Climate Forestry Stewardship Planning Training for Foresters

Training Session 1
February 9, 2022

dcr MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION

Mass Audubon

NEW ENGLAND FORESTRY FOUNDATION

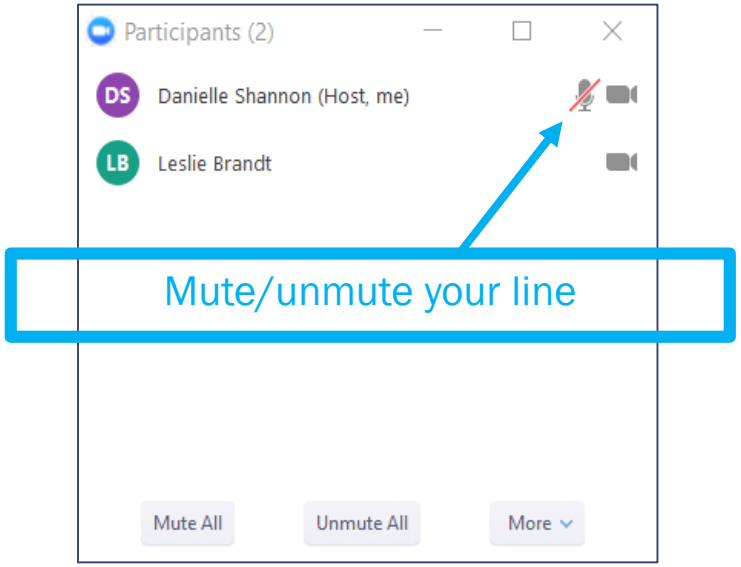
NIACS
Northern Institute of Applied Climate Science

Massachusetts Woodlands Institute
A SUBSIDIARY OF FRANKLIN LAND TRUST

WELCOME!

For today, please:

- **Turn on your webcams** (if you can).
- **Mute** yourself unless in a breakout room
- **Have a question?** Use the chat box!
- **‘Rename’ yourself**: **First name, Affiliation**



WELCOME!

This training will be led by a team made up of staff from the Northern Institute of Applied Climate Science, as well as the Massachusetts Department of Conservation and Recreation.

Maddy Baroli
NIACS Climate Adaptation Specialist

Maria Janowiak
NIACS Acting Director

Jennifer Fish
Mass DCR Service Forestry Program Director

NIACS
Northern Institute of Applied Climate Science

Learn more: www.forestadaptation.org/team
& www.mass.gov/orgs/department-of-conservation-recreation

Northern Institute of Applied Climate Science

Climate

Carbon

NIACS
Northern Institute of Applied Climate Science

Provides **practical** information, resources, and technical assistance related to forests and climate change

Chartered by USDA Forest Service, universities, non-profit and tribal conservation organizations

