Cherokee National Forest Landscape Restoration Initiative

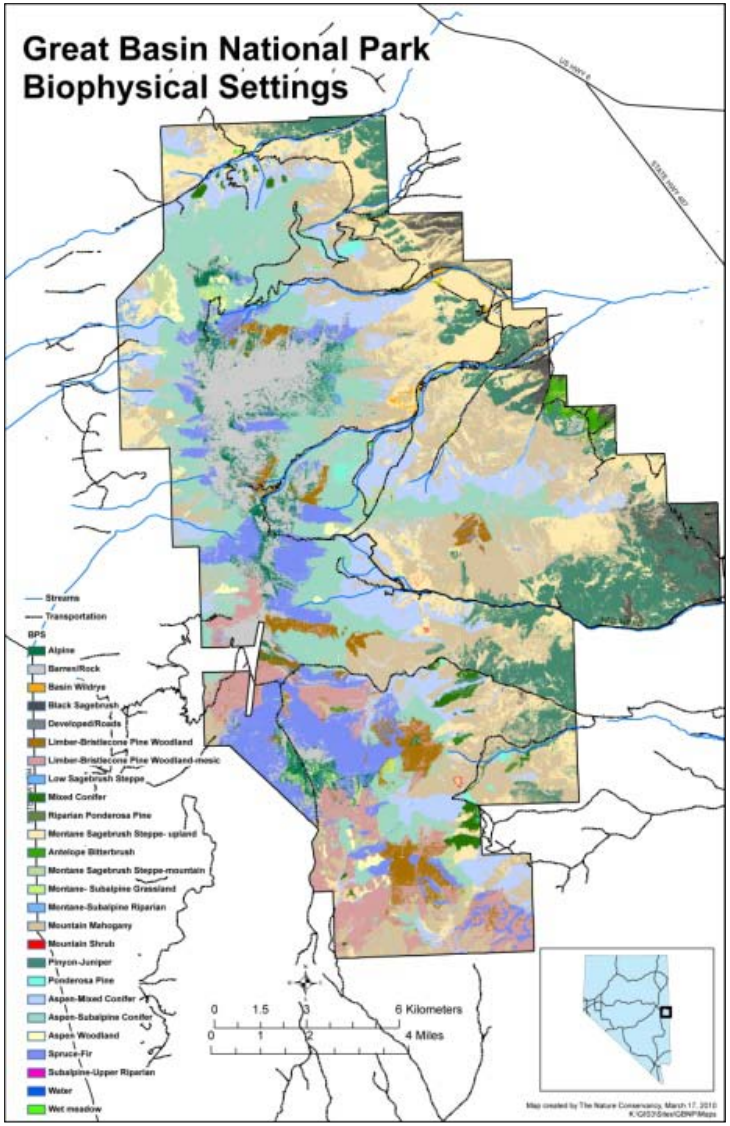
Public Meeting

April 5, 2011

Cherokee National Forest Landscape Restoration Initiative

Ecological Systems

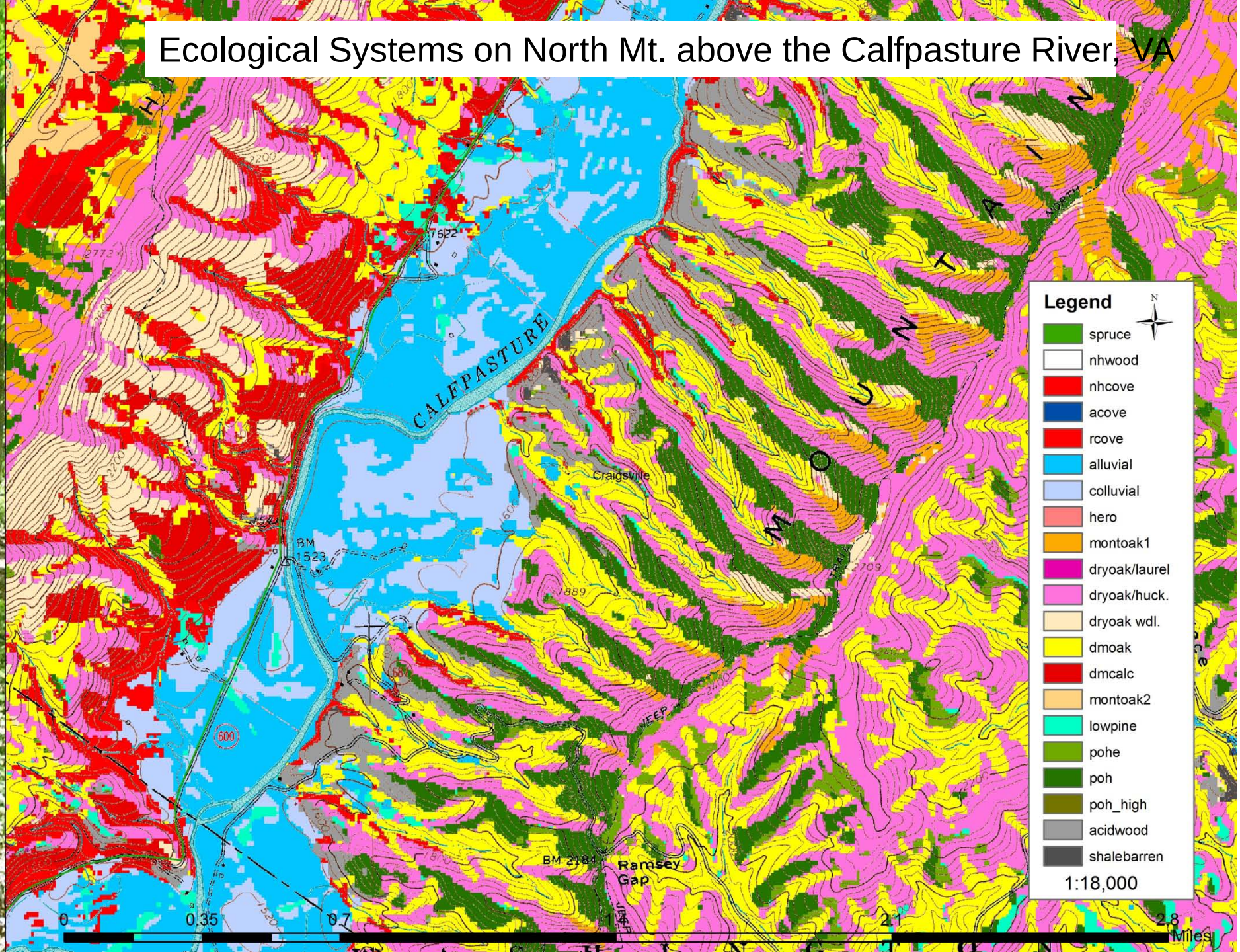
Dominant vegetation type expected in the physical environment (geology & climate) under a natural disturbance regime.



Ecological Systems: Landscape perspective

Jefferson NF, VA, from Steve Croy

Ecological Systems on North Mt. above the Calfpasture River, VA




Dry Oak / evergreen heath

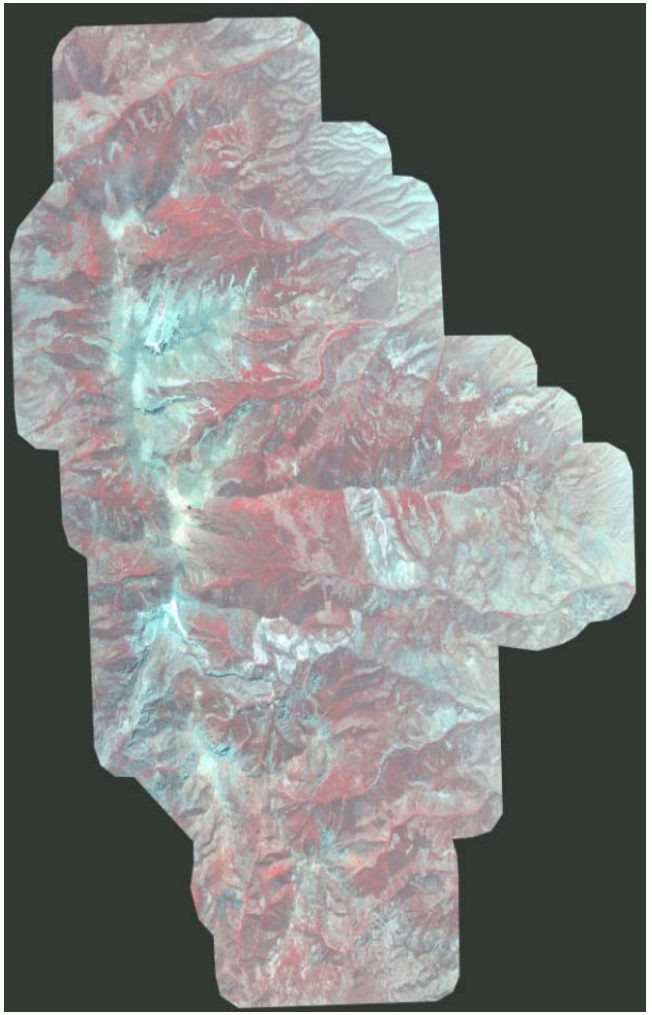
High Elevation Red Oak (S.&C. Appalachian Montane Oak)

