professionals are where the concepts meet reality in terms of climate mitigation and adaptation. Through interdisciplinary discussions different perspectives, sources of literature, and trade-offs among values are aired and brought to bear on these crucial issues. We believe they should be supported and rewarded appropriately for their work.

One tangible approach to strengthen support for resource professionals is to make more of the position descriptions for them "ladder" positions—GS-12/13 or GS 13/14 positions. However, in doing so, promotion to the next grade level should be based on accumulated knowledge and experience in the position rather than simply the passage of one year of work. That would require a different type of promotion review and justification process involving assessment of the individual's professional growth. While obtaining and demonstrating that growth might take two, three, or more years to justify a promotion, this approach would help attain and retain professionals at locations where increased experience would be highly valued.

Attention to Threats From Invasive Species

We agree with the comments on this ANPR by the Society of American Foresters that there is also an invasive species crisis that requires specific management interventions, as well as an increase in forest health professionals. Whether exacerbated by climate change, lack of appropriate management interventions (e.g., thinning to control stocking density and reduce risk of outbreaks) or by the need to transform social behavior (e.g., restricting firewood transfer to prevent spread of invasive pests like emerald ash borer or spotted lantern fly), in many cases, this crisis needs separate attention and separate solutions from climate resilience. As SAF says in their comments:

"Addressing forest health means managing the invasive species crisis, which requires an urgent expansion of funding and administrative capacity. A decline in forest health professionals has been concurrent over the past several decades with increase in international trade and invasive species introductions. A 2022 article (Loehle et al., Journal of Forestry 121:104-117) examining this topic lays out a practical set of recommendations for the needed resources and key information gaps that should be addressed to face this ongoing crisis, spanning port screening and sanitation to more research and control staff at university and government posts. "

It should be noted that the worst devastation to US forests in our history thus far was due to the introduced Chestnut blight fungus (*Cryphonectria parasitica*). Other outbreaks of indigenous pests in the 1970s to 2000, including the southern pine beetle (*Dendroctonus frontalis*), spruce budworm (*Choristoneura fumiferana*), Douglas-fir tussock moth (*Orgyia pseudotsuga*), and more recently the mountain pine beetle (*Dendroctonus ponderosae*) have all been linked to flaws in exercising appropriate forest management actions for protecting trees prior to outbreaks. Adaptive management—practiced in a timely and effective fashion—can reduce risks of outbreaks and losses when they occur.

Our Answers to Specific Questions:

• How should the Forest Service adapt current policies and develop new policies and actions to conserve and manage the national forests and grasslands for climate resilience, so that the Agency can provide for ecological integrity and support social and economic sustainability over time?

Our answer to this question focuses on clarifying, simplifying and harmonizing definitions with the BLM so it is clear to the public what these words mean and do not mean.

(1) First, we recommend that the Forest Service clarify the terms "ecological integrity" and "climate resilience." In the Planning Handbook definitions, there is "ecosystem resilience," but not "climate resilience"

<u>"Climate change adaptation</u>. Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities. This adaption includes initiatives and measures to reduce the vulnerability of natural and human systems against actual or expected climate change effects. Adaptation strategies include the following:

1. Building resistance to climate-related stressors.

2. Increasing ecosystem resilience by minimizing the severity of climate change impacts, reducing the vulnerability, and/or increasing the adaptive capacity of ecosystem elements.

3. Facilitating ecological transitions in response to changing environmental conditions."

Are these useful distinctions in practice? Does "climate resilience" in the sense of the ANPR's statement "climate resilience is essential to ecological integrity" mean the same as "ecosystem resilience" in that definition?

(2) We note that the BLM Proposed Public Lands Rule defines "resilient ecosystems" as:

"Resilient ecosystems means ecosystems that have the capacity to maintain and regain their fundamental structure, processes, and function when altered by environmental stressors such as drought, wildfire, nonnative invasive species, insects, and other disturbances."