FOREST SERVICE US DEPARTMENT OF AGRICULTURE

Michigan Technological University 1885

Great Lakes Indian Fish & Wildlife Commission

NCASI

UNIVERSITY OF MINNESOTA

AMERICAN FORESTS

The UNIVERSITY of VERMONT

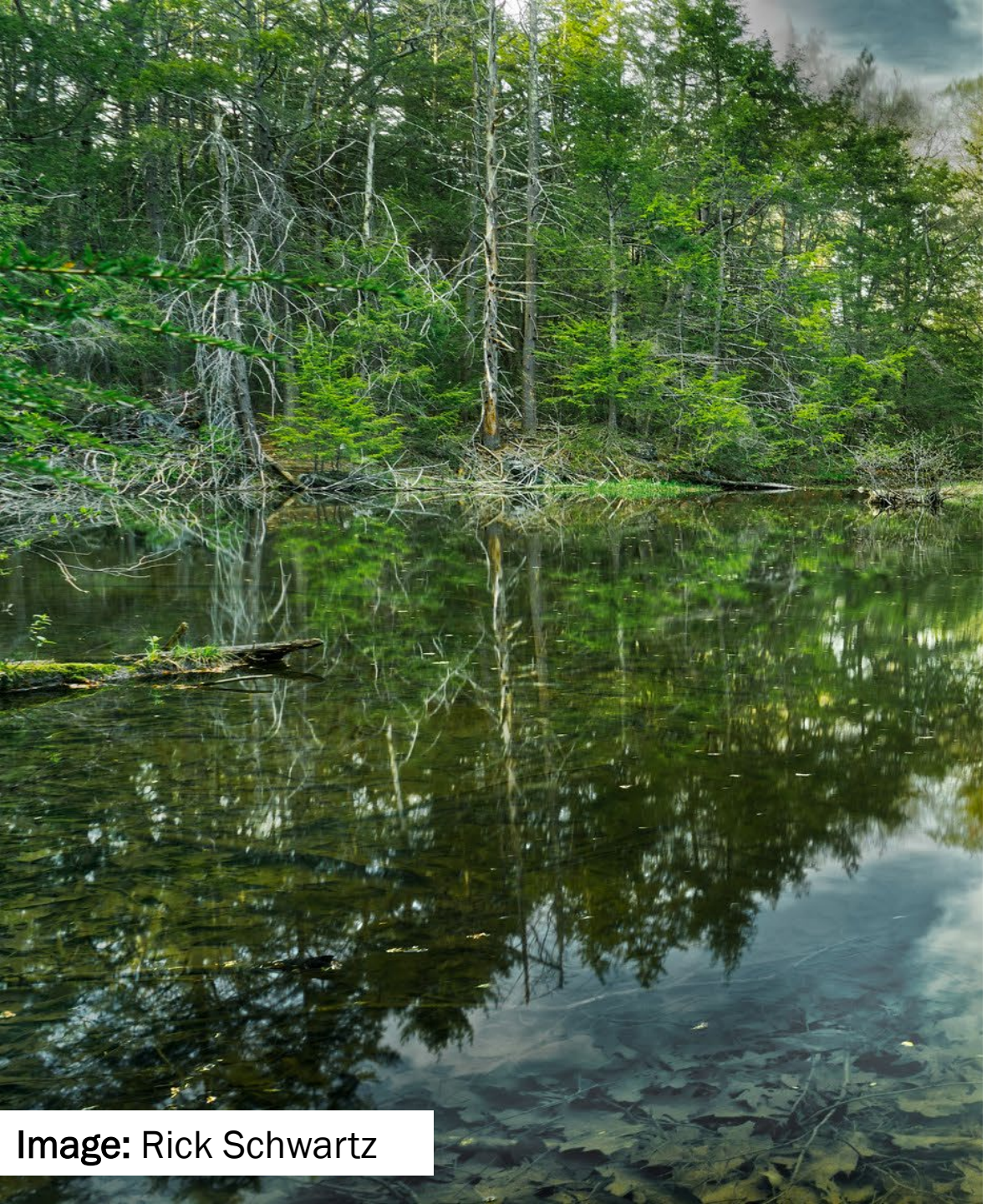


Image: Rick Schwartz

WHY ARE WE HERE?

- Integrate climate considerations into your forest stewardship planning work.