Montane Northern Red Oak-Chestnut Oak (cove type)

Current Vegetation

Actual current vegetation classes (S-class) for each ecological system

- early to late succession
- open vs. closed canopy
- natural vs. uncharacteristic (U-class)



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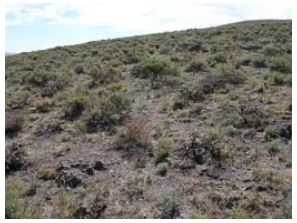
Ecological Departure = which vegetation classes are "out of whack"

Montane Sagebrush

Vegetation Classes	Actual % in Class	NRV % in Class
Class A – Early Development, Open Herbaceous vegetation is dominant; shrub cover is 0 to 10%.	5%	20%
Class B – Mid Development, Open Mountain big sagebrush cover up to 30%; herbaceous cover typically >50%.	10%	50%
Class C – Mid Development, Closed Shrubs are dominant with canopy cover of 31-50%. Herbaceous cover is typically <50%. Conifer sapling cover is <10%.	10%	15%
Class D – Late Development, Open Conifers are the upper lifeform; conifer cover is 10- 30%.	10%	10%
Class E – Late Development, Closed Conifers are dominant; conifer cover is 316 – 80%.	45%	5%
Class U – Uncharacteristic	20%	-

Too Little

Too Much



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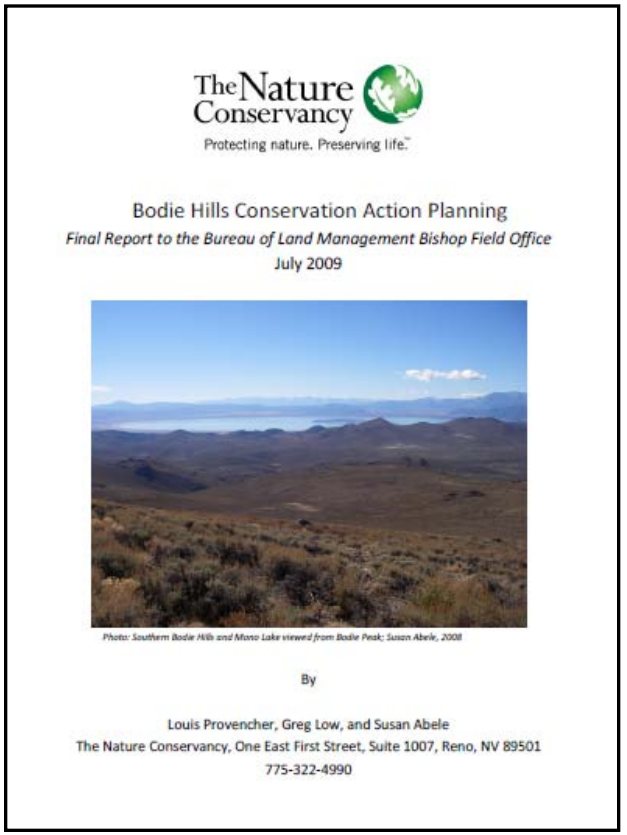
All Leading to Restoration Strategies

Allows land managers and stakeholders to develop and test alternative strategies to restore ecological systems



