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# CHEROKEE NATIONAL FOREST LANDSCAPE RESTORATION INITIATIVE



**Stakeholder Assessment Report**

**September 30, 2010**



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## THE CHEROKEE NATIONAL FOREST: A BRIEF OVERVIEW

The Cherokee National Forest (CNF) was established by President Roosevelt in 1936 from four separate forests created in the 1910s and 1920s. Today, it comprises 650,000 acres of contiguous forest in southwestern Virginia, east Tennessee, northwestern North Carolina and northern Georgia. The national forest's headquarters are located in Cleveland, Tennessee. The forest lies in the heart of the Southern Appalachians and is the largest tract of public land in Tennessee. The Appalachian Mountains comprise one of the most biodiverse areas in the world and are home to more than 20,000 species of plants and animals.

The forest offers many recreation benefits to the public. The forest receives two million visitors a year. It has thirty developed campgrounds and thirty picnic sites. There are over 600 miles of trails through the forest, including 150 miles of the Appalachian Trail. There are eleven designated wildernesses, which comprise a total of 67,000 acres, as well as two scenic byways: the Ocoee Scenic Byway and the Cherohala Skyway. The Ocoee Whitewater Center, which was home of the 1996 Olympic Canoe and Kayak Slalom Competition receives 300,000 visits a year.

The forest is home to 43 species of mammals, 55 species of amphibians and reptiles and 154 species of fish. The fish include trout (brown, rainbow, and brook), bass (small and large mouth), sunfish, catfish, crappie and perch, which inhabit over 500 miles of cold-water streams. There are 72 species of commercial and non-commercial trees.

## PURPOSE OF THE REPORT

This report was created to inform the deliberative process of the Cherokee Forest Landscape Restoration Initiative (CNFLRI). The Initiative covers the Tennessee portion of the northern section of the forest. The Nature Conservancy convened the group to engage diverse interests to establish a common vision for how to restore the Cherokee Forest. The CNFLRI Steering Committee members represent a diverse cross-section of key stakeholder interests, including affected conservation groups, wildlife/hunting organizations, forest product businesses, concerned residents, federal, state and local governments and other interests. Its thirteen members will continue their work through 2011. The purpose of the committee is to ensure that the Cherokee Landscape Restoration Initiative focuses on both the long-term, science-based ecological restoration and management of the forest's native vegetation, rare communities, watersheds and aquatic systems and on maintaining and improving the forest's overall health.

The work of the CNFLRI committee does not replace or have authority over the existing Forest Management Plan for the Cherokee National Forest that was developed by the US Forest Service (A copy of that plan can be found here <http://www.communityplan.net/cherokee/background.htm>). The plan lays out areas where certain management practices are needed or allowed. The CNFLRI follows the plan's current management prescriptions based on how forest areas are designated, such as such as "wilderness; wilderness study area; eligible wild or scenic or recreation river; Appalachian Trail corridor; cultural/heritage areas, scenic area; Roan Mountain; administrative sites; designated communication/electronic sites; scenic by-way corridors; sensitive viewsheds; OHV use areas; concentrated recreation zones; dispersed recreation areas suitable for timber harvest; mixed successional habitats; early successional habitats emphasis; black bear habitat management; rare communities; management, maintenance and restoration of plant associations to their ecological potential; riparian corridors ,streams, lakes, wetlands and floodplains; remote backcountry recreation-few open roads; and remote backcountry- non-motorized."

The CNFLRI is working to evaluate the current condition of the forest to make recommendations to help restore the forest to a more natural state based on what forest types might be expected or what types are in decline. The CNFLRI is not seeking to change any of the overlying land use designations such as "wilderness" areas because that is already dictated within the current forest plan. However, the condition of the forest within these areas *is* a focus of the initiative. In short, the CNFLRI is developing better data about existing forest conditions, determining needs for restoration efforts and suggesting ideas for how restoration projects could be achieved. All of this work will operate within and under the dictates of the current adopted forest plan.

The committee will work collaboratively with the Cherokee National Forest to identify and prioritize the needs for restoration, then design and initiate a robust public participation component that utilizes a variety of resources, including national, regional and local community expertise. Results will be compiled and presented as a set of recommendations to the Cherokee National Forest and will hopefully be considered as part of future management decisions.

## LANDSCAPE RESTORATION INITIATIVE PROCESS

The Landscape Restoration Initiative process will be completed by the summer of 2011. The Committee's approach emphasizes public participation and information-sharing, in order to decide upon community-supported and science-based methods for forest management and ecological restoration. The objectives of the initiative are to:

- Define a common vision for the ecological restoration and management of the forest.
- Engage and re-engage a diverse group of stakeholders interested in ecological restoration and management of the forest, including stakeholders from the local communities and other individuals or groups who are interested in participating in the process.
- Provide a structured process designed to engage a diverse group of stakeholders.
- Recommend a plan for the implementation of ecological restoration that will include specific measurable objectives and will prescribe explicit management actions that are consistent with the mission of the Forest Service.
- Establish a system for monitoring and evaluating restoration activities to allow for adaptive management over time.
- Prepare and submit a final report for the Forest Service to utilize in developing projects to restore the forest.

The final twelve months of the initiative will be devoted to a series of stakeholder meetings and workshops designed to share research and resource information, as well as to solicit public input and involvement. During this series of meetings, the committee will work in a step-wise fashion toward defining specific measurable goals for restoration and management of the CNF.

The public meetings will provide stakeholders with the opportunity to interact with experts within a variety of natural resource fields, engage with other participants, have meaningful discussions, and collectively influence the process for making specific management recommendations to the Forest Service.

Finally, the group will establish monitoring protocols and an evaluation process that will keep stakeholders informed of the progress of the Landscape Restoration Initiative – providing for their ongoing participation and input.

## STAKEHOLDER ASSESSMENT REPORT

The committee requested this stakeholder assessment report to inform its deliberations about the interests, needs and desires of the local community. The stakeholder community includes anyone who has a direct interest in how the forest is managed, whether they depend on it for their livelihood, personal enjoyment and recreation, have regulatory authority concerning its management, or simply value the forest for the many benefits it provides – such as wildlife habitat, clean water or natural beauty.

This assessment report is intended to document the concerns and recommendations of a selected subset of interested parties in order to:

- Inform the committee concerning issues or concerns that need a high level of attention and focus.
- Gauge the level of interest in the upcoming work of the committee and broaden participation.
- Suggest opportunities for improvement of community engagement in the process going forward.