This raises a question in our mind whether in the view of the BLM "ecosystem resilience" means resilience to all stressors (say, including native insects or recreation impacts) while the Forest Service "climate resilience" is resilient only to stressors associated with

climate. When the FS states in the ANPR "climate resilience is essential for ecological integrity and social and economic sustainability", does it really mean what the BLM would call "ecosystem resilience.?"

Since the Forest Service and BLM are often adjacent owners to federal land, it seems that it would be to the advantage of agency employees, the public, and taxpayers to harmonize definitions as much as possible, especially since none of these are defined in relevant statutes.

(3) "Ecosystem integrity" is defined by the Forest Service in the zero code of the Planning Handbook (FSH1909.12)

<u>"Ecological integrity</u>. The quality or condition of an ecosystem when its dominant ecological characteristics (for example, composition, structure, function, connectivity, and species composition and diversity) occur within the natural range of variation and can withstand and recover from most perturbations imposed by natural environmental dynamics or human influence (36 CFR 219.19)."

and the Natural Range of Variation

(part of the definition)

"In contrast to the generality of historical ecology, the NRV concept focuses on a distilled subset of past ecological knowledge developed for use by resource managers; it represents an explicit effort to incorporate a past perspective into management and conservation decisions (adapted from Weins, J.A. et al., 2012). The pre-European influenced reference period considered should be sufficiently long, often several centuries, to include the full range of variation produced by dominant natural disturbance regimes such as fire and flooding and should also include shortterm variation and cycles in climate."

Then there is the section in the Planning Handbook that says what to do with NRV in planning (Chapter 20).

"Agency designs plan components to provide ecological conditions to sustain functional ecosystems based on a future viewpoint. Functional ecosystems are those that sustain critical ecological functions over time to provide ecosystem services. "

In our view, these terms have become more complex than need be. The ANPR states "climate resilience is essential for ecological integrity and social and economic sustainability"

Would it mean anything different to say that "ecosystem resilience, including climate resilience, is essential for functional ecosystems and social and economic sustainability." Or even to say "is essential for ecological, social and economic sustainability"? Then we'd be back to the language of the 2001 Planning Rule, which was perhaps clearer. Does something need to be resilient to

be sustainable? Then perhaps there should be considerations of social and economic resilience as well.

(4) Since the 2012 Planning Rule was promulgated, climate mitigation and adaptation have increased in importance. The role of Native American management practices prior to the migration of Europeans has become much clearer. In some sense, the forests of today are artifacts of the removal of Native people and/or their cultural practices, as well as recovery from previous logging and mining. How does that knowledge affect what we think of as NRV? Is that same concept still applicable?

• How should the Forest Service assess, plan for and prioritize conservation and climate resilience at different organizational levels of planning and management of the National Forest System (e.g., national strategic direction and planning; regional and unit planning, projects and activities)?

Conservation and climate resilience are already considered in all levels of planning as far as we've observed.

• What kinds of conservation, management or adaptation practices may be effective at fostering climate resilience on forests and grasslands at different geographic scales?

Certain kinds of practices need to occur at different geographic scales. For example, efforts to breed rust-resistant western white pine may occur at the seed zone level. Lynx protection practices have been required in a Southern Rockies Lynx Amendment covering several forests. PODs (Potential Operational Delineations) need to line up across Forests and other landowners, as do migration corridors.

• How should Forest Service management, partnerships, and investments consider crossjurisdictional impacts of stressors to forest and grassland resilience at a landscape scale, including activities in the WUI?

We are not clear on this question. It seems that other landowners might do activities that would affect resilience, but not only WUI neighbors. Examples include adjacent landowners with weeds that blow on to federal lands or fires that start and move to federal land. To some extent, it seems as if legal liability, such as the \$122.5M settlement with Sierra Pacific for the Moonlight Fire would encourage neighbors to be careful.

• What are key outcome-based performance measures and indicators that would help the Agency track changing conditions, test assumptions, evaluate effectiveness, and inform continued adaptive management?

It is not clear at what scale this question is intended. The term "performance measures and indicators" is suggestive of the Government Performance and Results Act Key Performance Indicators, for example "number of watersheds moved to improved conditions class or sustained in condition class 1." These are rolled up at the national level.