The Nature Conservancy
Protecting nature. Preserving life.™

Bodie Hills Conservation Action Planning

Final Report to the Bureau of Land Management Bishop Field Office

July 2009

Photo: Southern Bodie Hills and Mono Lake viewed from Bodie Peak; Susan Abele, 2008

By

Louis Provencher, Greg Low, and Susan Abele
The Nature Conservancy, One East First Street, Suite 1007, Reno, NV 89501
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Aspen-Mixed Conifer Woodland	Average acres/yr Years 1-5	Average acres/yr Years 15-20	Cost/acre ($)
Mechanical thinning of late succession classes	43	20	$ 150
Prescribed fire applied to late succession classes	95	50	$ 150
Average Annual Cost	**$ 20,700**	**$ 10,500**	

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Ecological Departure Summary for Cherokee NF

Ecological System	% Departure	Acres (rounded to next 10)
Cove Forest	48	102,980
Montane Red-Chestnut Oak	47	71,850
Dry Oak Forest	61	65,880
Dry-Mesic Oak Forest	54	40,770
Low-Elevation Pine Forest	90	23,810
Montane Pine Forest &Woodland	82	21,840
Northern Hardwood Forest	13	11,640
Riparian & Floodplain Systems	59	2,550
Spruce-Fir Forest	82	2,240
Total Acres		**343,560**

Quick Snapshot - I

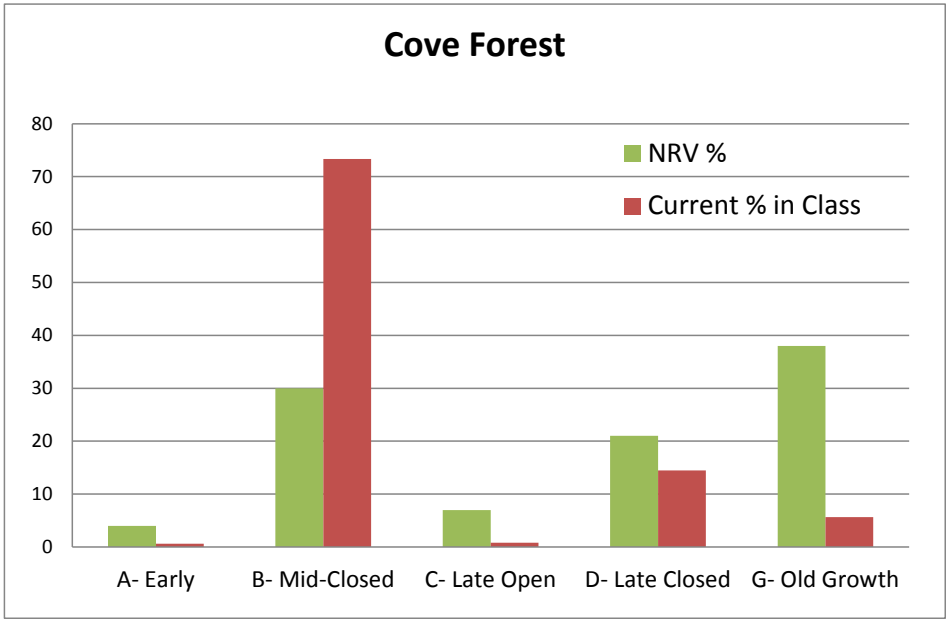
- The Oak and Cove Forest systems – which make up over 80% of the landscape – are *moderately departed* from NRV
- The two Pine systems are *highly departed*
- Spruce-Fir is also *highly departed*
- Northern Hardwood has *very low departure*

Quick Snapshot II

- In general, a substantial over-abundance of late-seral, closed canopy in oak and pine forests
- Current shortfall of old growth oak forests
- Shortfall of early succession in all systems
- Altogether ~7% Uncharacteristic vegetation

Cove Forest

- Largest ecological system – 103,000 acres, or 30% of the landscape
- Moderately departed from NRV
- Overabundance of mid-seral, closed overstory
- Substantial current shortfall of old growth



Oak Forests

Dry Oak, Dry-Mesic Oak, Montane Red-Chestnut Oak

- Collectively make up over 50% of the landscape
- Moderately departed from NRV
- Overabundance of late-closed succession class
- Shortfall of old growth classes, especially open canopy

