



The North Carolina Forest Resource Assessment

PAST

PRESENT

FUTURE



Farm Bill Requirement & Redesign Components:
STATE ASSESSMENT AND RESOURCE STRATEGIES
Final Guidance

Assessment requirement resulted from:

- 1) USFS and NASF initiative to “redesign” the State & Private Forestry Program
- 2) Language in the 2008 Farm Bill

Steering Committee (NC DFR Director's Team)

Technical Committee (NC DFR)

Outreach Committee (NC DFR)

Assessment and Associated Strategies Coordinators

Threats to Working Forest

Ecosystem Services

Forest Sustainability

Maintaining Forest Health

Protecting from Wildfire Risk

Maintaining Viable Urban Forest

Lead
Scribe
DFR
Liaison
GIS
Members

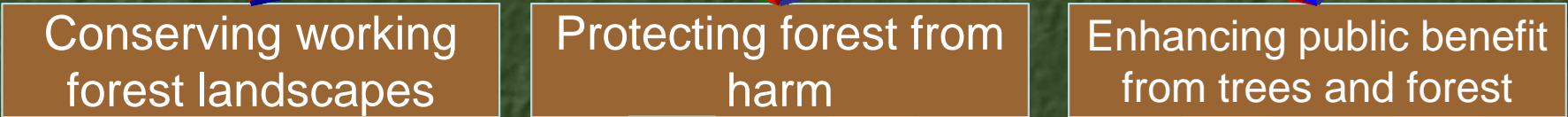
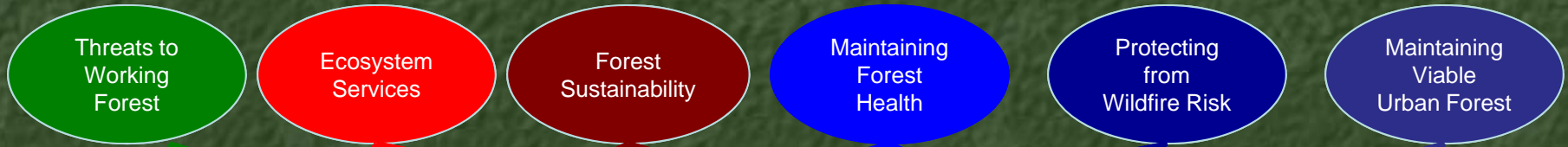
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Assessment

Strategies



Focused on Three Themes

- 1) Conserve Working Forests**
- 2) Protect Forests from Harm**
- 3) Enhance Public Benefit from
Trees and Forests**



Conserve Working Forests

- 1) North Carolina's Forests 2007
- 2) Declining Forest Types
- 3) Family & Minority Forests Ownership
- 4) Population Growth & Land Use Change Impacts on Forest Resources
- 5) Forest Management Practices for Forestry & Wildlife Management in North Carolina
- 6) Emerging Markets in Ecosystem Services



Protect Forests from Harm

- 1) Insects, Diseases, and Non-Native Invasive Plant Threats to Forest Health**
- 2) Fire and North Carolina's Forests**
- 3) Climate, Atmosphere, and Natural Disasters**



Enhance Public Benefit from Trees and Forests

- 1) Forestry Employment
- 2) Timberland Property Values
- 3) Timber Stumpage Values
- 4) Primary Wood-Using Industries
- 5) Non-Timber Forest Products
- 6) Water Quality and Quantity
- 7) Forest Wildlife Habitat
- 8) Bio-energy in North Carolina
- 9) Recreation Resources
- 10) Heritage Resources
- 11) Maintaining Viable Urban Forests



4.f.

Water Quality and Quantity

Key Findings

- North Carolina's surface water supply watersheds are 60 percent forested, while the state's groundwater wellhead protection areas are 36 percent forested. Forests and forest management practices play a vital role in sustaining clean, abundant, and affordable supplies of drinking water in North Carolina.
- Approximately two-thirds of the subwatersheds in North Carolina have less than 70 percent forest or natural land cover. Evidence has indicated that when a watershed's land cover falls below this threshold percentage, a significant drop can be expected in the overall quality of the water delivered from that watershed.
- Based upon the relatively rapid expansion of urbanizing areas, an emerging opportunity exists to re-evaluate and transform the role that forest management can serve in those subwatersheds that are located across urban, suburban, and rural transition areas.