The key question seems to be "what is the appropriate scale for tracking changing conditions, testing assumptions, evaluating effectiveness and so on?"

One example of such an effort (outcome-based performance measures) was the Watershed Condition Framework. This effort could be reviewed to see how helpful it has been over time.

The appropriate scale depends on the issue at hand, be it responding to recreation pressure by the use of designated dispersed campsites, to practices for restoring specific frog species. It's not clear that there's a "one size fits all" for adaptive management.

We think it may be more important to engage with various users of the National Forests to find what their needs are for data, and how best to make it readily available to the public. Perhaps there are data that are duplicative and could be streamlined into easily understandable reports across functional areas (e.g. NEPA planning and fuels). This could be done by establishing a National Information User's Group, similar to the successful Forest Inventory and Analysis (FIA) model which includes open participation and has led to successful adaptive management in data collection as well as funding advocacy.

1. Relying on Best Available Science, including Indigenous Knowledge (IK), to Inform Agency Decision Making.

a. How can the Forest Service braid together IK and western science to improve and strengthen our management practices and policies to promote climate resilience? What changes to Agency policy are needed to improve our ability to integrate IK for climate resilience—for example, how might we update current direction on best available scientific information to integrate IK, including in the Forest Service Handbook (FSH) Section 1909.12?

Review what is currently defined as Native Knowledge in the zero code of FSH 1909.12 and revise the definition.

IK, results of research studies, observations by experts (internal and external to the Forest Service), observations by members of the public, historical documents and so on are all part of the information that may be useful in developing practices and policies. Clearly the Forest Service would want the best available information of all types to use. We recommend expanding the definition to "best available information" with research and other scientific information as a subset of all the information.

b. How can Forest Service land managers better operationalize adaptive management given rapid current and projected rates of change, and potential uncertainty for portions of the National Forest System?

As we discussed above, we believe the role of on-the-ground natural resource experts is essential to adaptive management. They have been successfully dealing with change and uncertainties of various kinds throughout their careers, engaging in mutual learning and so on.

The role of the Forest Service is to support these employees and their engagement wholeheartedly.

c. Specifically for the Forest Service Climate Risk Viewer (described above), what other data layers might be useful, and how should the Forest Service use this tool to inform policy?

We would suggest that professionals on forests themselves answer the question of what other data layers might be useful. We don't believe any data layers should be used in policy before a structured ground-truthing exercise is completed and the recommendations of that exercise incorporated.

2. Adaptation Planning and Practices.

How might explicit, intentional adaptation planning and practices for climate resilience on the National Forest System be exemplified, understanding the need for differences in approach at different organizational levels, at different ecological scales, and in different ecosystems?

"Adaptation planning and practices for climate resilience" is a subset of all planning, as all planning should incorporate adaptation to climate and any other stressors. First, employees or the public would identify a situation where adaptation is needed. The relevant professionals would work together to identify practices that would help. If they were not sure, they might design a study or ask for help from researchers.

a. Adaptation Planning:

i. How should the Forest Service implement the 2012 Planning Rule under a rapidly changing climate, including for assessments, development of plan components, and related monitoring?

See our suggestions under the theme above for developing an adaptive management structure for the process of NFMA planning.

1. How might the Forest Service use management and geographic areas for watershed conservation, at-risk species, conservation and wildlife connectivity, carbon stewardship, and mature and old-growth forest conservation?

In our experience, the Forest Service has managed all of the named activities successfully without using specific management areas. In fact, if conditions change rapidly, the more flexible the Forest Service needs to be to respond. Needing to do a plan amendment to change a management area boundary might make responding to change more difficult and affect the ability of the Forest Service to respond to changes.

ii. How might the Forest Service think about complementing unit-level plans with planning at other scales, such as watershed, landscape, regional, ecoregional, or national scales?

As discussed previously, the Forest Service has chosen appropriate levels of decisions based on the nature of the issue. For example, wide ranging species, wildlife corridors and PODs.