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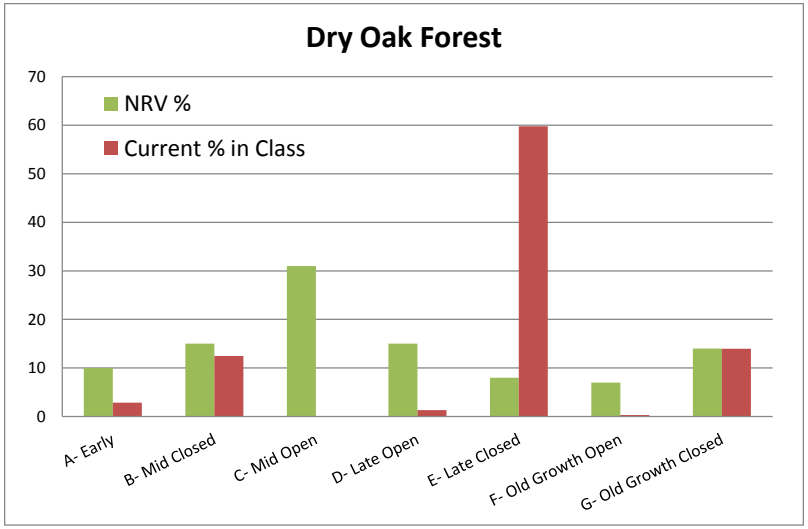

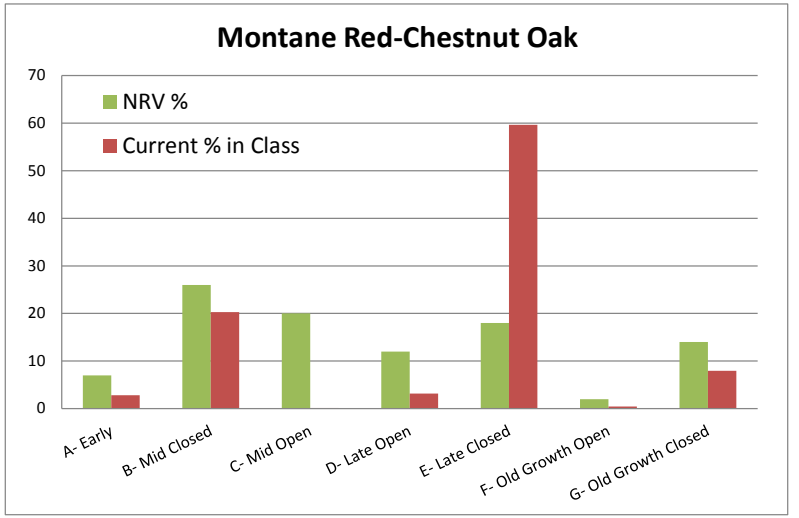

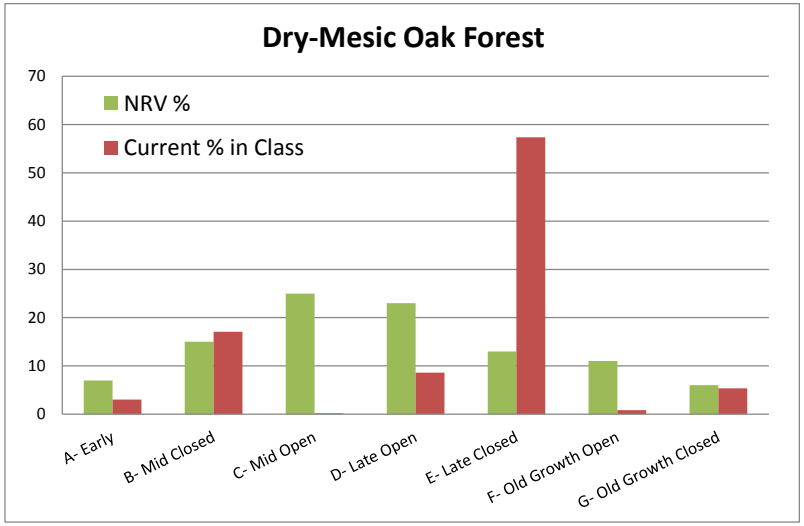

Pine Forests & Woodland

Low-Elevation Pine & Montane Pine

- Together make up 13% of the landscape
- Highly departed from NRV
- Overabundance of late-closed succession class
- Plus oak-dominated forest types
- Shortfall of late-open succession class
- Shortfall of early succession low-elevation pine

