

North Dakota Forest Action Plan Executive Summary

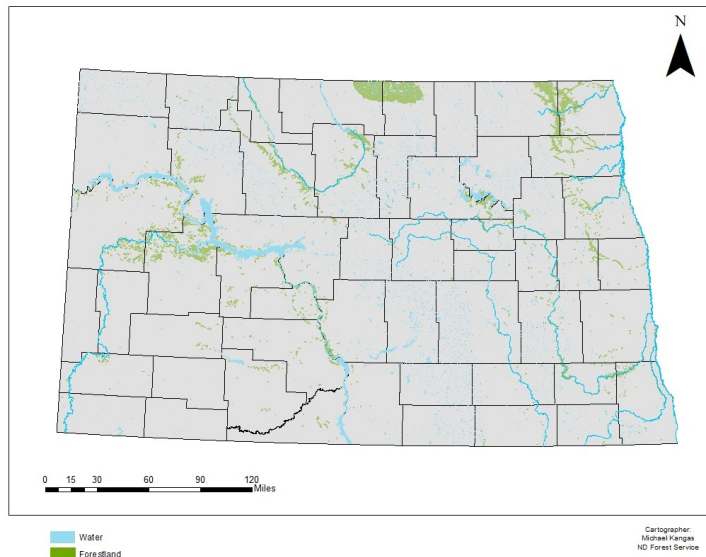


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Background

Forest Action Plans were required by the 2008 Farm Bill, Cooperative Forestry Assistance Act with the intended goal of ensuring that federal and state resources are being focused on important landscape areas with the greatest opportunity to address shared management priorities and achieve measurable outcomes.

Forest Action Plans consist of: 1) an assessment of current forest conditions and trends, 2) an assessment of priority forest resources, 3) description of priority forestry issues, and 4) an evaluation of strategic actions to address issues of state and national importance.



Forestland in North Dakota

Priority Forest Resources and Conditions

Priority forest resources for North Dakota include 4 categories: Upland Forests, Riparian Forests, Rural Tree Plantings, and Community Forests.

Upland Forests

Upland forests are found throughout the state but are most prevalent in the eastern half and northern areas of the state. The majority of these forests consist of deciduous species; most notably: aspen, birch, bur oak, green ash, and boxelder. Upland deciduous forests are common in the Turtle Mountains, the Devils Lake Hills, the Pembina Gorge, the Sheyenne River Valley, and the Killdeer Mountains. Small tracts of ponderosa pine forest can be found in southwestern North Dakota. Conversion to non-forest, pests, over-maturity and limited natural regeneration exert pressure on these forest resources.

Riparian Forests

A riparian zone is the area between a body of water and the adjacent upland, identified by soil characteristics and distinctive vegetation that tolerate an excess of water. The elm/ash/cottonwood forest type is the most abundant of all forest types in North Dakota and occurs along rivers, lakes and streams. Species such as green ash, boxelder and basswood may dominate along the eastern rivers, while cottonwood is more prevalent to the west. Other associated species include American elm, hackberry, bur oak and willow.

Riparian Forest cont....

Riparian forests have been dramatically altered by Dutch elm disease over the past 40 years. Additional pressures to these resources include conversion to non-forest, insect and disease, limited regeneration and the impending arrival of emerald ash borer.



Field windbreaks in Central North Dakota

Rural Tree Plantings

Rural tree plantings generally refer to farmstead plantings, shelterbelts, living snow fences, wildlife plantings, riparian buffer strips, and others that are designed to achieve conservation, economic and societal goals. Lack of species diversity, herbicide exposure, pests and removals are pressures to these resources.

Community Forests

Community forests include boulevard trees, trees planted within city parks, and trees that naturally occur within city limits or public right-of-ways. The management of such tree resources may fall under the responsibility of city foresters, public works departments, and/or community tree boards. The community forest also includes trees that are planted on private or commercial properties. Common tree species present in residential communities include cultivars of elm, linden, ash, oak, hackberry, and silver maple. Pests play a prominent role in the long term stability of community forests. Dutch elm disease has drastically altered the composition of many North Dakota Communities. Emerald ash borer will likely have a similar impact to these resources.

Priority Forestry Issues

Priority issues were identified through partner and stakeholder coordination and feedback. The following issues were identified in the 2010 North Dakota Forest Action Plan.

Invasive Tree Pests

Dutch elm disease has made a major impact on all priority forest resources. The expansion of the emerald ash borer, Japanese beetle, and the Gypsy moth within the region have raised great concern among natural resource professionals in North Dakota.

Over-maturity and limited natural regeneration

Over-maturity and limited natural regeneration threatens the sustainability of North Dakota's forests. Natural regeneration is hindered by the lack of processes that promote regeneration (flooding, prescribed fire, harvesting) or processes that limit regeneration (herbivory).

Lack of Species diversity

Limited species diversity limits the success and sustainability of the state's rural tree plantings and community forests. The climate and soils of the Northern Plains restricts the number of tree species that can be utilized. This issue is very prominent in more drought prone western North Dakota.

Strengthening Educational Outreach

The public's perception of the role trees and forests play in society is constantly changing. An understanding of people's dependence on the land and its natural resources for survival is no longer inherent. A disconnect from nature is developing in children as they spend more time indoors engaging in technology.

Conversion to non-forest

Conversion to non-forest is a threat to upland forests, riparian forests and rural tree plantings. Conversion takes on many forms including: residential development, clearing for agricultural uses, removal of windbreaks, and fragmentation of land ownership in smaller, less manageable parcels.

Wildland fire

Despite the conversion of much of the indigenous prairie to non-native grasses and crops, the majority of the state's fuels are still highly combustible, light fuels that burn readily and rapidly given the right environmental conditions. The western part of the state still contains large unbroken acreage of native mixed grasses and uncontrolled wildfire still remains a threat to North Dakota's people, property and natural resources.

Limited Wood Utilization Opportunities

North Dakota's wood product manufacturing industry is very small. The absence of viable forest product markets limits the economic incentive of landowners to sustainably manage forest resources.

Climate change

Climate changes will affect disturbance regimes, insect and disease outbreaks, recreational values, and productivity. Forests should be managed sustainably to help forests adapt to anticipated changes.

Strategic Actions

In addition to assessing forest conditions, identifying important forest resource, and documenting important forestry issues, Forest Action Plan began to establish a framework to address these issues by identifying programs and activities that correspond to the priorities. A summary of these programs can be found in Section 2 of the North Dakota Strategic Actions Appendix found on the NDFS website.



Aerial View of a Community Forest

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