Assessment reports are traditionally conducted at the beginning of a facilitated deliberative process to understand initial perspectives of key stakeholder groups. It is likely that some of these perspectives will change over time as new information is developed or shared.

There will be additional opportunities to comment or provide insights on this process through public workshops, regularly scheduled committee meetings, or by emailing or contacting the process facilitators. Anyone wishing to review the work of the committee, to read the operating procedures or who is planning to attend a meeting should visit the project website at: <http://www.communityplan.net/cherokee/index.htm>.

In order to reach community-supported and science-based methods for forest management and implementing ecological restoration on the ground, the CNFLRI's approach emphasizes public participation and information sharing. The CNFLRI's committee understands that the CNF has pre-defined procedures for determining its management decisions. These procedures remain in place and have final authority over all action taken or not taken within the CNF. The committee's role is deliberative only. While the committee may make suggestions or requests, they are not binding on any government agency.

### METHOD

The findings of the report do not reflect the opinions of the CNFLRI. This report summarizes 30 stakeholder interviews conducted in the summer of 2010. Interviews were conducted by the project's facilitators Karen Firehock and Melinda Holland of E<sup>2</sup> Inc. A copy of the interview questions can be found in Appendix A.

The list of interviewees was developed collaboratively by the CNFLRI Committee to include a diverse representation of the various forest interest groups, such as fire ecologists, loggers, recreation groups, conservation and sportsmen's groups, wildlife and forest advocacy groups, researchers, and local, state and federal agencies. These 30 interviews (31 people) represent a snapshot in time of the opinions of several key interests. However, this is not a statistically relevant sampling of all possible interests, nor does this report represent every possible viewpoint on the forest's current or future condition.

This document summarizes the key points elicited from the interviews. However, as a "summary" this document does not contain every comment made by interviewees. Interview subjects are referred to in this document as "participants." All interviews were conducted as confidential inquiries, so none of the information is attributed to specific individuals. In cases where exact quotation facilitates understanding, quotation marks are used, but the quote is not attributed. This report is also not a scientific evaluation of the forest's current condition or recommended management actions. That work is being conducted elsewhere by the Committee over its 14-

month process. For more on the Committee's work plan and timeline, please see: <http://www.communityplan.net/cherokee/index.htm>. For more on the Enhanced Conservation Action Process now being used by the committee, please see Appendix B.

Words that indicate relative rate of response are utilized. A "few" refers to two to three people, "several" refers to five to seven people, "one third" or "many" equals approximately 10 people, "half" references 15 people and the "majority" or "most" at least 25 people. Readers of this report are not encouraged to use this as a way to mathematically tally support for one view or another. These numbers are provided to give a sense of whether more than one person supported an idea and the relative amount of respondents who agreed. However, readers of this report are reminded that, since this is a summary of discussion interviews, the absence of someone bringing up an issue did not mean that they do not support it (or vice versa). Therefore, using statements, such as several or many, to tally votes for or against an idea in this report is strongly discouraged by the authors.

**The following is the list of interviewees:**

Fred Alsop, Professor of Biology, East Tennessee State University and Partners in Flight  
Keith Belli, Professor, Department of Forestry, Wildlife and Fisheries, University of Tennessee  
Ted Daily, District Forester, Tennessee Division of Forestry  
\*Dennis Daniel, National Wild Turkey Federation  
Sean Fisher, President, American Chestnut Foundation, Tennessee Chapter  
Dick Grayson, Mayor, Johnson County, Tennessee  
Sandra Goss, Tennessee Citizens for Wilderness Planning  
\*John Gregory, Tennessee Wildlife Resources Agency  
Craig Harper, Professor of Forestry, Wildlife and Fisheries, University of Tennessee  
Randy Hedgepath, Tennessee State Naturalist and Tennessee State Parks  
\*Steve Henson, Southern Multiple Use Council  
Julie Judkins, Resource Program Manager, Appalachian Trail Conservancy, Southern Office  
Roy Knispel, Tennessee Ornithological Society, Herndon Chapter, Bristol Bird Club  
\*Dwight King, Logger and Sullivan County Commissioner  
Robert Klein, Fire Ecologist, Great Smokey Mountains National Park  
Mike LaVoie, Fish and Wildlife Specialist, Eastern Band of the Cherokee Indians  
Greg Lynch, Mayor, Unicoi County, Tennessee  
Joe McGuiness, North Zone Wildlife Biologist, Cherokee National Forest, USDA Forest Service  
\*Katherine Medlock East Tennessee Program Director, The Nature Conservancy  
Matt Moses, Director of Sales and Marketing, Mountain Adventures Guides

Claudia Moody, NE Tennessee Tourism Association

\*Catherine Murray, Director, Cherokee Forest Voices

\*Steve Novak, Senior Staff Attorney, Wildlaw, Southern Appalachian Office

\*Danny Osborne, Division of Forestry, Tennessee Department of Agriculture

Josh Parker, Environmental Regulatory Specialist, Eastern Band of the Cherokee Indians

Dave Pelren, US Fish and Wildlife Service

\*Terry Porter, Tennessee Forestry Association

Larry Shoun, Owner, Shoun Lumber

Morgan Summerville, Regional Director, Appalachian Trail Conservancy, Southern Office

\*Mark Shelley, Director, Southern Appalachian Forest Coalition

\*Parker Street, Ruffed Grouse Society

*\* Also a member of the CNFLRI Advisory Committee.*

## ASSESSMENT INTERVIEWS: OVERALL FINDINGS

Participants were asked to select the top three issues faced by the forest that should serve as the focus of the restoration initiative. The following table shows the top choices, listed in order of preference.

Table 1: Priorities of Interviewees

Issue	Prioritized by
Forest and wildlife habitats	19
Streams, wetlands and other aquatic habitats	18
Timber	11
Invasive plants and insects	11
Rare habitats (bogs, etc.)	10
Scenic values/tourism	6
Game wildlife species	5
Recreation opportunities	5
Non-Timber Forest Products	3
Woody biomass	0



Several participants commented that *all* issues were important. Several others noted that, if forest and wildlife habitats were restored and improved, other values, such as game and wildlife species or recreation, would be addressed as a matter of course, since they are dependent on the health of the forest. For example, when habitats are healthy, they are likely to support the wildlife that hunters and fishermen depend on to enjoy their sport. Similarly, scenic values will be supported when the forest habitat is in good shape.