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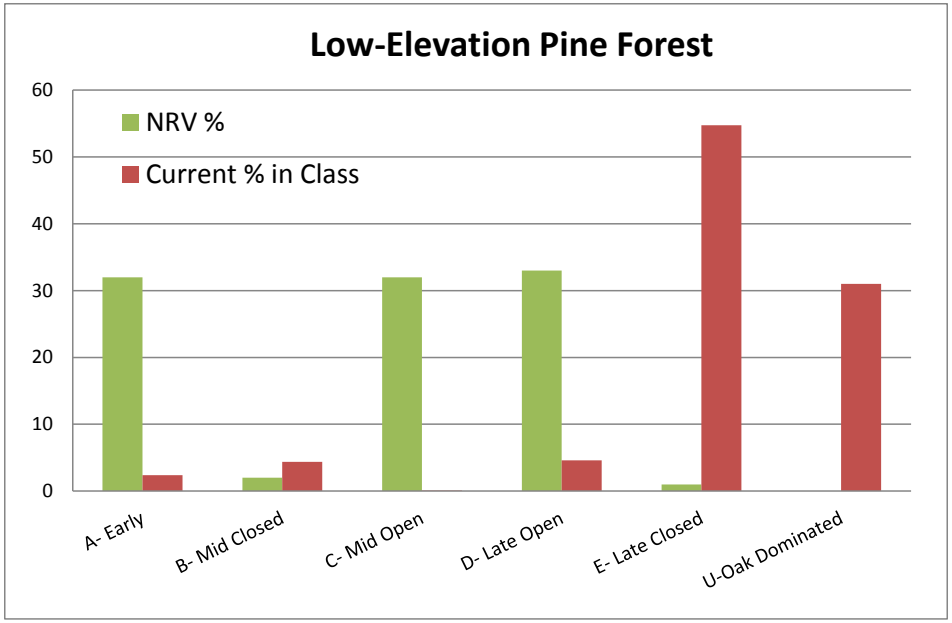
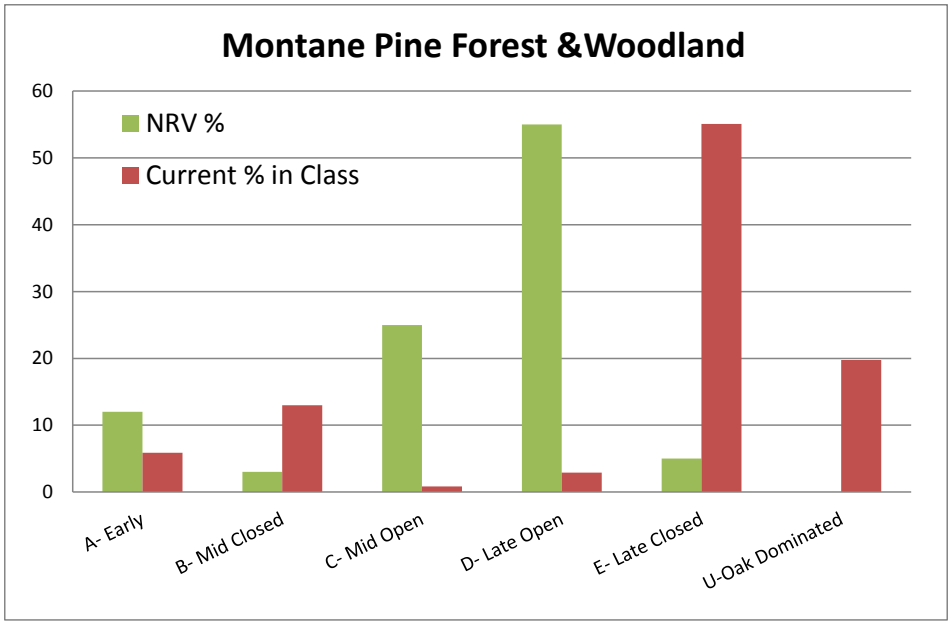
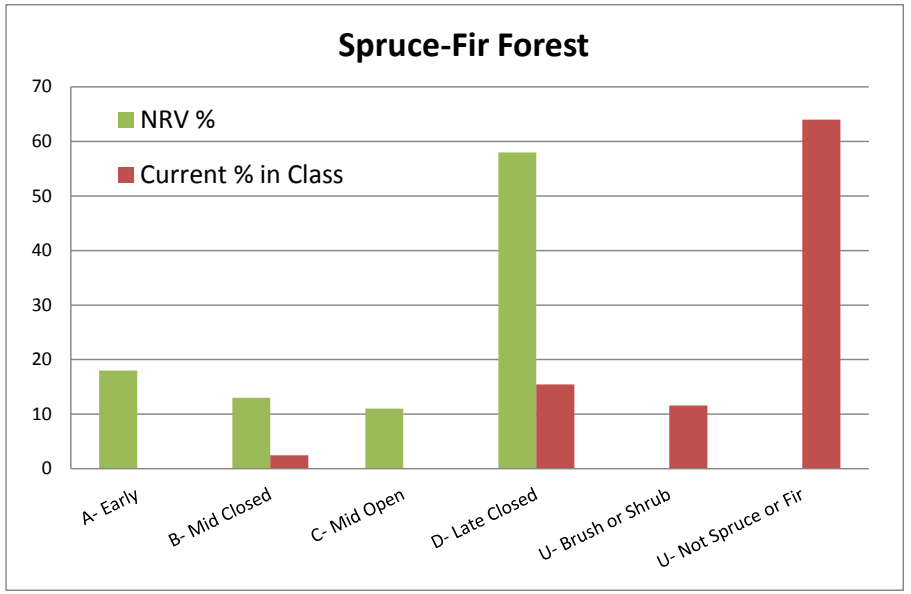