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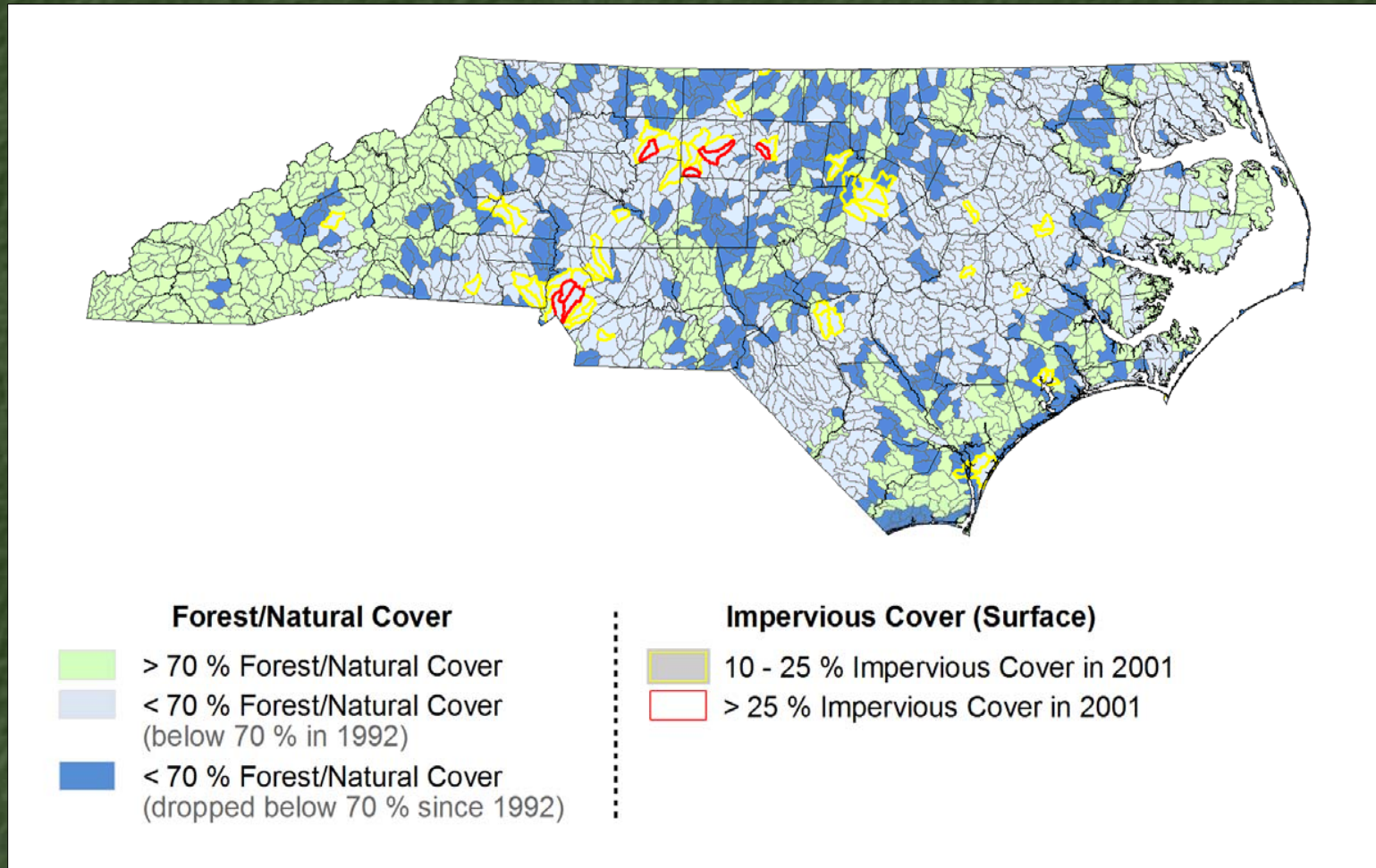
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