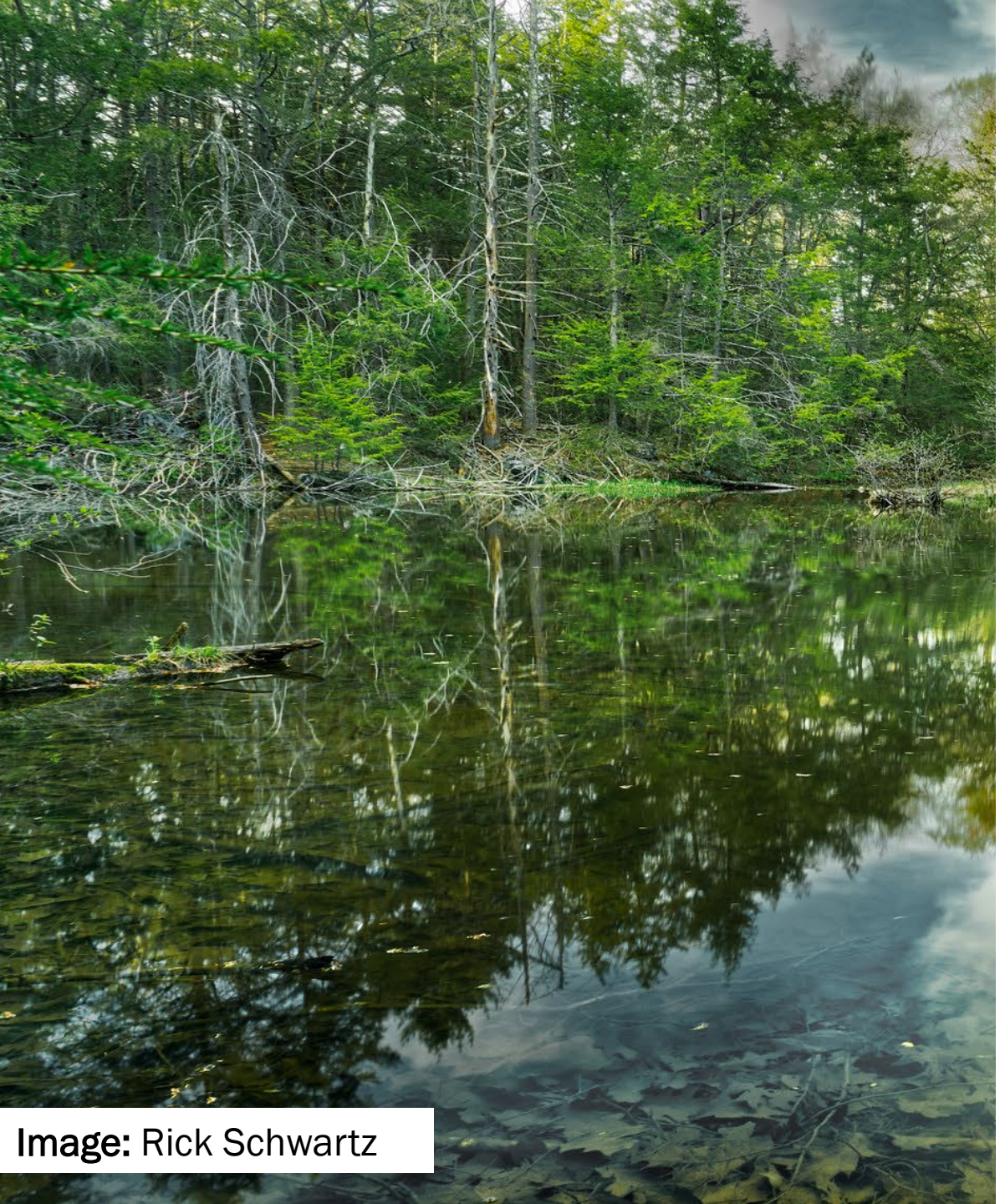


Image: Rick Schwartz

TRAINING OBJECTIVES

- Overview of new climate forest stewardship planning efforts
- Identify site-specific climate change impacts, challenges and opportunities, and adaptation actions
- Familiarize with climate forest stewardship plan directions and requirements
- Explore the Forester Guide as supporting tool for climate change planning
- Communicate climate change and adaptation ideas to landowners

TRAINING SCHEDULE

February 9 - Web Session 1

- Introduction to Climate Forestry Program, climate impacts on Massachusetts forests