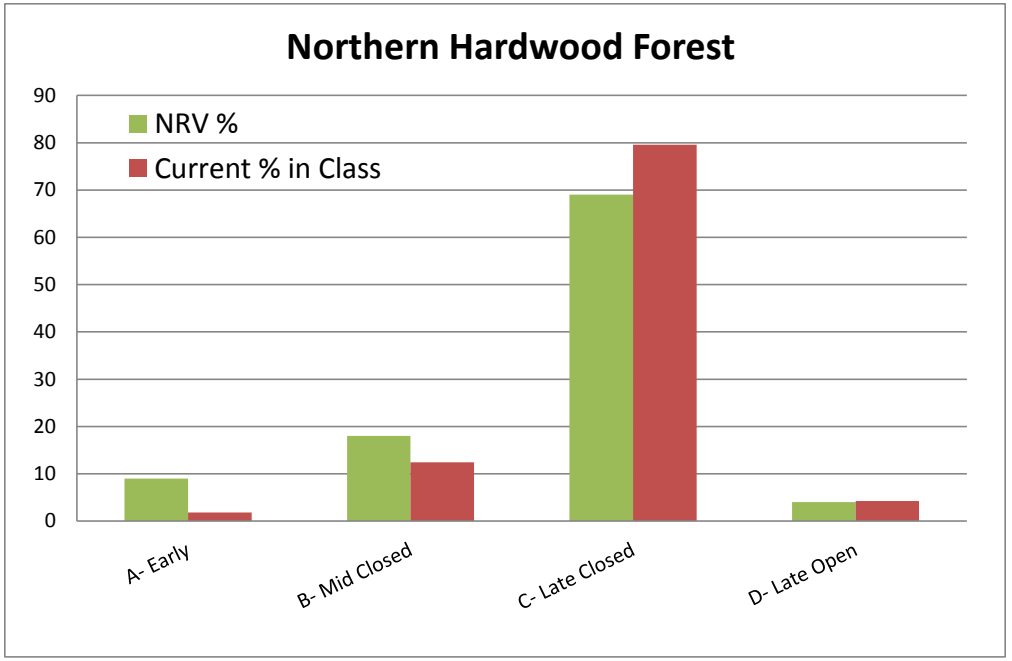
Spruce-Fir Forest

- Small system – 2,000 acres, but highly departed from NRV
- Almost 75% Uncharacteristic forest type, mostly forest types NOT red spruce-frasier fir or red spruce-northern hardwood
- Virtually no early or mid-succession spruce-fir