Invasive plants and insects were noted as a top pick by a third of the participants. Several participants noted that habitat damage from pests has an impact on scenic views because ridge tops are more sensitive to damage and are highly noticeable when they are defoliated by pest infestation.

## COMMENTS AND CHALLENGES

Participants were also asked to comment the importance of the issues and on any challenges the committee may face as it addresses these issues. The comments on the issues, as well as on the key challenges, are summarized below. Note that they have been edited and combined. Quotations (" ") indicate that the comment is a direct quote (without attribution, so as to protect confidentiality).

**FOREST AND WILDLIFE HABITATS:** Forest and Wildlife Habitats received approximately two thirds of the votes (as indicated in the chart) as a top priority. For those who selected this as a top issue, they also discussed how this might be achieved in terms of new or altered management of the forest. Those who were foresters, or those involved in that industry tended to focus on the need to better manage the timber and advised selected clear cuts as a way of providing a diversity of forest habitats for wildlife. One participant noted that, while many members of the public object to any clearcutting in the forest, clear cuts of under 100 acres can provide important habitat. However, several participants noted that how cuts are done and for what purpose are very important to consider. One participant noted that, in order to improve habitats, having natural oak and hickory stands and white pine are key. They explained that, "We need different age classes and different species of stands – age classes being the most important, as that relates to the type of wildlife – small early successional stands are important to ensuring adequate habitat to foster species diversity." Another participant noted that we need to consider what type of forest age to manage for and ensure that if we want to protect a particular species, then we should understand its habitat needs. He gave the example of ruffed grouse whose habitat needs are sometimes just noted as 'open space' but what they actually need is "young forest habitat" (2-20 years old), not early successional habitat.

Participants also noted the importance of emphasizing a diverse habitat as one way to get to a healthful forest. A sentiment that was echoed by many and best stated by one participant was, "Diversity is the spice of life. If a diversity of habitat types is protected, then the forest should be able to support its native species." It was noted that large blocks of contiguous forest are needed to support habitat for native wildlife. For example, the cerulean warbler needs large blocks of interior forest habitat.

Challenges to managing forest and wildlife projects concerned the controversy over whether or not projects that are conducted as *wildlife projects* were truly undertaken for that reason. Several participants questioned the validity of cuts that they felt were more intended for economic gains than for wildlife (for more see discussion on timber following). One participant commented that "The biggest conflict is (there are) no funds to close a road or restore a habitat and they (loggers) often cut adjacent older mature stands and call it part of restoration. Also fire demands take away from the budgets for other things like habitat work."

Several participants also noted that there is greater controversy concerning older trees, since they might be viewed as "old growth" and environmentalists feel these can be left alone to let nature take its

course. One participant suggested that seeking to cut more younger forest areas could help to get around the concern over harming "old growth" forest and noted that "We need to find areas in younger stands where early succession can take place with minimal conflict."

Bats were also highlighted as a species of concern, especially Indiana bats, which require certain trees for summer roosting. Other endangered species have specific habitat needs, such as rock outcrops or sandstone bluffs. Other impacts to wildlife can come, not just from habitat loss, but also from diseases. Three participants noted that White nose syndrome, which affects cave-dwelling bats and is caused by a fungal pathogen, has been documented in the Great Smoky Mountain National Park in White Oak Blow Hole Cave, so there is an expectation that it will spread into the Cherokee National Forest at some point.

**STREAMS, WETLANDS AND OTHER AQUATIC HABITATS:** This was the second highest vote getter at 18. Participants who selected this category noted the importance of the Cherokee Forest in recharging groundwater supplies and protecting headwater streams that provide drinking water to human communities. Many rare species are also associated with aquatic habitats, such as cranberry bogs.

Challenges noted here were the ability to accurately monitor the water resources and to conduct restoration work in sensitive riparian areas. A few participants felt that it is almost impossible to get permission to work in riparian areas, while a few others noted that it can be done as long as extra care is used to design a project that is not too impactful.

**TIMBER:** Timber received about a third of the votes for making it a priority issue. While several participants wanted more timber harvesting in the Cherokee, some noted that there is no shortfall of timber locally. They explained that, despite the lower levels of harvest within the national forest, timber is still very important to the local economies. One participant noted that the decline in harvest had resulted in changes to the local infrastructure for wood harvest, because when timber harvesting is not managed, the mills eventually leave and then timber must be trucked farther for milling. They stated that, "Mills have closed there around the Cherokee, so we don't have the infrastructure that we used to."

Challenges for timber included the need to avoid impact of endangered species habitats. For example, one participant explained that managing the land for timber production could increase impairment of bat habitat needed outside of the cave environment. He added that most endangered and threatened species in Cherokee National Forest impact tens, hundreds and sometimes thousands of acres. He added that the presence of threatened aquatic species can affect the entire drainage, but these areas are probably not fully mapped for the Cherokee.

Another participant wondered about perceptions concerning reduced harvest of timber from the Cherokee. They asked whether the mill closures from reduced supplies have led to lingering animosity within surrounding communities. They also noted that if there are continued (sustained) projects in the Southern Appalachians, then there would be fiber coming off the National Forest, but of a different type and quality than in the past. It will be smaller diameter, require different jobs thus necessitate a need for retraining for new forest industry jobs. Several participants also wondered about the sustainability of large scale biomass production, but they did not have enough information to evaluate its impacts.

Many participants cited the challenge of the public's perceptions of tree harvesting, whether it was cutting a few trees because of disease, or clear cutting hundreds of acres. One participant explained that, "People do not want to see timber cut in the Cherokee; they do not understand the science of forest management, they think a clear cut is 500 acres; they do not know what a clear cut does. A few times a month, I hear about virgin forests that people think they have. I help guide people through the

timber selling process and I write management plans for them. There are a lot of stands that have been high-graded and need clear cutting now.”<sup>1</sup>

Another challenge noted was dealing with old plantations within the forest are areas where white pine has taken over. One participant stated that "There are lots of offsite white pine where it has taken over. So even if old white pine areas are available, then we still might want to get rid of them and switch to natives. They aren't well clustered together so it will be complicated."

**INVASIVE PLANTS AND INSECTS:** This issue was selected by one third of interviewees as a significant problem, both now and for the future. One participant explained that, “The more dramatic changes seen are related to damage to yellow pines from southern pine beetles and that has occurred over the past 10-12 years. The difference is the pine forests in the Appalachians are out of whack and fire suppression has resulted in epic damage from the beetles. Another big change is the loss of hemlock that has occurred from the woolly adelgid.”