February 16 - Web Session 2

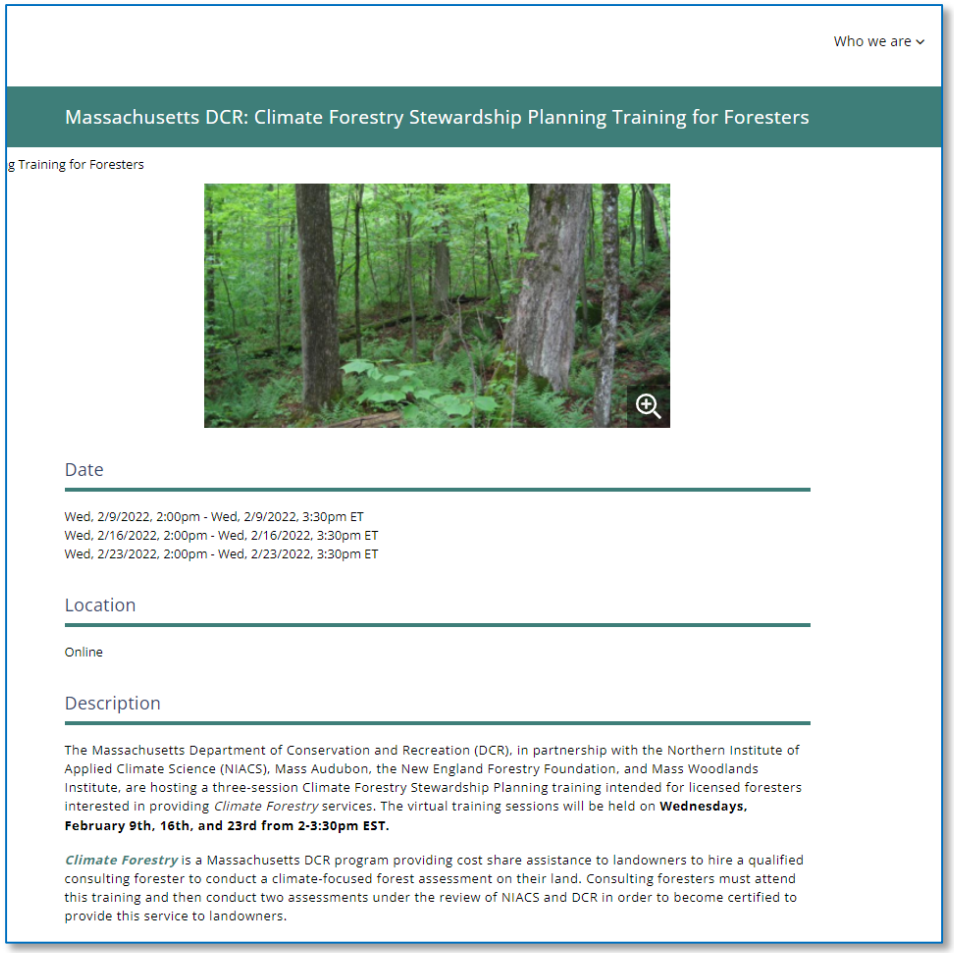
- Integrating climate adaptation into forest management

February 23 Web Session 3

- Walkthrough of climate forest stewardship plan directions and sample plan

TRAINING DETAILS

- Keep an eye out for **emails**!
- Keep track of materials, find resources on the **training webpage**
- Sessions will be recorded? (minus the breakout room discussions)



Who we are

Massachusetts DCR: Climate Forestry Stewardship Planning Training for Foresters

g Training for Foresters

Date

Wed, 2/9/2022, 2:00pm - Wed, 2/9/2022, 3:30pm ET
Wed, 2/16/2022, 2:00pm - Wed, 2/16/2022, 3:30pm ET
Wed, 2/23/2022, 2:00pm - Wed, 2/23/2022, 3:30pm ET

Location

Online

Description

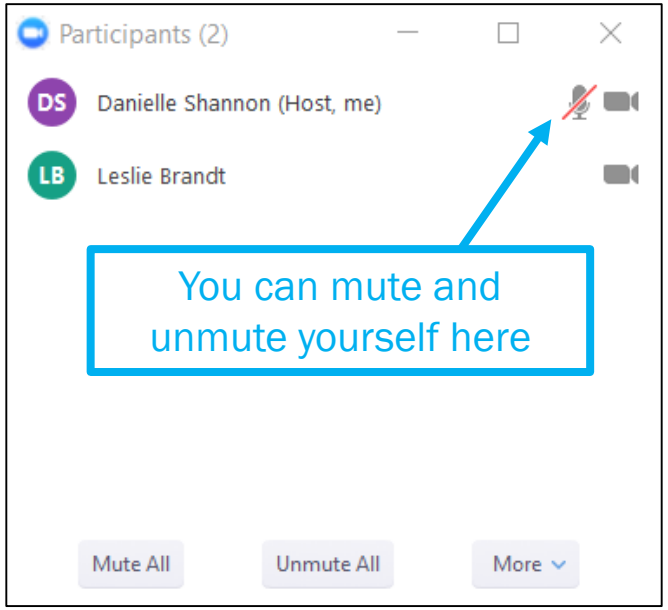
The Massachusetts Department of Conservation and Recreation (DCR), in partnership with the Northern Institute of Applied Climate Science (NIACS), Mass Audubon, the New England Forestry Foundation, and Mass Woodlands Institute, are hosting a three-session Climate Forestry Stewardship Planning training intended for licensed foresters interested in providing *Climate Forestry* services. The virtual training sessions will be held on **Wednesdays, February 9th, 16th, and 23rd from 2-3:30pm EST.**

Climate Forestry is a Massachusetts DCR program providing cost share assistance to landowners to hire a qualified consulting forester to conduct a climate-focused forest assessment on their land. Consulting foresters must attend this training and then conduct two assessments under the review of NIACS and DCR in order to become certified to provide this service to landowners.