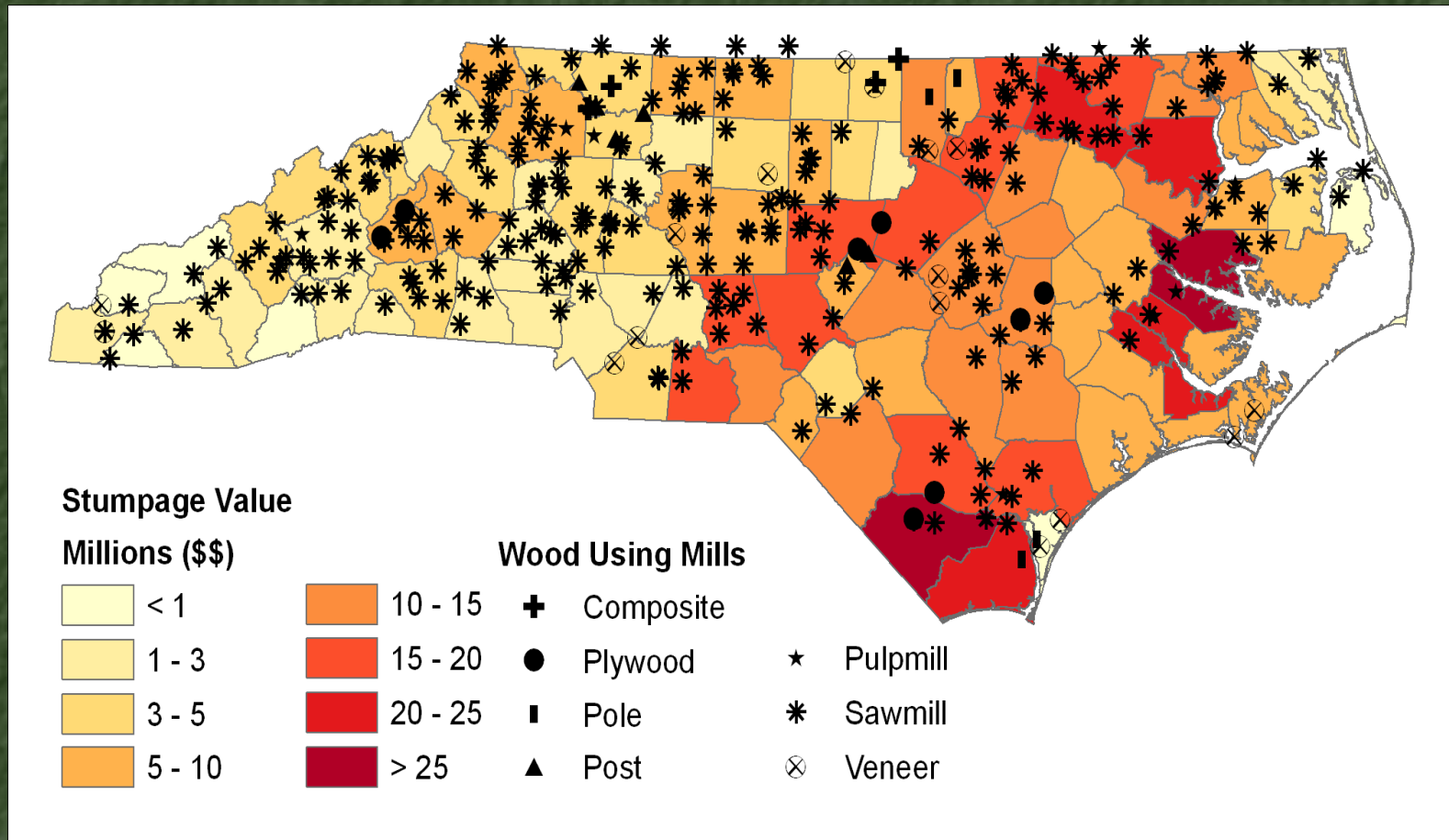
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FIGURE 4f-5. Forest and/or natural cover trends in relation to impervious cover.