Decisions should be made, and the analysis focused on the scale appropriate to the question that requires the decision. That's a reason to support the concept of Forest Plans as loose-leaf notebooks of decisions made at different levels.

a. Adaptation Practices:

i. How might the Agency maintain or foster climate resilience for a suite of key ecosystem values including water and watersheds, biodiversity and species at risk, forest carbon uptake and storage, and mature and old-growth forests, in addition to overall ecological integrity? What are effective adaptation practices to protect those values? How should trade-offs be evaluated, when necessary?

The experts on fostering resilience, as well as effective adaptation practices, for a specific area are the natural resource professionals in the Forest Service, as well as the States for wildlife and forest health. Trade-offs are evaluated when adaptation projects are proposed, through a public NEPA process which would include everyone with knowledge and/or a stake in the outcome.

ii. How can the Forest Service mitigate risks to and support investments in resilience for multiple uses and ecosystem services? For example, how should the Forest Service think about the resilience of recreation infrastructure and access; source drinking water areas; and critical infrastructure in an era of climate change and other stressors?

This is a broad question, but in terms of wildfires and fire suppression, recreation infrastructure and access, source drinking water and other critical infrastructure should be mapped and available in developing suppression strategies and tactics.

iii. How should the Forest Service address the significant and growing need for post-disaster response, recovery, reforestation and restoration, including to mitigate cascading disasters (for example, post-fire flooding, landslides, and reburns)?

The Forest Service may need to ask for additional funding, as well as restoring or creating with states and private partners, the infrastructure for successful reforestation. American Forests described some of the challenges and solutions in <u>this report</u>. In the 1980's, there was a robust infrastructure of nurseries, tree coolers, technical expertise and networks with partners, and joint experimentation and technology improvement. These kinds of infrastructure can be rebuilt today.

iv. How might Forest Service land managers build on work with partners to implement adaptation practices on National Forest System lands and in the WUI that can support climate resilience across jurisdictional boundaries, including opportunities to build on and expand Tribal co-stewardship?

In terms of wildlife adaptation practices, we support a fire management planning process that would incorporate 1) development and future management of PODs, 2) areas for prescribed fire

and pretreatments, 3) areas for mechanical treatments, 4) areas and conditions for wildland fire use, 5) suggestions for strategic WUI treatments 6) incorporation of Indigenous Knowledge and opportunities for Tribal co-stewardship and 7) analysis of human-caused ignitions and recommendation for their reduction. This would be an EIS with a plan amendment and also be coordinated spatially across forests and other landowners. Finally, the discussion would help communities understand potential suppression strategies and develop evacuation plans.

v. Eastern forests have not been subject to the dramatic wildfire events and severe droughts occurring in the west, but eastern forests are also experiencing extreme weather events and chronic stress, including from insects and disease, while continuing to rebound from historic management and land use changes. Are there changes or additions to policy and management specific to conservation and climate resilience for forests in the east that the Forest Service should consider?

Yes, the climatic patterns and stressors differ. Extreme storm events are an example. Southern coastal plain and Piedmont forests experience hurricanes. But mid-Atlantic and New England forests also experience ice storms in addition to hurricanes (notably, the 1938 hurricane that devastated the Connecticut River valley into northern New England). Both are quite different than typical storms affecting Pacific Coast forests. In the northeastern and northern Lakes States forests, research has shown that after dormancy occurs in the late autumn, interruptions—mid-winter warmups lasting 10 days or more—are occurring more frequently, followed by a rapid return to deep winter low temperatures. Those warmups are enough to begin bringing some species out of dormancy and the subsequent deep re-freezing injures buds and causes mortality not evident until the following spring or summer. Although some pests in the east are similar (e.g., southern pine beetle and mountain pine beetles are the same genus— Dendroctonus), others differ greatly from the common western indigenous pests. For all these and additional reasons, eastern forests need specific adaptive management activities tailored to forest cover types, physiography, and climatic patterns. They also need flexibility and encouragement in national policies to tailor conservation and resilience objectives to regionally relevant situations. Any new policies need to be explicit and clear in their language that regional approaches are expected to differ among regions because the nature of the threats and climatic patterns are different. Then let each Regional Office work with station, university, and NGO scientists to come up with the adaptive management and conservation approaches that best fit evolving regional and local conditions.