TRAINING TIPS & EXPECTATIONS

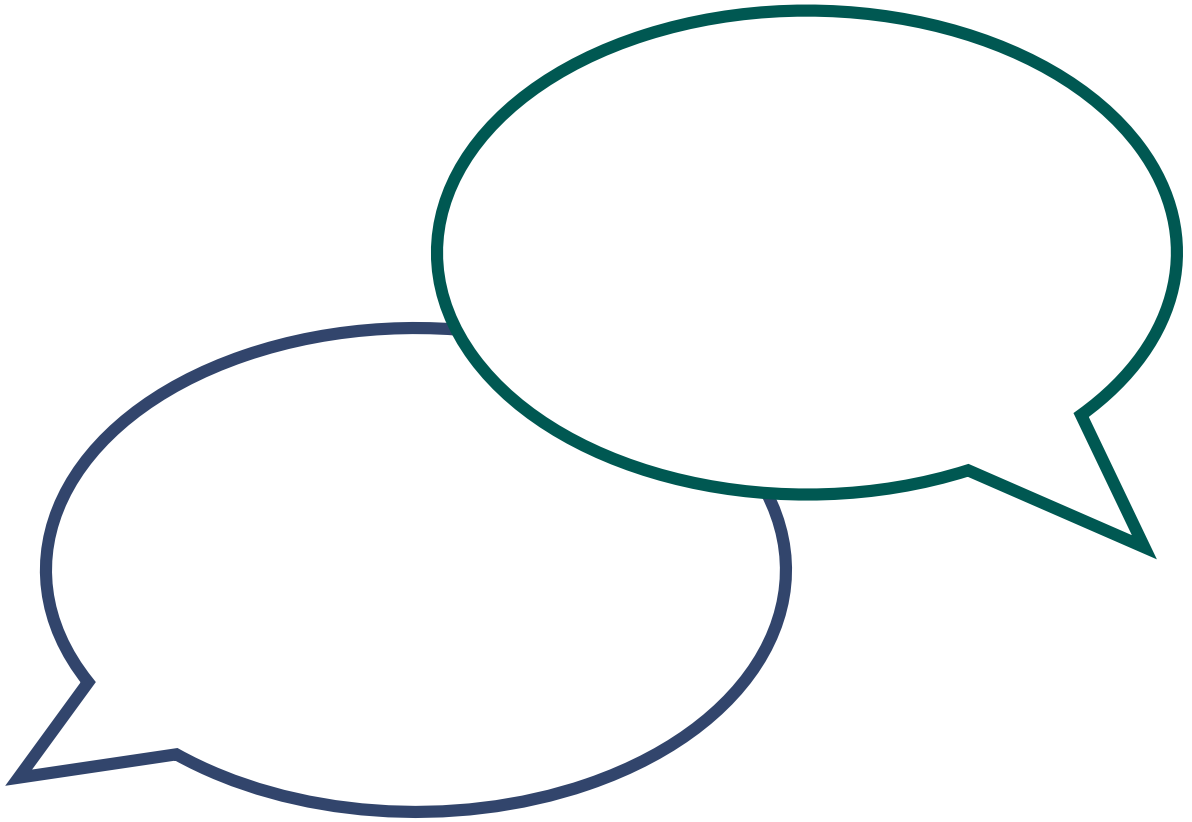
Be as fully engaged as possible

- Close your email
- Mute your cell phone
- Shut your door / minimize distractions in your office or home office
- Utilize Zoom chat and annotate function



BREAKOUT INTRODUCTIONS

- Join your breakout room
- Introduce yourself!
  - Name
  - Location
  - Focal property (if selected)