The gypsy moth, borers (oak) and the hemlock wooly adelgid were all noted as pending pest threats. Similarly, dogwoods have been harmed by dogwood anthrax, though it was noted that, if the tree has enough light, it can withstand the disease. Since moisture affects the ability of the fungus to spread, opening the canopy helps the dogwood to survive.

A key challenge brought up by several participants was that the forest needs to be healthy in order to withstand the onslaught of invasive species. Several interviewees mentioned the necessity of using chemical control along with other methods to successfully control invasive plants. They noted that some members of the public and environmental groups do not understand that these chemicals can be used safely without harm to watersheds, streams or wildlife. They stressed the need for more education on how to control invasive species to build public acceptance and support. A few participants commented that CNF staff currently do little or nothing to control invasive plants, perhaps due to fear of public resistance.

**RARE HABITATS (BOGS, ETC.):** One third of participants selected rare habitats as most important. Managing the forest to foster desired habitats was highlighted as an issue needing more attention by several participants. As an example, one stated that, “The balds and open areas in CNF have some native grasses, but there has been a long debate over what is ‘natural’ for the balds and the issue of stopping forest encroachment into the balds.”

Challenges for bog areas centered around their need for active management. Two participants noted that the challenge for rare habitats such as bogs, is that they may often need active management in order to remain in place, since encroaching trees may cause them to dry out as tree roots absorb and evapotranspire the water. Although managing the bogs by active tree cutting is artificially enabling the bogs to remain in their current locations, the participants felt that so many bogs had likely been destroyed outside of the national forest boundaries, that the Forest Service should make the effort to conserve these rarer habitats within the forest, especially since they may also contain threatened or endangered species.

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<sup>1</sup> High grading, the act of selectively cutting the highest quality trees and leaving the rest, has the potential to leave a forest deficient and unable to reproduce the stock that is the highest quality in future years.

**SCENIC VALUES/TOURISM:** This topic received one fifth of the votes. Several participants suggested that restoration projects may be very important around camping and fishing areas, where tourists are more likely to notice damaged habitats. Also, when dollars are limited, it may be important to focus efforts on hemlock restoration in stream valleys to provide natural beauty and stream valley protection. It was noted that the Cherokee Forest is very important for tourism and tourism-related income, such as from visitors who also stay at bed and breakfasts or visit local stores for hunting, fishing or camping supplies. North East Tennessee was noted as the fastest growing region for tourism in the state and much of this was attributed to the many activities and scenic values offered by the Cherokee Forest.

Challenges included the need to ensure that highly visible and visited areas do not suffer from unsightly damage. For example, participants noted the need to protect and enhance the vistas from highly visible blight (large clear cutting was given as an example of blight). Several noted the importance of scenic values and tourism in counties where the forest encompasses a significant land mass, such as in Johnson County, where it covers 30 percent of the land area. Some local government and business interviewees stressed the need for restoration and enhancements in CNF to increase tourists' use of the forest.

One participant noted that "We often use images of the forest in advertising. It's a resource and a tool and we want people to respect it and protect that pristine, unique, lush area and not have to worry about anyone trashing it or running you down (on an ATV). Also the AT(Appalachian Trail) comes through there too. In Erwin people coming off the trail are important to the town. There is a lot here to protect and this all revolves around our beauty recreation -- scenery, outdoor recreation and heritage."

**GAME WILDLIFE SPECIES:** One fifth of participants selected this category. There was discussion concerning the types of habitat needed by some game species (for more see timber and wildlife section of this report).

A challenge noted by several participants was a lack of game species diversity. One participant stated that, "There is not enough diversity of game currently in the Cherokee and deer and grouse have dwindled, while bear has increased and turkey probably has increased." Some participants attributed this to the forest being off balance and not containing the diversity of habitat types needed to support the full range of native species adequately. However, one participant questioned whether game species should be considered noting that "There is too much emphasis on game species. I have seen a lot of the logging disguised as promotion of game and wildlife species habitat. Traditionally, we've just meant log a mature forest."

One participant also suggested that emphasis should be placed on funding restoration of small game habitat. They explained that "I don't have to buy a permit from the Cherokee for small game. But anyone who uses the forest should have to pay the same to support our wildlife management efforts."

**RECREATION OPPORTUNITIES:** One fifth of participants selected this category. Several also noted that while it is important for forest users, it is largely outside the scope of the CNFLRI. Challenges centered around user conflicts and incompatible uses. Several participants noted that there will always be conflict in the Cherokee because of its multiple-use mandate. While the national forests were originally created to provide the nation with a reliable, long-term timber supply, the increasing focus on other uses, such as recreation, have made it more difficult for them all to exist in tandem.

**NON-TIMBER FOREST PRODUCTS:** While only a few participants selected this as a key issue for focus, several pointed out that not much is known about the harvest for various non-timber products. Challenges centered around a lack of adequate data. Some participants noted that, while there is a lot of non-timber harvest activity going on, for example, of ramps, grapevines and ginseng, little is known about the impacts of gathering. One participant explained that there are likely to be gatherers who do

not obtain permits and there are not adequate data about existing conditions or both pre- and post-harvesting of these products.

**WOODY BIOMASS:** Although this issue received no votes, a few participants made comments about it. Several participants thought woody biomass was outside the scope of a restoration focus. However, several others commented that there is uncertainty as to what effect woody biomass harvesting could have on the forest, as it depends so much on market demand, as well as on which types of energy facilities would process the biomass and where they are located. They did not see it as a top issue, but they felt it was something about which more should be learned.

## DISCUSSION

The following discussion session contains key themes found in the interviews. As a semi-structured interview process, participants were asked specific questions (see Appendix A) as well as follow-on or clarification questions. In addition to summarizing rankings of individual focus areas, the interviewers also looked for key themes or issues that were brought up in discussions by a participants. The following broad heading Restoration and Active Management reflects a central theme discussed by participants. While at least two thirds of interviewees agreed that restoration is needed, they diverged on how restoration might be achieved. Based on this discussion and ideas from participants, the last part of the document includes several recommendations for the CNFLRI Committee to consider moving forward.

### RESTORATION AND ACTIVE FOREST MANAGEMENT

Many interviewees questioned how restoration would be defined and determined. There was concern expressed about how this committee process will determine the current condition of the forest and how restoration will be defined. Participants wondered to what state the forest would be restored. In Appendix B there is a description of the process and tools that the CNFLRI will use to address understanding the current condition of the forest and what should be the restored condition.

