



## Massachusetts Forest Action Plan Update Review



National Priorities

November 2015

Massachusetts Department of Conservation and Recreation  
Bureau of Forest Fire Control and Forestry

## *Background*

The 2008 Farm Bill requires each state to analyze its forest conditions, trends and delineate priority forest landscapes in a State Assessment. Based on the State Assessment, a Statewide Forest Resource Strategy is required by each state and will become the foundation for formulating U.S. Forest Service State & Private Forestry (S&PF) competitive project proposals and guiding S&PF program direction. These assessments and strategies focus around three national priorities:

- Conserve and Manage Working Forest Landscapes for Multiple Values and Uses
- Protect Forests from Threats
- Enhance Public Benefits from Trees and Forests

The U.S. Forest Service has issued guidance to the states recommending the development of a strategies document and the minimum requirements for each strategy within that document. This guidance states that each state forest resource strategy should:

- Outline long-term strategies and programs to address priority landscapes identified in State Assessments and the three national priorities
- Describe how the state proposes to invest funding to address management objectives
- Include long-term timeline for projects and program implementation
- Identify partner and stakeholder involvement
- Identify strategies for monitoring outcomes
- Describe how state's proposed activities will accomplish S&PF objectives
- Describe how S&PF programs will be used to address priority landscapes
- Incorporate existing statewide natural resource plans

In fall 2008, the Massachusetts Department of Conservation and Recreation (DCR) Bureau of Forest Fire Control and Forestry (the Bureau) began the state assessment, publishing the findings in the "Assessment of the Forest Resources of Massachusetts".

As a follow up, in 2010 DCR published their Forest Action Plan called "Forest Resource Strategies of Massachusetts", highlighting DCR's plans that address the key findings identified in the Forest Resource Assessment. These strategies are organized by DCR's areas of service which are:

- State Lands Management
- Cooperative Forest Management
- Forest Health
- Urban and Community Forestry
- Forest Products Marketing and Utilization
- Forest Legacy
- Forest Fire Control

Since the publishing of the MA Forest Action Plan in 2010, several programs have experienced positive receptions and continue to flourish. Those key programs, group under the appropriate National Priority category, are reviewed below.

## National Priority 1

Conserve and Manage Working Forest Landscapes for Multiple Values and Uses

### ***Highlight for State Lands Management***

#### **Landscape Designation and Management Guideline Process**

Active forest management on state lands in Massachusetts was in peril at the writing of the Forest Resource Strategies of Massachusetts - 2010. Forest management using timber harvesting as a tool had ceased at the time of Strategy writing due to extreme controversy brought to bear by special interest groups. The [Landscape Designation and Management Guideline Process](#) completed in 2012 successfully brought stakeholders to a consensus that a balance of uses could co-exist on state forest lands in Massachusetts. Approximately 40 % of state lands were designated as working woodlands and 60% as reserves and parks. There is now about 123,000 acres of “Woodlands” actively managed for a suite of ecosystem services including the production of renewable forest products.

### ***Highlights for Cooperative Forest Management***

#### **The Forest Stewardship Program**

Working forests are significant drivers of local, rural economies in areas that are traditionally challenged by a need for sources of employment. Privately owned, productive forest represent a source of stability while providing larger social benefits through habitat, clean water and recreational opportunities.

The DCR Forest Stewardship Program provides funding assistance to landowners with more than 10 acres of woodland to create a Forest Stewardship plan with the help of a consulting forester. The plan helps landowners learn more about what’s on their land and how to achieve their management goals, which might include enhancing wildlife habitat, recreational trails, and conducting timber harvesting.

There are typically landowners on the waiting list for this program.

Impacts:

- 1,039 landowners receive woodland enhancement plans
- 87,331 acres of land enrolled in long-term sustainable management
- 75% of landowners dual enroll in MGL Ch61, a form of short-term land protection
- Numerous woods walks, outreach material, workshops, talks to broad audiences on the importance of sustainable forest management reach hundreds of landowners, non-profits, land trusts and other members of the public

In more urban areas, Town Forests provide a sense of community, respite and habitat islands in a fragmented landscape. The DCR Forest Stewardship Program also provides funding assistance to municipalities to create a comprehensive forest resource plan including community involvement and outreach. Community Stewardship grants are also provided to help implement outreach plans.