3. a. How might the Forest Service use the mature and old-growth forest inventory (directed by E.O. 14072) together with analyzing threats and risks to determine and prioritize when, where, and how different types of management will best enable retention and expansion of mature and old-growth forests over time?

There is a substantial literature on different ways of protecting mature and old-growth forests from a variety of stressors. The threats and risks, as well as types of management to retain and expand forests, are fairly well understood. As we've stated, by supporting experts at the Forest

and Ranger District levels the Forest Service can ensure that the most current techniques will be used to enable retention and expansion of MOG forests over time.

b. Given our current understanding of the threats to the amount and distribution of mature and old-growth forest conditions, what policy, management, or practices would enhance ecosystem resilience and distribution of these conditions under a changing climate?

As Figure 2 in this ANPR shows, the greatest threats to old trees are insects, disease, and wildfire. In some dry places, thinning older stands may help older trees resist insect infestation. Older stands could be protected from wildfire both from delineation on a map and providing that to fire suppression teams, and in some places by thinning.

4. Fostering Social and Economic Climate Resilience.

a. How might the Forest Service better identify and consider how the effects of climate change on National Forest System lands impact Tribes, communities, and rural economies?

Once the contribution of climate change to any specific effect (e.g., wildfire, insects) were determined, then it would be possible to use social and economic models to estimate these impacts. For example, IMPLAN, originally developed by Rocky Mountain Research Station scientists, has four decades of success in assessing regional socio-economic conditions from a wide variety of policies and management actions.

b. How can the Forest Service better support adaptive capacity for underserved communities and ensure equitable investments in climate resilience, consistent with the Forest Service's Climate Adaptation Plan, Equity Action Plan and Tribal Action Plan?

Identify underserved communities and ensure that they are funded to develop collaborative groups to help prioritize projects, and provide funding for them for development of capacity to apply for and manage grants.

c. How might the Forest Service better connect or leverage the contribution of State, Private and Tribal programs to conservation and climate resilience across multiple jurisdictions, including in urban areas and with Tribes, state, local and private landowners?

Other partners include USDA NIFA, and its Cooperative Extension arm, with outreach to private landowners and the land grant institutions. Groups like the Colorado Forest Restoration Institute help different groups work together across multiple jurisdictions.

d. How might the Forest Service improve coordination with Tribes, communities, and other agencies to support complementary efforts across jurisdictional boundaries?

Again, through forest-based collaborative groups or outside coordination groups like CFRI. Also, there are media groups whose coverage and audiences are targeted. The National Woodland Owners Association and its magazine, Minority Landowner magazine, state forestry associations, and media like these can help. Some states also have specific programs targeted

at minority ownership groups (e.g., <u>https://agriculture.sc.gov/resources/resources-for-minority-and-women-farmers/</u>). Some of these currently enjoy USDA support from other agencies. Leveraging the work of other USDA agencies might accelerate Forest Service delivery of financial and technical assistance provided by the SP&TF mission area.

e. How might the Forest Service better support diversified forest economies to help make forest dependent communities more resilient to changing economic and ecological conditions?

Many previously forest dependent communities are now centers for amenity migration, high housing costs, and so on. There are still communities that are definitely left behind. The Forest Service should focus funding on those communities, including some of the funds for wood utilization and other business grants. The Forest Service could also help by supporting capacity for these communities to apply for innovative business grants from other agencies. USDA also has programs dealing with education about and recovery from substance abuse aimed at helping farm families ensure that farms, ranches, and forests can pass from parents to children. The Forest Service should be actively supporting these programs because substance abuse affects the ability of local forest management infrastructure to find eligible workers who can be insured as operators of machinery in mills, logging operations, and trucking.

Thank you for the opportunity to provide our comments. We have also uploaded our June 17, 2023 comment letter, and our Climate Change Position Statement and Climate Change Science Statements for your consideration.

National Association of Forest Service Retirees Submitted July20, 2023