Created by D.G. Jones, NCDNR, 2009

FIGURE 4c-13. NC 8-year average of total stumpage value by county and wood-using mills, 2001 – 2008.



Created by: A. Bailey, NCDNR, 2009



Six Priority Maps were developed to:

- 1) Tell the Story of Forests in NC**
- 2) Educate and Inform**
- 3) Build Constituencies to Effect Positive Change**

NC Forest Resource Assessment – Priority Landscapes

Priority Landscapes*

Rural Forest Priority Landscape

Urban Forest Priority Landscape

Selected input data layers and issue maps were used to create the priority landscape maps

Programmatic Priority Areas*

Conserving Working Forest Lands

Protecting Forests and Communities from Wildfire Risk

Threats to Forest Health

Maintaining Viable Urban Forests

Each of the input data layers or issue maps below were used in the creation of programmatic priority area maps

Input Data Layers and Issue Maps from Assessment

Forested Lands

Softwood Market Strength

Hardwood Market Strength

T&E Species Habitat

DWQ Excellent Bioclass Watersheds

Wildland Fire Susceptibility Index

Vacation Homes

Wildland Urban Interface

Imminent Forest Health Threats

Major Forest Health Threats

Urban Growth

Imperviousness

Tree Canopy

Population Density

Total Population

Absence of Canopy

Forestland

No Professional Staff

Hurricane Risk

Ozone Non-Attain.

No Management Plan

Urban ETJ

Forest Patch

Freezing Rain

Biodiversity & Wildlife Habitat

Plantable Space

Tornado Risk

Wildfire Risk

Site Productivity

No Advisory Group

No Tree Ordinance

* For details on input layers and weighting (if any), see the individual maps. Further details can also be found in the mapping and GIS analysis appendix.



Assessment Goals

Goal 1: Increase the sustainable management and conservation of forest lands in NC. (4,12)

Goal 2: Reduce negative impacts from forest threats. (3,17)

Goal 3: Increase the restoration, maintenance, and management of fire adapted species and ecosystems. (3,12)

Goal 4: Maintain or increase the viability and sustainability of existing and emerging markets. (4,8)

Goal 5: Increase fish and wildlife habitat in North Carolina's forests. (4,12)

Goal 6: Manage, conserve, restore, and enhance forestlands important to current and future supplies of clean water for economic, social, and ecological uses. (4,8)

Goal 7: Enhance the benefits and sustainable management of urban forests. (4,10)

(26 Objectives, 90 Strategies support these Goals)



Example Objectives: Population Growth & Land Use Change Impacts

Objective 1.3: Assess and re-define services provided to forest landowners to efficiently and effectively meet their diverse management objectives.

Objective 1.4: Strengthen and support an urban-focused initiative that meets ownership objectives for urban-rural interface landowners and communities.

Objective 1.1.—Conserve high-priority forest ecosystems and landscapes. (Addresses key Assessment findings in sections 2b, 3a, 3b, 4g, 4j, and USDA Forest Service national objectives 1.1, 1.2, 2.2, 3.1, 3.2,3.4, 3.5, 3.6, 3.7.)

Strategy 1.1.1.—Collaborate with other natural resource organizations to identify high-priority forest ecosystems and landscapes.

Priority Area(s)	DFR Program Areas	Key Stakeholders and Partners)	Resources Needed	Measures of Success
Rural Forest Priority Landscape Map Conserving Working Forestlands Map Urban Forest Priority Landscape Map Forest Legacy “Areas of Need” Priority Ecosystems (State Wildlife Action Plan) Significant Natural Heritage Areas (Natural Heritage Program)	Forest Legacy Forest Stewardship FM GSB	DENR—NHP NCWRC NRCS Land trusts ADFPTF CWMTF NHT	Increased funding for GIS mapping capability Identification of lead individual and/or agency and formation of interagency team focusing on forestland conservation	Improved level of coordination among state agencies responsible for land acquisition and conservation Current and new partnerships that develop to assist with conservation efforts or to create new initiatives within high-priority ecosystems or landscapes Acres of forest permanently protected or conserved that are considered to be high priority forest ecosystems or landscapes



What's next?

How do DFR's programs align with strategies?

Identifying partner DFR's programs that align with strategies.

Discussing strategy priorities and timelines



The Assessment and Strategies Can be Viewed Online:

<http://www.ncforestassessment.com/index.htm>

Questions?