Many of the interviewees called for the need to actively manage the forest which they defined as involving some harvest. One participant stated that, “Active management is crucial to this forest; no management equals no timber and equals decline of the forest. Management paralysis is not a timber issue.” Several participants raised the concern that, by not managing the forest and removing older or damaged trees, we are essentially creating a “buffet table for the gypsy moth.” Another participant explained that oak regeneration is an issue: “People want to see oaks. Leaving the forest alone, you will lose your oak and hickory. They do not understand what is needed to create it and maintain it.”

Many participants expressed concern that the Forest Service is not able to manage the forest actively. One participant noted that, “Fear of litigation by a few keeps the Forest Service from doing active management and what should be done to help the resources in the forest. We want to see the science be the guiding line. We can always get people to agree on wildlife, but yet when science calls for active management people object to it. It's good to hear the public's views and their concerns can be addressed through education, once they learn what science says, even if it does not look good.” Another participant summed the issue up this way: “Politicians feel harvesting timber on public lands is not good, the forest should be a museum they think – they think this at all levels, from local to state to feds, but mostly feds. The courts have been a big influence and judges and lawyers are deciding and taking it (management) away from natural resource professionals. The political climate has been the biggest influence. Court decisions in the west have had an effect on the east to bring harvest to a very minimum. The USFS is still in the never-ending loop of analysis paralysis.”

Several participants brought up the issue of the appropriateness of management from a historic context. Several participants questioned the notion of Europeans finding a virgin forest and noted that active management has

occurred as long as there have been people on the landscape. They noted that the Cherokee has been actively managed since colonization – and even before that by the Indians – and felt that there is far less management going on today than in the past. It is thought that the local Indian tribes instituted burns to clear underbrush for hunting, as well as to clear land for crops and other uses, which promoted openings in the forest and different age classes of trees.

Many participants expressed frustration that the prescriptions in the current forest management plan are not being carried out. Several felt that this has led to a decline in early successional habitat and resulted in declines in several native species. One participant expressed concerns that ESH (early successional habitat) is only counted when it is greater than two acres, so natural succession is not counted, only man-created ESH, which is caused by larger clear cuts.

Several participants pointed out that we need to actively restore the Cherokee Forest because human interventions have caused it to become “severely out of balance.” Suppression of natural fires in order to protect the properties of those who live near the forest was cited as an example for how the forest is prevented from developing in a more natural state. In discussing why current management actions are inadequate, participants noted that only a few restoration projects a year are being implemented, mostly because of the controversy surrounding any proposals to engage in management. Getting projects through the National Environmental Policy Act (NEPA) process can take years to accomplish, so the Forest Service cannot respond to pressing needs. While public scrutiny is important and provided for by regulations, some participants felt that even projects that should have been noncontroversial had been “stalled or killed completely.”

While many participants urged active timber management as critical to restoration, several participants raised concern about timber management and pressures to cut trees to justify the financial return for projects. One participant said, “Timber production and timber management goal is not so compatible with wildlife habitat promotion and scenic goals.” He added that the “US Forest Service calls things restoration that are cuts and they just need money –but it leaves things off like road decommissioning, since no cuts are associated with that. Water quality is not taken into consideration. Monocultures are still there from old clear cuts, but they are not looking at those areas. Just cutting is not getting us restoration; we need a watershed approach, look at diversity and age structure.”

Several participants criticized timber as the driving issue behind every Forest Service decision. They felt that it should be a byproduct of a restoration project and not the main goal. Several participants also noted that the best uses for wildlife should be considered first with far less emphasis on making money for the Forest Service. Several participants felt that goals for habitat restoration could be compatible with harvesting some timber as long as the project is not impairing wildlife diversity to get to the timber. Several also noted the need for better information on what habitats are most in need of restoration such as “protect Carolina Hemlock, fix an eroded stream, more fields etc.”

What scale of management is needed and for what purpose are the questions that lie at the heart of the concerns expressed by participants about how to restore the forest. One participant explained this as, “Harvesting is a key component of forest management and fire prevention. We need some harvest, either selective or small clear cuts, to promote wildlife habitat, ecological succession, new growth; prevent fuel buildup; provide forestry career opportunities. Recreational opportunities, hunting , etc are funded by timber sales. Harvest doesn’t have to mean large clear cuts or other harmful practices.”

Several participants pointed out that the challenge to active management lies in the fact that, while many people might agree that the forests needs to be “managed,” there is disagreement on what that means. For example, do there really need to be clear cuts? And if so, what size? Another participant commented that, “Monocultures are still there from old clear cuts, but they (USFS) are not looking at those areas. Just cutting is not getting us restoration; we need a watershed approach, look at diversity and age structure.” Some expressed concern over the need for active oversight of even small clear cuts to prevent habitat damage, harm to

important aquatic and forest habitat, control of erosion and visual blight that might negatively impact tourism uses.

The challenge of what to do with old roads from past logging operations was also identified as a challenge. One group noted that their restoration efforts had been destroyed by an off-highway vehicle (OHV) group and expressed concern about whether they would be willing to volunteer to engage in future restoration projects. A few participants cited the need to access the forest for management and monitoring as a reason to ensure that at least some roads remain accessible.

Several participants noted that the USFS lacks adequate funds to conduct and monitor restoration projects. Participants also brought up the fact that the budgeting for projects often (some felt always) requires established targets for timber harvests, in order to show whether or not a project has provided adequate benefits. One participant commented that the need to set targets for timber is inherently problematic. They felt that it was important to target funds for restoration without having to achieve revenue from timber harvest. Some participants also questioned whether or not the US Forest Service has adequate staff to take on more projects. Finally, many participants wondered how or whether this project (CNFLRI) would be able to help with obtaining funding to do restoration.<sup>2</sup>

Several participants noted that many times managers do not have adequate information to make good decisions. Water quality was cited as an example of an area in which the Forest Service lacks adequate data to determine the impact of projects. A participant stated that, "They can't check the information on what are the impacts to stream quality, what are the potential outcomes from a project, or what it means to have water temperature changes for water quality."

Several participants discussed the challenge of climate change but not all agreed that anything could be done about the issue within the context of the CNFLRI. One person noted that climate change is an issue that not everyone on the CNFLRI Committee believes is happening. They added that "It's important to recognize that we are talking about a world that is changing for whatever reason. If we can agree on that, we can promote an adaptive management approach." Another participant questioned whether we need to think about if there are some ecological zones which will have great difficulty in the face of climate change and understand whether it is realistic to try to manage some areas towards conditions which may be impossible to achieve given changes which are occurring or are predicted to occur due to climate change. They suggested that we need to know what are the relative vulnerabilities of various zones/habitats/species to changing climate; the bio-physical conditions needed and bio process needed to maintain them on the CNF landscape.