Impacts:

- 69 towns received forest resource plans totaling 24,031 acres of municipal land
- 11 Community Stewardship grants lead to invasive species removal, habitat restoration, trail signage and maintenance
- 2 town forest celebrations, Fitchburg and Weston, provided informational resources and inspiration to over 200 municipal officials, members of non-profits and general public

### **The Bird Habitat Assessment Program**

Massachusetts is an especially important New England state to breeding birds because it is a part of both the Northern Forest Region and the Eastern Deciduous Forest Region. For some of these species, as much as 90% of their population is breeding here. Many birds show a decline in their populations. For those birds that depend on forest habitat, it is important to know how to modify forest structure to meet habitat needs is critical for declining species.

The DCR Bird Habitat Assessment Program, in partnership with Mass Audubon, provides funding assistance to landowners to work with a consulting forester or other qualified professional to evaluate existing and potential habitat for a selection of birds.

Impacts:

- Pilot area created in western Massachusetts
- Toolkit for habitat assessments created in concert with Mass Audubon
- 25 private foresters trained in bird habitat assessments
- 2 woods walks lead by Mass Audubon professionals
- Presentation of “Foresters for the Birds” program at Mass Audubon 23rd birder’s conference
- 13 bird habitat management plans on 1,300 acres of private land focused on management of 12 priority bird species
- Second pilot area being created for eastern Massachusetts

### **Estate Planning Outreach Program**

Many forests in Massachusetts are family forests, owned by families and individuals whose average age is over 60 years old. In fact, 71% (or 1.2 million acres) of these forests are owned by people that are 55 years old or older. In the coming years, these family forest owners will be making decisions about the future of their land (e.g, convert the forest to development, parcelize the property into smaller ownerships, conserve the land). The decisions family forests make about the future of their land are the greatest driver of landscape change and will have significant impacts on our forested landscapes and the benefits they provide.

The Estate Planning Outreach component of the Working Forest Initiative seeks to reach these many landowners and help inform these critical decisions.

Impacts:

- Over 1,000 landowners owning more than 50,000 acres of land have been reached through educational programs.
- Over 15,000 copies of “Your Land, Your Legacy” have been distributed

- Over 30,000 people have visited [www.MassWoods.net](http://www.MassWoods.net) to learn more about land conservation
- 70% of landowners responding to our evaluation survey said that they have moved forward with at least one action to plan the future of their land.
- As a result of our outreach, 3 landowners have already donated conservation land totaling 252 acres, and over 15 landowners have committed to conserve their land and are currently working with land trusts and conservation agencies to do so, totaling 1,750 acres pending.
- Landowners have donated over \$260,000 in land value to date, and those with pending conservation projects are committed to donate well over \$300,000 in order to permanently conserve it. Landowners currently in the process of conserving their land are protecting over \$1,450,000 in land value.

### **Due Diligence Grant Program**

This program assists landowners who are willing to donate a conservation restriction on their land with funding for ancillary costs of appraisal, title, survey, closing costs, and environment site assessment.

Impacts:

- Identified the 424 landowners who pre-qualify for the Due Diligence Grant
- Mailed information packets to the 424 landowners with an invitation to three information sessions.
- Mailed information packets to 56 land conservation organizations, agencies and service foresters who work in the focus area municipalities with invitation to three information sessions.
- Mailed information packets to private consulting foresters and state service foresters working in the focus area towns.
- Held three information sessions about the program – in Greenfield, Gardner, and West Brookfield – for conservation organizations and landowners.
- Presented Due Diligence Grant information at 4 landowner engagement workshops to date.
- Facilitated the submission of four grant applications to date with several more expected in FY2015

### ***Highlight for Forest Legacy***

#### **The Brushy Mountain Forest Legacy Project**

Completed in 2011, the Brushy Mountain Forest Legacy Project conserved 3,486 acres of forest land. This property is a certified tree farm and is managed for sustainable forestry, conserves scenic resources and fish and wildlife habitat, and promotes local, regional, and national conservation goals. The conservation restriction on the property guarantees public access for passive outdoor recreation including organized nature walks, hunting, fishing, and hiking. The Commonwealth is also given access to conduct rare species and natural community research.