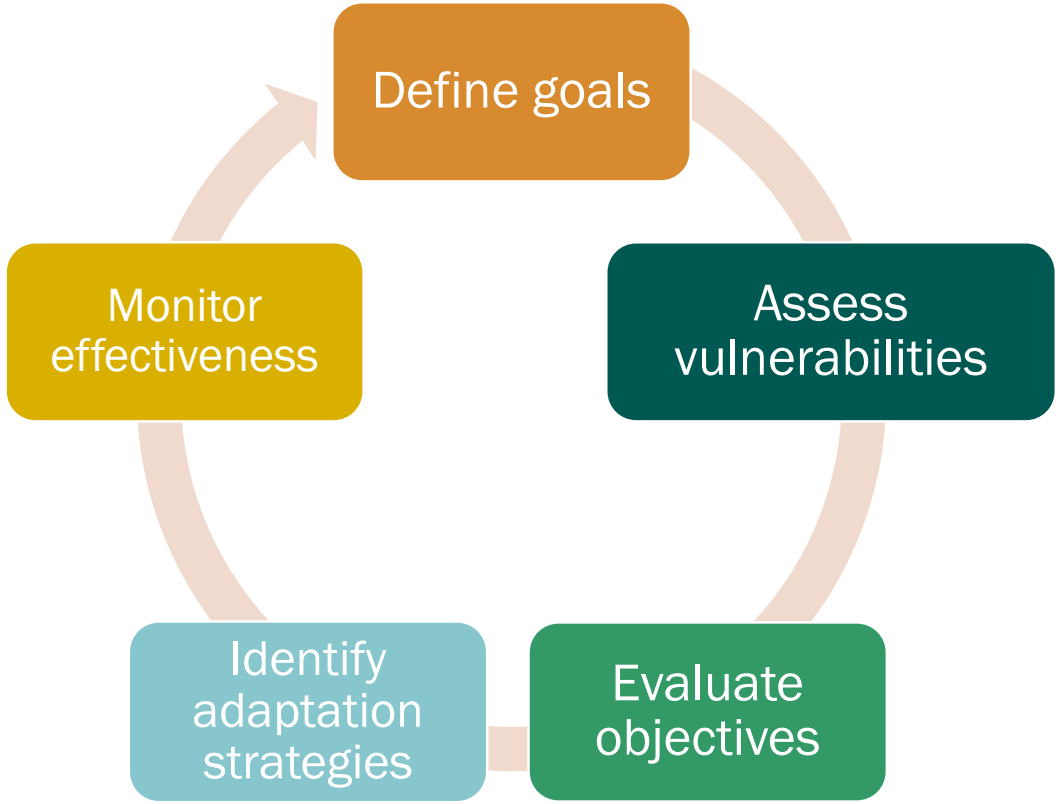


WHO IS IN THE TRAINING? (AND FOCAL PROPERTIES)

- DCR Service Foresters
- Consulting Foresters
- Bay State Forestry Service
- Long View Forest
- Wigmore Forest Resources
- Shire Forestry
- Sweet Birch Consulting
- Jourdain Forestry
- New England Forestry Consultants

FORESTER GUIDE

- **"Managing Forests for Climate Change in Massachusetts"**
  - Attached in email and available on training webpage
  - Includes climate impacts on various forest types, example mgmt. options for adaptation & mitigation, a climate glossary, and more. . .
  - Incorporates NIACS' Adaptation Workbook process



