

Appendix 1: Legislation, Regulations, Policy, and Direction Pertaining to Ecological Restoration

The practice of ecological restoration on National Forest System lands is guided by fundamental legislation, policy, and national and regional direction. Legislation mandates broadly that the national forests be managed for sustainability and multiple objectives, whereas U.S. Forest Service policy and direction focus more specifically on restoration planning and practice.

A number of federal statutes govern the restoration and maintenance of the ecological resilience of National Forest System lands and resources so as to realize sustainable multiple-use management and to provide a range of ecosystem services. Collectively, these statutes highlight the importance of maintaining forested areas to support the national welfare. These include (but are not limited to) the following legislation, listed in chronological order:

- **Organic Administration Act of 1897 (16 USC 475, 551).** The Organic Act defines the purpose of national forests, and directs that “[n]o national forest shall be established, except to improve and protect the forest within the boundaries, or for the purpose of securing favorable conditions of water flows, and to furnish a continuous supply of timber for the use and necessities of citizens of the United States.” The act directs the secretary of agriculture to “make such rules and regulations . . . to preserve the (national) forests from destruction.”
- **Multiple-Use Sustained-Yield Act of 1960 (16 USC 528–531).** This act states that national forests are to be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes. The act directs the secretary of agriculture to manage renewable surface resources of national forests for “multiple use” and “sustained yield.” Multiple use refers to the management of the diverse renewable resources of national forests in a balanced combination that will best meet the needs of the American people, providing for periodic adjustments in use to conform to changing needs and conditions, and “harmonious and coordinated management” of the resources without impairment of the land’s productivity. Sustained yield refers to achieving and maintaining in perpetuity a regular output of renewable resources without impairing the productivity of the land.
- **Forest and Rangeland Renewable Resources Planning Act (FRRRPA) of 1974, as amended by the National Forest Management Act (NFMA) of 1976 (16 U.S.C. 1600–1614, 472a).** The FRRRPA and NFMA state that the development and administration of National Forest System renewable resources are to be in accordance with the concepts for multiple use

and sustained yield of products and services as defined in the Multiple-Use Sustained-Yield Act of 1960. The FRRRPA and NFMA establish that all forested lands in the National Forest System shall be maintained in appropriate forest cover with species of trees, degree of stocking, rate of growth, and stand conditions designed to secure the maximum benefits of multiple-use, sustained-yield management in accordance with land management plans. The FRRRPA and NFMA set the requirements for land and resource management plans for units of the National Forest System, including requiring guidelines to provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives. The NFMA also requires that national forest lands “shall be (periodically) examined... as to stocking rate, growth rate in relation to potential and other pertinent measures. Any lands not certified as satisfactory shall be returned to the backlog and scheduled for prompt treatment. The level and types of treatment shall be those which secure the most effective mix of multiple-use benefits.”

- **Healthy Forests Restoration Act (HFRA) of 2003 (16 U.S.C. 6501–6591).** The HFRA provides processes for developing and implementing hazardous fuel reduction projects on certain types of “at-risk” National Forest System and Bureau of Land Management lands, and also provides other authorities and direction to help reduce hazardous fuels and protect, restore, and enhance healthy forest and rangeland ecosystems.

Postfire restoration is often limited by funding constraints. In some cases, “fire cost recovery settlement funds” may be available where settlements or litigation for environmental damages caused by wildfires have resulted in receipts to the federal government. Disbursement of these funds is regulated by Public Law 85-464 of 1958 (16 USC 579c). Section 7 of Public Law 85-464 states that such monies will be “made available until expended to cover the cost to the United States of any improvement, protection, or rehabilitation work on lands under the administration of the Forest Service rendered necessary by the action which led to the forfeiture, judgment, compromise, or settlement.” In a Forest Service correspondence dated March 20, 2014 (file code 6520/3900), the Pacific Southwest Region regional forester directed that national forests develop business plans and processes to expeditiously use such fire settlement funds. Attachment A of the correspondence notes that neither fire resource damage assessments, nor settlement agreements, judicial decisions, nor any other documents issued in relation to Forest Service fire cost-recovery litigation direct how the Forest Service uses these funds or how the Forest Service prioritizes restoration activities funded by them.