## ***Highlight for Forest Fire Control***

### **Meet Fire Management Needs**

Over the past five years, the DCR Forest Fire Bureau has maintained an effective fire management program by continuing strong cooperative relationships with municipal fire departments, state fire services, federal agencies and other DCR programs. DCR Fire has averaged over 450 municipal, state and federal firefighters trained in all aspects of wildland fire and fire management per year. With support from our agency, DCR maintains a successful fire tower program with 42 towers still in existence supporting local fire detection needs during high fire danger days. Over the last five years DCR Fire has facilitated over nine basic level Air Operations trainings throughout the state targeted at local fire department staff. DCR Fire management staff have collaborated with state lands managers and planning staff to contract the creation of four comprehensive fire management plans on four significant DCR state forests and reserves with positively identify suppression planning needs and prescribed fire needs on over 28,000 acres of state owned lands.

## National Priority 2

Protect Forests from Threats

### ***Highlights for Forest Health***

These are accomplished through a cooperative effort working with the USFS and other federal, state and regional partners.

#### **Asian Longhorned Beetle Eradication Program**

The DCR Forest Health Program is a major partner in the effort to eradicate the Asian longhorned beetle in Worcester County, MA. This ongoing project utilizes federal and state funding to survey and remove infested trees thus protecting the residual forest which is susceptible to the spread of this invasive pest. A smaller infestation in the Boston/Suffolk County area was recently declared eradicated through the efforts of the cooperative ALB Program.

Reforestation efforts were also implemented in Worcester County, focusing on areas with depleted canopies due to removal of infested trees. The Reforestation Efforts, while executed by DCR's Urban and Community Forest team, were fully coordinated and supported by with Forest Health teams. Since 2010, nearly 18,000 trees have been replanted within the ALB regulated area.

#### **Forest Health Working Team**

The MA DCR Forest Health Program has also been a partner in the creation of a regional Forest Health Working Team as part of the Northeast Area Forest Fire Protection Compact. This working team has been successful in putting together qualified forest health staff that can travel to assist other states and Canadian Provinces if a forest health issue/emergency arises. The discovery of Emerald ash borer and subsequent delineation work in NH and the Level 3 (high risk areas beyond the regulated borders) Asian longhorned beetle detection surveys recently accomplished in Massachusetts are two examples of how successful the program has been.

#### **Insect and Disease Mitigation**

In addition the MA DCR Forest Health Program is working with the USFS and other cooperators to monitor and when necessary treat insects and diseases which threaten the future health of the forest resources of the state. This has been accomplished through ongoing forest health monitoring utilizing aerial and ground surveys. When available biological control agents have been released in an effort to get them established in areas controlling the Hemlock woolly adelgid, Winter moth and Emerald ash borer.

### ***Highlight for Forest Legacy***

#### **The Southern Monadnock Plateau Phase II Project Metacomet Monadnock Forest Project**

The Southern Monadnock Plateau Phase II and Metacomet Monadnock Forest Projects protected 3,016 acres of forestland from development in 2011 and 2012.



In the last 5 years, Massachusetts has amended our Assessment of Need to create/expand 3 Forest Legacy Areas: Heritage Corridor, Nashua River Greenway Expansion, North Quabbin Expansion. This greatly increases the opportunities for protection of significant areas of forest in Massachusetts from the threat of development.

### ***Highlight for Forest Fire Control***

#### **Maintain Strong, Highly Trained Response Resources**

DCR continues to grow its wildfire training program for both in state and national response benefits. The agency has responded to annual requests for type 2 initial attack hand crews each of the last five years, and most recently has started qualifying and mobilizing single resources to national incidents. Districts Fire Wardens are now required to deliver at minimum two twelve hour basic wildland fire training courses to municipal fire departments in their respective districts each year.