There were divergent views on whether management actions could take place in riparian areas. Several participants thought that managing riparian areas is "off limits" and the off-limits area depends on the size of the stream. While more care and extra diligence is required to get approval for projects in riparian areas, it is not technically true that no management projects would be allowed. However, one participant felt that, "It is so difficult to do that, (get permission to manage in riparian areas) managers don't want to bother. Long term, it takes out opportunities to regenerate riparian areas."

Several participants also brought up the issue of how forests adjacent to or near to the USFS forest boundary are managed. Several noted that forests adjacent to the Cherokee are at risk, which impacts forest health. Real estate developers who cut the forests for short-term gain and then replace them with housing were cited as a threat to the Cherokee. Others raised the issue of second homes and vacation properties as a potential threat.

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<sup>2</sup> Budgeting for and funding of projects will be an important focus for the CNFLRI according to the Committee.

## GOALS FOR FOREST MANAGEMENT

Overall, those who were interviewed expressed a strong desire for this process to succeed. Many said they were encouraged by the effort and agreed we need a new way of doing business in the Cherokee. As one participant noted, "Doing nothing is not an option."

Goals that people brought forward for the committee to consider include the following:

- Managing forests based on scientific data and research, not public opinion.
- Ensuring that conservationists are working cooperatively with hunting/fishing etc. groups to accomplish compatible goals.
- Adding more early successional stage forest, to support certain bird species; for example, in Carvers Gap, there is a need for more alder trees to support alder flycatcher nesting, but there is pressure to remove some of the alder trees to expand the parking lot.
- Rehabilitating areas impacted by OHVs. Since OHV use will likely increase, there is a need to address its potential impact.
- Getting everyone to agree to a landscape restoration initiative that looks at managing the health of the forest.
- Providing an oak and hickory regime that will provide good wildlife value and be a significant component of the forest in the future.
- Restoring the American chestnut. Chestnuts are a traditional food source for the Eastern Band of the Cherokee Indians and good for wildlife. (However there is an issue with obtaining enough seedlings to get them onto the national forest at a landscape scale.)
- Improving and increasing management actions on the ground and instilling a greater confidence in the public and stakeholders for those actions.
- Providing for projects in the forest that are true ecological restoration and that have an excellent monitoring program.
- Enhancing recreation uses to benefit county economies.
- Protecting views and scenic values from the Appalachian Trail [viewshed].
- Establishing a modern-day Civilian Conservation Corps to restore the Cherokee Forest.
- Using an adaptive management approach so theories can be tested by monitoring projects to see if they have the intended effect and making changes as needed to ensure intended outcomes are achieved.

## PUBLIC ENGAGEMENT

Participants were also asked to discuss their experiences with and recommendations for public involvement. About half the interviewees had participated in a previous public involvement process concerning the Cherokee National Forest. Participants discussed the changes that have occurred in how the Forest Service conducts public engagement.

In the past, meeting formats for public engagement resembled public hearings. One participant recalled a meeting in which 20-30 people came and each person read a part of a long document. There was no real



dialogue and all communication was uni-directional. To foster more information sharing, the Forest Service changed to an open-house format for the last update of the Forest Management Plan. They had stations staffed by topical resource experts on particular subjects, such as roads or timber management. The public was able to ask questions and provide their input. USFS staff then met again in the fall, to discuss feedback provided from staff about ideas from the first meeting and to request input on the proposal. The difficulty in evaluating the success of the open-house approach is that there were differences in opinion by participants (interviewees) on the success of this process. Some interviewees felt that the public's comments were incorporated into the final version of the management plan, while others felt that it was a "black hole" and it was a mystery as to how and when comments were used.

There were also concerns raised by some about the open-house meeting format because there were not opportunities to hear everyone speak, and some "experts" staffing tables were thought to lack adequate familiarity with local issues and conditions. One participant noted that, "People (who staffed the tables) were not familiar with the specifics, experts could not answer the questions, people came away even angrier. They were just trying to get the cut (tree harvest) out."

These divergent views on the value of the open-house format and a lack of clarity by some on how comments were evaluated and utilized point to the need to improve the transparency of the process. Despite some criticisms, several participants concluded that the public involvement processes they have attended have gone well and were reasonably well facilitated. They felt the public involvement process was open and inclusive, that the Forest Service kept the process balanced and that it sought and received input from all interested participants.

Participants were concerned that a fear of challenges, lawsuits and various public reprisals had resulted in "all talk no action towards forest management or restoration for last 20 years." Several participants felt that "science" should be given more weight than lay public opinions obtained through outreach efforts.

It was felt by several participants that the Forest Service needs to better educate the public on how and why to manage forests, to prevent the public from objecting to management that is in the best interest of the forest's health. One participant noted that, "The USFS has a much bigger problem with lack of trust (than does the National Park Service). There are people out there who just distrust most government agencies, especially with fire." Another participant stated that, "The public thinks the USFS does not know what they are doing, or they are just cutting the timber and that's all they do."

The National Environmental Policy Act's (NEPA) regulations were brought up several times by interviewees. One person explained that, "The spirit of NEPA is collaborative management, but the reality is the USFS is the gatekeeper and they let people in as they choose. They control when and how people comment. It does not make for meaningful engagement and people are shut out. People in general are very frustrated with that process. This is not unique to the Cherokee. People in USFS – they are just as frustrated with NEPA and they get stymied and hamstrung through the NEPA process."

Most participants cited the need to better educate the public about the multiple benefits provided by the Cherokee, as well as the importance of having stands of different age classes. One participant noted that, "The biggest problem is failure of the NFS to educate the public on the values of the forest, its renewable resources, and how the forest can serve our needs to its fullest potential." Others noted problems with public perceptions of the forest and why it needs to be managed: "Past monocultures have made the forest susceptible to disease and reduced available wildlife habitat. The concern is that the public would not understand the need to clear some of these areas and start over with species that are more diverse and better suited to the particular location."

One participant summed up the need to help the public understand how and when to engage: "Since the public lands belong to all the people, I strongly believe in public participation. I also think there is a need for education

to help the public understand (procedures). The Forest Service process, procedures, language, management areas, management prescriptions is a foreign language.” Another noted that, “Management has been stifled for a long time, since before Clinton came in. All these political, social competing resources going on shut down management for years. We need to take smaller bites and show it can work at the pilot scale before doing the big scale.” One participant expressed their support for the multi-stakeholder approach followed by the CNFLRI committee noting that, “By the time the committee gets to the end, the Forest Service will know if there is any flexibility on behalf of the interests. Will people see the need for management or still want to leave it alone? That's the big question.”