Forest Service policy focuses more directly on ecological/ecosystem restoration and management practices that promote long-term sustainability and resilience to climate change. The following regulations and policy documents are especially pertinent:

1. **The USDA Forest Service Planning Rule of 2012 (36 CFR 219)** implements requirements under the NFMA for National Forest System Resource Planning and is designed to ensure that plans provide for the sustainability of ecosystems and resources; meet the need for forest restoration and conservation, watershed protection, and species diversity and conservation; and assist the agency in providing a sustainable flow of benefits, services, and uses of National Forest System lands. The planning rule establishes requirements to guide development, amendment, or revision of land management plans to maintain and restore ecosystems while providing for ecosystem services and multiple uses. The planning rule emphasizes restoration of natural resources to make National Forest System lands more resilient to climate change, protect water resources, and improve forest health. Plans are required to take into account the interdependence of ecosystems, impacts from and to the broader landscape, system drivers and stressors, including climate change, and opportunities to restore fire-adapted ecosystems for landscape-scale restoration.
2. **Forest Service Manual 1020 (Forest Service Mission)** sets out objectives and guiding principles to realize the agency's mission. The mission of the Forest Service is to "sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations." FSM 1020.2 (Objectives) states the following Forest Service objectives:
 - Advocates a conservation ethic in promoting the health, productivity, diversity, and beauty of forests and associated lands
 - Protects, restores, and manages the national forests and grasslands so they best demonstrate the sustainable multiple-use management concept
 - Develops and provides scientific and technical knowledge aimed at improving the capability to protect, restore, manage, and use forests and rangelands
 - FSM 1021 lists guiding principles. The first two are as follows:
 - We use an ecological approach to the multiple-use management of the national forests and grasslands.
 - We use the best scientific knowledge in making decisions and select the most appropriate technologies in the management of resources.

3. **Forest Service Manual 2020 (Forest Service Ecosystem Restoration Policy)** provides “broad guidance for restoring ecosystems on National Forest System lands so that they are self-sustaining and, if subject to disturbances or environmental change, have the ability to reorganize and renew themselves.” The objective of the policy (FSM 2020.2) is as follows:
- Ecosystems (are) ecologically or functionally restored, so that over the long term they are resilient and can be managed for multiple use and provide ecosystem services.

FSM 2020.3 directs the Forest Service to “emphasize ecosystem restoration across the National Forest System and within its multiple use mandate.” Further, Forest Service land and resource management plans, project plans, and other activities may include goals or objectives for restoration. In developing restoration goals and objectives, the Forest Service can consider a suite of factors, including the following:

- Public values and desires
- The natural range of variation (NRV)
- Ecological integrity
- Current and likely future ecological capabilities
- A range of climate and other environmental change projections
- The best available science information

The January 2006 Ecosystem Restoration: A Framework for Restoring National Forests and Grasslands (USDA 2006) provided several additional recommendations for the planning and implementation of restoration projects, including the following:

- Consider the effects of restoration at local and landscape levels
- Give priority to restoring ecosystem processes, such as natural fire regimes
- Establish objectives for the long term
- Recognize that ecosystems are dynamic and avoid “static endpoint” thinking
- Use multiple sources of relevant information, such as historical records, scientific studies, practical experience, and indigenous knowledge
- Deal with uncertainty by using adaptive approaches to restoration
- Design and implement monitoring as part of restoration and use this information to learn and adapt

The Forest Service Pacific Southwest Region (Region 5) has also emitted specific direction related to ecological restoration. The Region 5 Ecological Restoration Leadership Intent (USDA Forest Service 2015) sets ecological restoration as “the central driver of wildland and forest stewardship in the Pacific Southwest Region, across all program areas and activities.” The document sets out 15 goals, including the following (paraphrased):

- Collaboratively accelerate restoration pace and scale
- Increase forest resilience through treatments and wildfire
- Restore degraded meadows
- Decrease occurrence of uncharacteristically severe forest fires and their impacts
- Expand fire prevention efforts in southern California in order to conserve chaparral and coastal sage scrub
- Ensure a grounding of restoration efforts in concern for biodiversity and ecological processes both before and after disturbances such as fire
- Reforest after wildfire where appropriate and implement suitable stand maintenance activities that meet project goals and site conditions
- Ensure sustainability of forests, resources, and carbon as climates change
- Expand watershed improvement programs
- Improve habitat connectivity
- Decrease invasive species impacts

In summary, ecological/ecosystem restoration has been identified as a major policy and management priority on National Forest System lands. The Pacific Southwest Region postfire restoration strategy adheres to and tiers to congressional legislation, as well as Forest Service policy and direction. In providing suggested guidance for planning and implementation of restoration activities in burned ecosystems, the strategy fills an important Forest Service need.

References

U.S. Department of Agriculture, Forest Service [USDA FS]. 2015. Region Five ecological restoration: leadership intent. Vallejo, CA: USDA Forest Service, Pacific Southwest Region. 4 p.