## National Priority 3

Enhance Public Benefits from Trees and Forests

### ***Highlight for Cooperative Forest Management***

#### **Buy Local**

The Northern Berkshires represents Massachusetts' largest unfragmented forested landscape with excellent highway access to exurban markets. This project is a unique partnership of agriculture and forestry organizations focused on conserving this working landscape by bringing the successful MA "buy local" farm model to forestry. This model has resulted in a stabilization of farm land loss and increases in farm production and direct sales. The purpose of this project is to head off fragmentation of forest landscapes in MA by significantly increasing sustainable forestry and making forest land ownership and forest businesses viable via developing value-added local products and markets to environmentally conscious consumers in nearby exurban and urban areas.

In developing a "Buy Local" model for forest products in Massachusetts over the past 5 years, the program has transitioned from the local foods model to relationship based outreach due to a refined understanding of needs of both forest products businesses and urban markets. The initial adoption of marketing strategies was effective in getting the public to think about where wood is sourced from, and was beneficial in raising public awareness about global benefit of local wood consumption.

In years three through five, observation of public interaction with program staff, constituent emails, and dialogue with CQP member businesses allowed the project to adapt the model to best suit both the intent of the project and the desired outcomes. Targeting architects, builders, and engineers of both private and public work quickly focused outreach to those with influence over active societal consumption of forest products. Education efforts to the public continued and the program expanded to include sourcing local wood for three public buildings. These projects helped staff understand the complexity, timing, and regulatory (structural) issues that limits rural Massachusetts wood producers from accessing urban markets. A major success of the project in partnering with designers was the first published specification of CQP sourced forest products for the FF&E on a public building project at Walden Pond.

While the economic climate over the course of the project has put a strain on the businesses and communities it has been assisting, program staff and participating businesses have seen a shift in the design culture that shows a high level of interest in building with wood. With the Urban Timber exhibit at BSA in 2014, Harvard GSD "Wood Urbanism" Colloquium, Wood Works, and the USFS FPL Tall Building challenge, design momentum is moving towards increased usage of forest products. By accomplishing project goals, the program has created an effective model for the integration of local wood into the construction industry across the urban rural continuum.

### ***Highlight for Urban and Community Forestry***

#### **Greening the Gateway Cities**

The issue addressed in this project was to reduce household heating and cooling energy use in urban residential areas in the state's Gateway Cities.

The goal was to increase tree canopy cover by 10% in targeted areas within Massachusetts' 26 Gateway Cities. Current research shows that for every 1% increase in tree canopy cover over and above a minimum of 10% brings a reduction of 1.9% reduction in cooling energy use and 1.1% in heating energy use.

Approach:

- Identify environmental justice neighborhoods within Gateway Cities with low canopy cover, older housing stock, higher wind speeds and large rental population.
- Employ Foresters and seasonal tree planting crews from the community to:
- Coordinate tree planting programs in Gateway Cities, working with municipalities and grass root partners.
- Provide technical support to communities to benefit from tree planting to reduce energy use in urban neighborhoods.
- Provide outreach and education to private landowners as to where to site trees on their property and what trees to plant and educate them on proper tree maintenance.

In addition, healthy urban forest ecosystems improve the quality of the water we drink, the air we breathe, the stability of our neighborhoods, and our sense of community and individual pride.

### ***Highlight for Forest Legacy***

#### **Q to W**

The Quabbin Reservoir to Wachusett Mountain Forest Legacy Project will protect ~4,000 acres of forestland within the Quabbin, Ware River, and Wachusett Watersheds. These watersheds are part of an unfiltered drinking water supply system that provides water to 2.5 million people (1/3 of the population of Massachusetts).

### ***Highlight for Forest Fire Control***

#### **Provide a Prescribed Fire Program for hazard fuels mitigation and ecosystem restoration**

DCR has been a leader in developing one of the strongest prescribed fire partnerships in the northeast over these last five years. Acres treated per year continue to increase as DCR, Mass Fish and Wildlife and our nonprofit partners continue to build capacity in experience and qualifications. Over the last five years, an average of 800 nonfederal acres have been treated with prescribed fire, and the state is on track to reach 1500 acres for 2015.