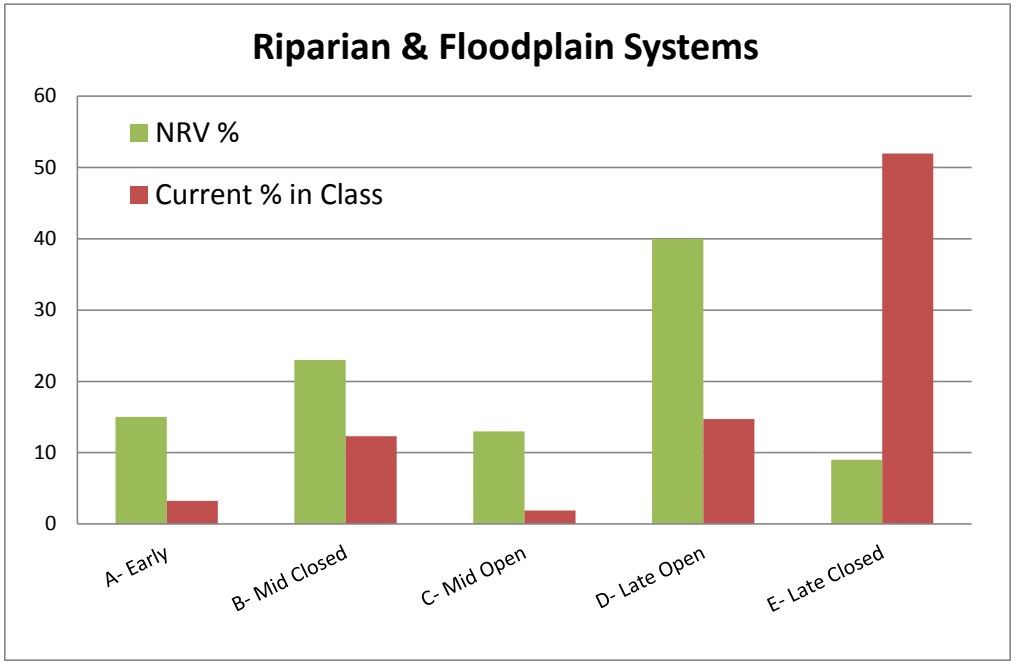
Northern Hardwood Forest

- Good news! (at least for now)
- 12,000 acres – very low departure from NRV



Riparian & Floodplain Systems

- 2,500 acres, moderately departed from NRV
- Shortfall of early succession and open canopy vegetation classes



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Quick Overview

- Consistent over-representation of mid/late closed forest
- Consistent under-representation of early-open and late-open forest
- Why? Large-scale clear cutting before the creation of the Cherokee National Forest followed by fire suppression.
- More natural distribution of forest classes will encourage diversity of habitat for all kinds of wildlife and a healthy, robust forest for the future.

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CNF Landscape Restoration Initiative
Timeline
▲ Meetings Planned and Proposed

Last Updated: December 23, 2010

	2010								2011								Comments
	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb.	March	April	May	June	July	August	Sept	
Meeting Schedule																	
Steering Committee Meetings		▲ ▲		▲	▲	▲								▲	▲	▲ ▲	
Steering Committee Workshops (all day long)									▲		▲		▲ ▲				
Public Meetings					▲ ▲					▲				▲	▲ ▲		
Conference Calls			▲		▲			▲									
Process																	
Situation Assessment																	
Online Survey (including Steering Committee review before it is launched)																	
Review and Refine Ecological Models to be used																	Models within LandFire will be reviewed by committee members and outside partners to ensure accuracy and make sure everyone is in agreement.
Obtain Ground-truthed remote sensing data																	LandFire data will be ground truthed with plots throughout the region to ensure greater accuracy of the information.
Workshop 1-Current Condition and Ecological Models																	See 5-CAP process description for more information
Workshop 2-Future threats and Initial Strategies																	See 5-CAP process description for more information
Workshop 3-Outcomes of Management Scenarios																	See 5-CAP process description for more information
Statistical and Cost-Benefit Analysis																	
Write Recommendations																	

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Next Steps

- Develop and test management scenarios to move forests back toward their natural range of variability
- Cost-benefit analysis
- Committee will develop final recommendations to the Forest Service

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Questions?