



Climate Change Effects on Our Nation's Forests

A Position Statement of the National Association of Forest Service Retirees

Approved February 7, 2023

Purpose

To advocate for acknowledging and addressing the accelerating and intensifying effects of changing climatic and disturbance patterns by emphasizing science-based management of our nation's forests and rangelands to protect and conserve their health, resilience to disturbances, and productivity.

Scope

National forests and grasslands, and other publicly and privately owned forests and rangelands, are experiencing the effects of changes in climate and disturbance patterns. Benefits from these lands are essential to the health and well-being of communities and economies. To sustain flows of benefits, land managers must respond to an emerging reality where they: (1) have limited control of climate change driving forces; (2) are seeing marked changes on the ground; and (3) face future conditions, though yet unclear, that are likely to change benefits and their flows from these lands. The emerging reality requires land managers to join with community leaders, citizen groups, and other stakeholders to learn and act together in adapting forest and rangeland management to changing conditions and uncertain futures.

Position

The [National Association of Forest Service Retirees](#) (NAFSR) believes that changing climatic conditions are already affecting forest and rangeland ecosystems, altering disturbance patterns, and driving them towards a future whose conditions are uncertain. Adding to the uncertainty are shifting social values, demographics, consumption patterns, and emerging “green” technologies and markets—changes affecting forests and rangelands that are outside the immediate control of forest and rangeland managers.

NAFSR sees a new reality emerging from the convergence of rapidly changing weather and disturbance patterns and evolving socio-economic and technological dynamics. Forests and rangelands are increasingly vulnerable to cascading, escalating, changes. Communities and economies already are being affected, and effects—both negative and positive—will increase further in the future.

NAFSR intends to increase our engagement in public discussions about the effects of climate change on forests and rangelands.

- We recognize that the effects of climate change on lands and communities extends beyond the boundaries of national forests and grasslands to all the nation's forests and rangelands.
- We believe that through adaptive management it may eventually be possible to shape future conditions of forests and rangelands to sustain the flow of benefits and services critically important to the well-being of people and communities.
- We support efforts to reduce risks, uncertainties, and threats to forests, rangelands, and communities.

- We will also engage outside the forestry community in broader discussions about values and choices made that complicate or constrain the actions of natural resource managers working to mitigate undesirable, sometimes indirect, effects of values and choices on forests and rangelands.

NAFSR supports and promotes science-based management of natural resources. The science available for climate-smart planning and management has grown tremendously since 2000. Opportunities now exist to implement climate-smart approaches that are more tailored to specific ecosystems and may help reduce future risks and uncertainties from changing climatic conditions. Responding to these opportunities requires a significant surge in workforce capacity for both field management and research, expanded use of innovative approaches proven successful in some areas, and stronger public support for these increases.

NAFSR believes that changing climatic conditions and weather patterns have contributed to increases in the frequency and intensity of some disturbances, altering the succession and fate of forests and rangelands—both in the near and long term. Climate changes are altering the distribution and abundance of species at different places and speeds. The timing and future outcomes of these changes are yet uncertain because different forests and areas are affected differently. But climate changes are often a prime cause of extreme events and their cascade of consequences.

NAFSR believes the cascading effects of extreme events require greater focus and attention. In the case of wildfires, not only are extreme events leading to more acres burned, communities damaged, and firefighters worn out, extreme fires also are outstripping reforestation capacities and exposing shortages in tree seed and seedling nursery production. Burned areas left unrestored compound damages to water, wildlife, and other resource values.

NAFSR supports the purposes and actions outlined in the USDA [Secretary's Memorandum](#) (June 2022) and believes that the six adaptation actions outlined in the USDA Forest Service's [Climate Adaptation Plan](#) (July 2022) respond well to the Memorandum and deserve widespread support by the public and elected officials. Better, broader partnerships and alliances will help in addressing climate change effects.

NAFSR supports the Climate Action Plan's statements that planning must become more strategic and collaborative, focused on longer time horizons and broader spatial scales. To become more strategic, NAFSR believes that:

- Defining desired future conditions should emphasize creating forests that are resilient—able to withstand and absorb disturbances from multiple stressors, whether intense infrequent episodes or chronic extended effects, while maintaining similar structural composition, functioning, and the flow of needed benefits despite the changing conditions.
- Long-term projections of climate changes and landscape-scale trends firmly grounded in science are an essential ingredient. Projections and trends should look ahead multiple decades. Landscape-scale means considering what is happening on all lands, even across jurisdictional and ecological boundaries.

To become more collaborative, NAFSR believes that:

- Land management plans for individual national forests and grasslands still should consider local conditions and local needs, yet also consider future needs, risks, and uncertainties across larger landscapes. More people from more communities and groups should participate.
- Learning and progress happen more quickly when land managers, scientists, community leaders and others plan together, then design and implement projects and activities together, and monitor results together. Learning together and monitoring together builds trust faster and accelerates adaptation—both are essential to deal with rapidly changing conditions.

NAFSR scientists have prepared a statement on science underpinning this position statement.