

Cherokee National Forest Restoration Initiative

Issue: Climate Change

Climate change is already altering our nation's forests in significant ways and those impacts are very likely to accelerate in the future -- in some cases dramatically. Adaptive management and a vibrant monitoring program will become critical in the uncertain environment of climate change.

Restoring the health and maintaining the resiliency of our public lands, including the Cherokee National Forest, is crucial for adapting to the effects of climate change. Forests work as carbon sinks – trapping carbon dioxide in the trees and the soil.

Mitigation and adaptive management for climate change impacts presents challenges for land stewardship and restoration for our national forests. A sensible, science-based management approach, which takes into account the important service these forests provide, will maximize carbon storage and result in a healthy, resilient landscape which will have greater capacity to survive natural disturbances and large scale threats to sustainability -- especially under changing and uncertain future environmental conditions such as those driven by climate change and increasing human uses.

The principles provided here are designed to reflect and incorporate current science and provide for resilient forests and also holds great promise for secondary benefits to wildlife, water and recreation.

We expect that management approaches will be updated as science evolves and policy develops. At this time, the following is a list of minimum items recommended to be addressed at the planning stages when developing restoration projects:

Principles:

- Climate change is a factor to be considered in the delivery of our overall recommendations and implementation of restoration activities.
- Use the best available science on climate change that is relevant to the planning unit and the issues being considered in planning.
- Where necessary to make informed decisions and provide planning direction responsive to changing climate, use climate change science and projections of change in temperature and precipitation patterns at the lowest geographic level (national, broad, mid-, base) that is scientifically defensible.
- Address climate change during project planning in terms of “need for change” so that the unit will continue contributing to the diversity and health of the forest.
- Forests should be managed in ways that will increase their capacity to sequester and store carbon and reduce their carbon emissions.

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- Place increased value on monitoring and trend data to understand actual climate change implications to local natural resource management.
- Integrate restoration planning to Forest Land Management Rule and CNF Forest Plan climate objectives and guidance.

These principles need to be reflected in our Cherokee National Forest Restoration Initiative Final Report and accompanying recommendations. This guidance should set an appropriate level of consistency across the forest for treating climate change in land management planning and restoration objectives. This should provide some level of flexibility for units to focus on what is relevant locally to mitigate and adapt to climate change.

It is therefore prudent to support approaches that have few environmental drawbacks and many collateral benefits which draw support from a wide variety of stakeholders as these strategies also protect biodiversity, open space, water quality, recreation and other increasingly threatened public values. Management strategies should take an integrated approach to forest restoration and stewardship in order to be cost-effective and to carefully address and enhance the array of ecosystem services.