## RECOMMENDATIONS FROM INTERVIEWEES TO BETTER ENGAGE THE PUBLIC

- “Each county has a Farm Bureau office and they have monthly meetings and that could reach a lot of landowners if we go to them.”
- “Set up the public meeting as close to where the project is that is occurring – it is extremely important to engage the local community. These are also the people who have been living there the past 100 or so years.. They have information of what happened 50 years ago, even before USFS ownership.”
- “Convincing people it is okay to cut trees and importance of having different wildlife habitat are needed.”
- “People who have gone to these meetings in the past will think it don't matter what I say or what I do they'll do they've always done, so we need to find a way to convince them that this new process will have a different result.”
- “The happy ones won't be there (at the meeting), so you just hear from those who don't want to do anything. You don't hear from those who believe in active management. It's important to try to hear the other side – satisfied or not.”
- “In the last forest management planning process, the USFS had problems with scheduling; there was a lot of scheduling, then canceling of meetings or changing the day of the planning team meeting at the last minute. This process needs to set and stick to a schedule.”
- “We need to educate public on what are the current problems; for example the problem of invasives and why herbicide use may be necessary, and why/how they are safe.” “Use a national advertising campaign like Smokey the Bear, to educate about controlling invasives.”

One participant summed up the overall desired outcome in this way “My first hope would be that this approach is successful to setting an example for a new public planning process in the south. For that effort (CNFLRI) to successfully bring people to the table and to reach consensus. If this is achieved then the Forest Service is able to do good landscape management. This would be a big break through in getting something done. Of course, we do not want projects running amuck; some projects should be rejected. But they would now be able to do something! If this process can succeed, it will make a big difference for everyone. I am highly supportive of this collaborative approach.”

## GOALS FOR PUBLIC INVOLVEMENT

The following objectives summarize the facilitation team’s recommendations for the CNFLRI’s next steps:

1. **The CNFLRI should develop consensus recommendations on restoration** which are acceptable to all key stakeholder interests thus reduce the likelihood of legal challenges while increasing support for implementation of restoration measures.

2. **Clarify the federal forest planning process:** A primer that outlines current USFS forest management procedures and those NEPA procedures that are followed by the Forest Service can be created to 'demystify' how forest planning is conducted.
3. **Engage the public early in the Committee's work:** A series of public educational workshops will be held in mid-October 2010 to explain the process and solicit public concerns and goals for the Cherokee Forest.
4. **Broaden and deepen public understanding of forest conditions and management:** Additional public workshops will be designed and scheduled to allow for public education on those forest management topics of greatest concern (topics to be determined by the CNFLRI Committee).
5. **Provide a clear process for engagement:** Goals and logistics (time, locations) for all public meetings will be clearly articulated in advance and notes and outcomes from the meetings will be posted to the project website following the meeting in a timely fashion (within two weeks).
6. **Allow for on-going public participation:** Results from the CNRLRI concerning the condition of the forest, as well as recommended projects or management actions will be shared with the public to allow them to participate throughout the process and allow their views and perspectives to be incorporated into the committee's recommendations.
7. **FAQ:** A frequently asked questions document will be created and posted to answer common questions about the committee process and actions.
8. **Open Committee meetings:** All meetings of the CNFLRI Committee will be open to the public and public comments and questions will be welcomed at the beginning and end of every meeting.
9. **Educational component:** Every public meeting will include an educational component to share information, prior to soliciting input, so that input is informed by the most recent and relevant data possible.
10. **Website:** All committee reports or analysis will be posted to the project's public website for public review and comment and comments will be considered by the committee.
11. **Make the case for forest restoration:** There is a need for general education about why the Cherokee Forest needs to be 'restored' and what 'management' means for the forest. The case should help to explain: What are the consequences of no action? Why do we need a diversity of habitats? What are the benefits of multiple habitats for wildlife, as well as for humans?
12. **Diversify opportunities for meaningful engagement:** Education of the public needs to occur in several ways. Some people will attend meetings, while others will not. In order to ensure that a wider diversity of people know about forest needs, committee members will need to actively share the committee's work with their constituencies. The facilitation team can assist in creating materials that are easily understood by diverse audiences, but the outreach should happen through the CNFLRI members, as they have the necessary credibility within their own constituencies.

## CONCLUSION

This stakeholder interview process has revealed both a high degree of concern for the lack of active forest management and restoration, a desire to ensure that projects are conducted that are truly about restoring wildlife habitat and a strong desire to have a new way of doing business. While many participants noted that

there needs to be good scrutiny of projects to ensure they are good for the forest, many also noted the challenge that the Forest Service is not able to keep pace with the restoration demands that now exist.

Past monoculture stands; the impact of invasive species – both existing and imminent; the lack of abundance of some forest types because of past management actions; and the multiple demands from many types of users require that restoration projects accelerate. However, many participants noted that better data are needed on existing forest conditions, along with goals and targets that will restore the forest to a more “natural” state.

The CNFLRI Committee is commissioning studies and research over the next year that will provide a much better understanding of current forest conditions, needs and opportunities to restore the forest. Comments on the process or forest management ideas can occur through email to the facilitation team, through written correspondence or phone, whichever is easiest. Providing flyers about the forest’s condition and restoration needs at community events and festivals is another way to reach nontraditional audiences. The committee will be asked to suggest locations and opportunities to distribute information.

Most participants also raised the need for improved public education concerning the multiple values provided by the forest and why some form of management is needed. Many who cited the need for improving the current condition of the forest noted that there will be a long process to determine how to achieve restoration. The steps noted above, as well as others developed throughout the process will help to improve the public’s awareness and engagement in the process. This one process will not, however, overcome everyone’s trust issues. There will continue to be skeptics and there will continue to be resource challenges in staffing, funding and time for forest restoration. However, as one participant said it best, “We’re all in this because we love the forest. I believe consensus is difficult, but possible.” By having a diversity of voices within the CNFLRI, as well as by soliciting ideas from the many public(s) in and around the forest, and bringing new data and expertise to work towards a solution, it is hoped that new, innovative and creative approaches will be developed and, most importantly, put in place for a renewed and healthy Cherokee National Forest.

