### Cherokee National Forest Landscape Restoration Initiative

Photo by Witt Langstaff

Public Meeting September 20, 2011 Erwin, Tennessee

## **Cherokee National Forest**

- North Zone
- 7 counties
- 340,000 acres



# **Steering Committee**

- Geoff Call, US Fish and Wildlife Service
- Dennis Daniel, National Wild Turkey Federation
- John Gregory, Tennessee Wildlife Resources Agency
- Steve Henson, Southern Multiple-Use Council
- Josh Kelly, Environmental Community At-Large
- Dwight King, Logging and local community At-Large
- Joe McGuiness, US Forest Service-Cherokee National Forest
- Katherine Medlock, The Nature Conservancy
- Catherine Murray, Cherokee Forest Voices
- Danny Osborne, TN Dept. of Agriculture, Division of Forestry
- Terry Porter, TN Forestry Association
- Mark Shelley, Southern Appalachian Forest Coalition
- Parker Street, Ruffed Grouse Society

# Our Goal

Develop a set of scientifically sound, ecologically appropriate, consensus based recommendations to the Forest Service.

- 1. Re-engage the public
- 2. Use the best available science
- 3. Work together



# **E-CAP** Overview

- Uses Ecological Systems found in LANDFIRE BpS models.
- Uses Vegetation Dynamics Development Tool (VDDT) to model scenarios.
- Determines restoration goals by comparing BpS to current condition
- Allows multiple scenarios to be compared (including ROI)



Ecological Systems=Dominant vegetation type expected in the physical environment (geology &climate) under a natural disturbance regime



#### We "localized" LANDFIRE maps

# **Natural Range of Variability**

- Each Ecological System has a <u>Natural Range of</u> <u>Variability</u> (NRV) that is determined by:
  - Composition (System Classification)
  - Disturbance (Age- Early, Mid, Late, Old)
  - Structure (Open vs. Closed)
  - Condition (Natural vs. Uncharacteristic)



## **Current Vegetation**

Actual current vegetation classes for each ecological system based on FS Veg and additional info.

- early to late succession
- open vs. closed canopy
  - natural vs. uncharacteristic



# **Ecological Departure**

- E-CAP defines restoration needs by determining the <u>Ecological Departure.</u>
- Departure of current vegetation from its natural range of variability (NRV) -- i.e., dissimilarity between expected and current vegetation classes



#### Ecological Departure = which vegetation classes are "out of whack"

**Cherokee NF Ecological Forecasts -- 20 Years** 

Ecological System	<b>Acres</b> (rounded to nearest 100)	Ecological Departure
		Current Condtion
Cove Forest	103,000	47
Dry Oak Forest	65,900	61
Dry-Mesic Oak Forest	40,800	54
Low-Elevation Pine Forest	23,800	90
Montane Pine Forest	21,800	82
Montane Red-Chestnut Oak Forest	71,800	47
Northern Hardwood Forest	11,600	12
Riparian & Floodplain Systems	2,500	54
Spruce-Fir Forest	2,200	40





# Why?

- Likely due to management of forests just prior to and shortly after FS acquisition.
- 50 + years of effective fire suppression.



# **Developing Recommendations**

- Diversity of management options including:
  - Rx Fire and fire breaks
  - Commercial harvest
  - Non-commercial harvest
  - Thinning to various degrees
  - Planting
  - Others
- Focus on creating early habitat in systems that are lacking
- Focus on creating open midlate habitat
- Focus on reducing U-Classes (U-B-Gone)





#### **Low-Elevation Pine**

#### **Cove Forests**



# **Additional Recommendations**

- Watershed Approach
  - Appropriate scale for planning and measuring success.
- Invasive Forest Pests and Pathogens
  - Significant threat to our Forests
  - Early detection and rapid response is key
  - Additional funding for treatment is key



# **Additional Recommendations**

- Climate Change
  - Use best available science at lowest scale
  - Use adaptive management approach
- Biomass/biofuels
  - If markets become available, this could help make some restoration projects more financially feasible.



# **Additional Recommendations**

- Economics, Feasibility, and Contracts
  - Recommendations must be realistic, therefore, must have flexibility in contracting
- Threatened and Endangered Species
  - Increased focus on rare community restoration efforts
- Roads
  - Current backlog of maintenance is cause for concern



# **Next Steps**

Incorporate input from the public

Comments from this meeting submit tonight to recorder, on form or, send by Oct. 7, 2011 to: <u>karenfirehock@gmail.com</u> (phone) 434-975-6700, #222 (fax) 434-975-6701



- Finalize recommendation language.
- Final draft of entire document to be posted to the web <u>http://www.communityplan.net/cherokee/schedule.htm</u> and available for comment until Oct. 20, 2011