

This developing plan content is under construction and is being shared as a snapshot of thinking. Additional changes based on Forest Service and public input are expected.

Forest Health and Non-native Invasive Species

Background

Non-native invasive plant species have been identified as one of the four critical threats to USFS ecosystems. A list of the highest priority invasive plant species was developed from both botanical surveys completed during the past 20 years and non-native invasive plant inventories that were conducted across selected watersheds. Thousands of acres on the Nantahala and Pisgah NFs are known to have some occurrences of the 23 priority species; however, the exact infested acreage within the Nantahala and Pisgah NFs is unknown and changes annually. The determination of new invasive plants on the Forest could lead to an increase in the number of priority species. Many of the priority species are prevalent across the Southern Appalachian region and are continuing to spread, actively impacting native vegetation composition and structure. Control work is ongoing where non-native invasive plants are impacting rare species, unique habitats, ecozones, adjacent lands and active management areas.

In addition to non-native invasive plant species, other forest threats include insects and diseases as well as introduced wildlife species. These threats can or have had a large impact on forest ecosystems. More information about these threats may be found at <http://www.fs.fed.us/foresthealth/management/index.shtml>.

Desired Conditions

- Ecosystem diversity, function, and connectivity are minimally impacted by non-native invasive species and disease. Prevention, detection, and suppression techniques apply the best available science to existing and emerging forest health threats.
- Forest managers, with help from local, state, and national programs, are responsive to threats from non-native insects and plants. Control and management is achieved with strategic, creative, timely and adaptive actions through an integrated pest management strategy.
- Healthy native ecosystems are maintained and restored such that non-native organisms and fungi (e.g. *Pseudogymnoascus destructans*, the fungus that causes white-nose syndrome in bats, and *Batrachochytrium dendrobatidis*, the fungus that leads to chytridiomycosis in amphibians) and undesirable wildlife (such as, but not limited to, feral swine), do not adversely impact ecosystem processes to the extent practicable.
- Travel and utility corridors do not serve as vectors to spread non-native invasives.
- Integrated pest management prevents or minimizes pest problems by using the most current science and available control methods.
- Pesticide use is safe, effective, selective, and clearly communicated to the public.
- Information on non-native invasive pests is readily available to the public to minimize spread and allow for early detection and control.

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- New introductions of non-native invasive species are promptly detected and treated to minimize establishment.

Standards

- All activities with the potential to increase or result in new NNIS will be assessed prior to project decisions.
- When work is conducted in areas containing federally listed or species of conservation concern plant species, a physical barrier will be used, when necessary, to protect these plants. The physical barrier must be sufficient to protect the non-target rare species from drift and flow of pesticide.
- Off-road equipment, such as skidders, dozers, ATVs, or UTVs, is clean and free of plant material.
- Pesticide use on the forest will be approved on a project specific basis and supported by the appropriate NEPA analysis and decision. Method and timing of application are chosen to achieve project objectives while minimizing effects on non-target vegetation and other environmental elements. Selective treatment is preferred over broadcast treatment.
- When seeding temporary openings in vegetation management projects or new road construction or reconstruction, do not use non-native invasive plant species or category 1 species (regional list of species known to be invasive and persistent throughout all or most of their range).

Guidelines

- Integrated pest management, utilizing the best available science, should be implemented for control of non-native invasive species.
- Pesticides should be applied at the lowest rate effective in meeting project purposes and according to guidelines for protecting human and wildlife health.
- During management actions, retain notably live specimens of tree species in peril from current or future forest health issues.
- Tools and practices should be utilized to minimize the spread of non-native invasive plants along trails, roads, waterways, and other corridors.

Management Approach

- Use vegetation management practices, such as (but not limited to) forest thinning, forest regeneration, sanitation, biologic control, chemical application, and prescribed fire, as a means to promote and maintain more vigorous, healthy forest stands.

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- Coordinate with Federal, State, and Local pest management Agencies/Organizations and programs to adequately address current and future forest health issues.
- Forest management pest prevention programs are incorporated in standard forest practices, such as periodic training on new NNIS.
- Work with state, federal, and county partners for development of a weed-free certification for soil, gravel, mulch, hay and straw to reduce infestations of NNIS on the Forest.
- Annually update the prioritized NNIS list taking into account species on the periphery of the forest in adjacent states or counties.
- To the extent possible, work with adjacent landowners interested in controlling NNIS that are currently or could potentially spread onto the Forest.
- Implement monitoring programs to ensure long-term eradication, control, or containment and no re-invasion of NNIS.
- Provide opportunities for research test plantings, progeny tests, and small scale restoration of species lost to invasive or exotic pests and diseases where these opportunities include research and cooperator involvement and assistance where necessary.
- Consider pretreatment of NNIS prior to conducting prescribed burns.
- In cooperation with other agencies, initiate animal damage control measures when animal populations (e.g. feral swine) threaten public health or safety, or cause unacceptable damage to wildlife, timber, aquatic resources, or property.