A summary of stakeholders asked of the CNFLRI process is best stated in the participants' own words:

“I want to be able to say we did the very best management of that land at the time that we knew how to do. All decisions were based on the best scientific knowledge – we did a good job and left it better than what was left to us.”

“Long term, I am optimistic that we can get back into active management – it took us 20 years to get here; it will take 20 years to get back there. But people are getting more aware – people are starting to wise up. In the Cherokee I know we won't get all we want, but as long as it's better than what we have now, I can live with that.”

“I hope we can all look back in a few years and say we helped make a difference.”

# APPENDIX A: INTERVIEW GUIDE FOR THE CHEROKEE NATIONAL FOREST SITUATION ASSESSMENT

Answers by individuals are kept confidential. The results of the Assessment will be presented in a final summary report. The summary report is a synthesis of the perspectives of all interviewees along with an analysis of what this means for the Cherokee planning process. To protect confidentiality, participant’s individual responses will not be attributed to them in the summary report.

A copy of the case statement will be sent to each interviewee to read prior to the scheduled interview. Each interviewee will be asked if they read the case statement and whether or not they have any questions about the process before beginning the interview. Those questions will be answered by the interviewer before beginning this interview.

Interviewee name: \_\_\_\_\_ Date: \_\_\_\_\_

Affiliation(s): \_\_\_\_\_

Contact info: \_\_\_\_\_

Primary area of interest or expertise related to the Cherokee Forest: \_\_\_\_\_

The following questions are asked of all respondents. [A <Probe> is a follow-on question that will be asked if the respondent does not give enough information initially]:

## PART ONE: BACKGROUND

- 1) Please describe your background and area of expertise as it relates to the Cherokee forest and planning for its future management. <Probe> *How many years have you been engaged with this issue? Has your perspective changed over time, and if so, in what ways?*
- 2) Have you participated in past public engagement processes concerning the Cherokee? <Probe> *If yes, please describe. Were you satisfied with the results? Why or why not? What would you like to see in this process in terms of public engagement and opportunities for input?*

## PART TWO: AREA OF FOCUS FOR LANDSCAPE PLAN

- 3) In consultation with the Cherokee National Forest, we have identified the following potential areas of focus to address for the Cherokee Forest Landscape Plan. These are examples only – they have not yet been adopted by the Committee. You do not need to comment on all of them, only those with which you have some familiarity. Of these issues we have proposed, which issues do you think are most critical to address? <Probe> *What are the top three issues to address, from this list or your own list? Why did you chose those – what was most significant to you and why?*
  - Streams, wetlands and other aquatic habitats
  - Game Wildlife Species
  - Forest Habitats
  - Rare Habitats (bogs, etc.)
  - Non-Timber Forest Products
  - Timber
  - Woody biomass
  - Invasive plants and insects
  - Scenic values/tourism
  - Recreation opportunities

- 4) Are there any issues left off the list that we should add? Why?
- 5) Any issues to delete? Why?
- 6) Do you see any challenges or obstacles to doing this (physical, economic, scientific or social)? These are examples only – they have not yet been adopted by the committee. *<Probe> Please describe them.*

Examples of Obstacles

- Incompatible road construction
- Incompatible forestry practices
- Invasive species
- Altered Fire Regime
- Lack of needed management actions
- Climate Change
- Availability of recreation facilities (overlooks, trails, campgrounds, roads, etc.)
- Others?

PART THREE: APPROACHES TO COMMUNITY ENGAGEMENT AND OUTCOMES

- 1) Are there any areas of conflict (political, social, competing resource demands) concerning the forest that we should pay particular attention to? *<Probe> Why? Are there any cautions or approaches to addressing the issue that we need to be aware of?*
- 2) What are your hoped-for goals or outcomes for this landscape restoration effort?

BELOW ARE OPTIONAL QUESTIONS THAT MAY BE ASKED DEPENDING ON THEIR AREA OF EXPERTISE:

Now that we have covered the top ten issues, we'd like to hear more from you about your own work or area of interest. In this section we can ask questions related to \_\_\_\_\_ (your area of expertise).

- 1) Please describe any specific work that you are now doing, or have done in the recent past, that may be relevant to learn about or consider as part of the habitat management planning process.
- 2) Who else are you working with or what groups do you engage in \_\_\_\_\_ work?
- 3) Who else should we interface with/engage with from your \_\_\_\_\_ field and why?
- 4) If the committee is interested and needs to know more about your work, would you be able and willing to make a presentation to the group? Similarly, are you available to review ideas or serve as a resource person should question arise concerning \_\_\_\_\_ (your area of expertise).

## APPENDIX B: CNFLRI EVALUATION PROCESS FOR EVALUATING FOREST CONDITION AND RESTORATION

### Enhanced Conservation Action Plan (E-CAP) process

The CNFLRI is determining what needs to be restored in the Northern Portion of the Cherokee through an Enhanced Conservation Action Plan (E-CAP) process for the Cherokee Forest. The E-CAP process is designed to estimate the distribution of forest types across the landscape prior to European settlement and the natural range of variability within those types, assess the current condition of the forests on the landscape, determine the degree to which current conditions deviate from the natural range of variability, and compare the cost-effectiveness of a range of strategies proposed for restoring the natural range of variability to the landscape where this is appropriate and feasible.

The E-CAP process utilizes computer modeling and includes a cost benefit analysis to evaluate the benefits of choosing one approach over another. It provides a way to seek agreement, to model management scenarios, and to evaluate costs and benefits.

### Landfire Model

Natural range of variability (NRV) is determined by Landfire Model [http://www.landfire.gov/products\\_overview.php](http://www.landfire.gov/products_overview.php). This model will be used because it has a predictive capacity, so different scenarios for forest management can be run and outcomes evaluated before choosing a particular solution. The CNRLI committee can change the values used in that model to more closely resemble what would be expected for the Cherokee.

The committee will be evaluating the forest ecological zones to make sure they are adequate and include all the forest types in the Cherokee. The committee and other experts will review the degree of reliability for the proposed ecological zones, since some have been fully peer reviewed, while others may require additional research prior to adopting them.

### Forest Inventory Assessment (FIA) plots

To improve the accuracy of the data used for the Cherokee Forest, the CNFLRI will be collecting additional data, as well as ground-truthing and refining the model using the additional Forest Inventory Assessment (FIA) plots that the Cherokee Forest has commissioned. The new FIA plots are established at one plot for every 2000 acres, as opposed to the usual scale of one plot for every 6000 acres.