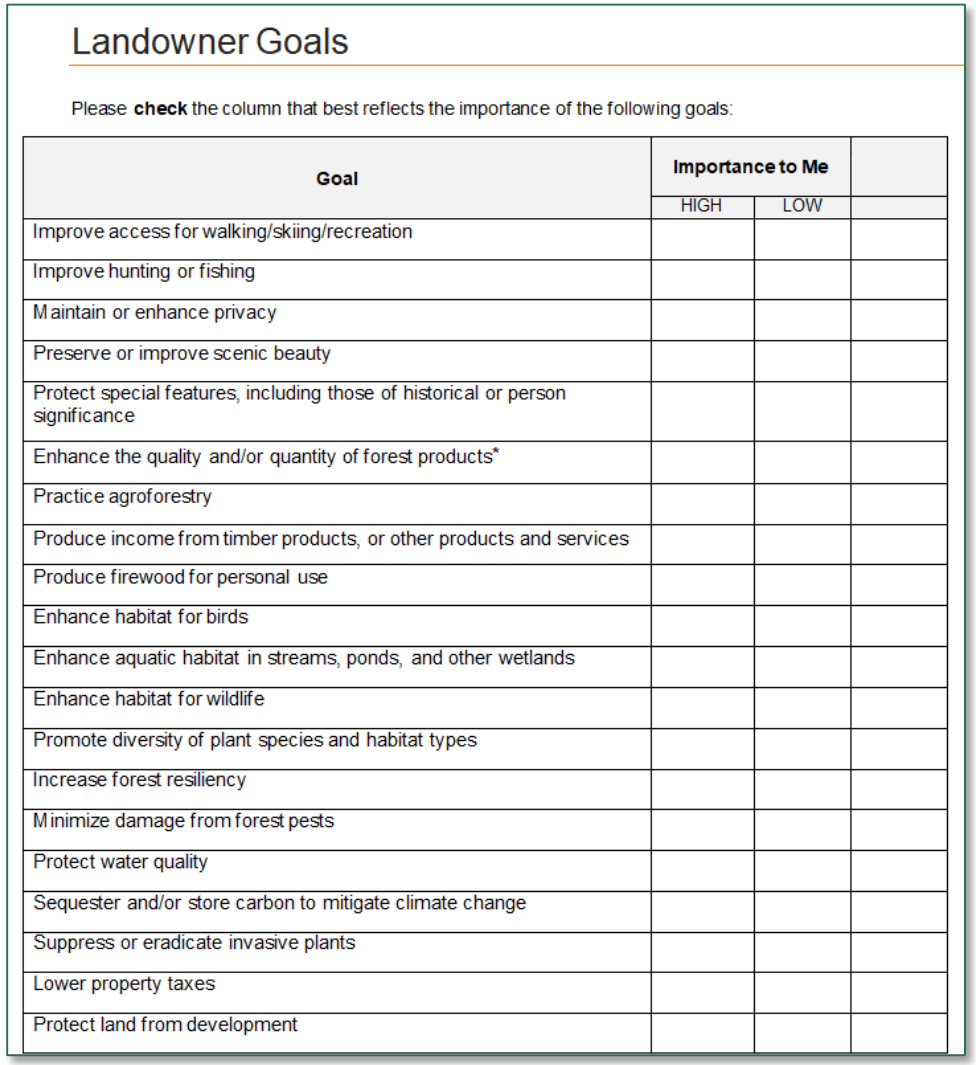
STEP 1 ACTIVITY – WHAT ARE SOME LANDOWNER GOALS FOR YOUR SITE?

Management Goal

Broad, general statements, usually not quantifiable, that express a desired state or process to be achieved.

Examples from the form

- Improve hunting or fishing
- Protect water quality
- Increase forest resiliency
- Produce income from timber products, or other products and services



Landowner Goals

Please **check** the column that best reflects the importance of the following goals:

Goal	Importance to Me		
	HIGH	LOW	
Improve access for walking/skiing/recreation			
Improve hunting or fishing			
Maintain or enhance privacy			
Preserve or improve scenic beauty			
Protect special features, including those of historical or person significance			
Enhance the quality and/or quantity of forest products*			
Practice agroforestry			
Produce income from timber products, or other products and services			
Produce firewood for personal use			
Enhance habitat for birds			
Enhance aquatic habitat in streams, ponds, and other wetlands			
Enhance habitat for wildlife			
Promote diversity of plant species and habitat types			
Increase forest resiliency			
Minimize damage from forest pests			
Protect water quality			
Sequester and/or store carbon to mitigate climate change			
Suppress or eradicate invasive plants			
Lower property taxes			
Protect land from development			

QUESTIONS?

Credit: Getty Images/iStockphoto

MASSACHUSETTS DCR CLIMATE FORESTRY

- Part of the Working Forest Initiative
- https://www.mass.gov/guides/climate-forestry
- Working on various climate projects for 1.5 years
  - Stewardship and climate change
  - Municipal carbon
  - Various projects geared toward harvesters

dcr Massachusetts

NEW ENGLAND FORESTRY FOUNDATION

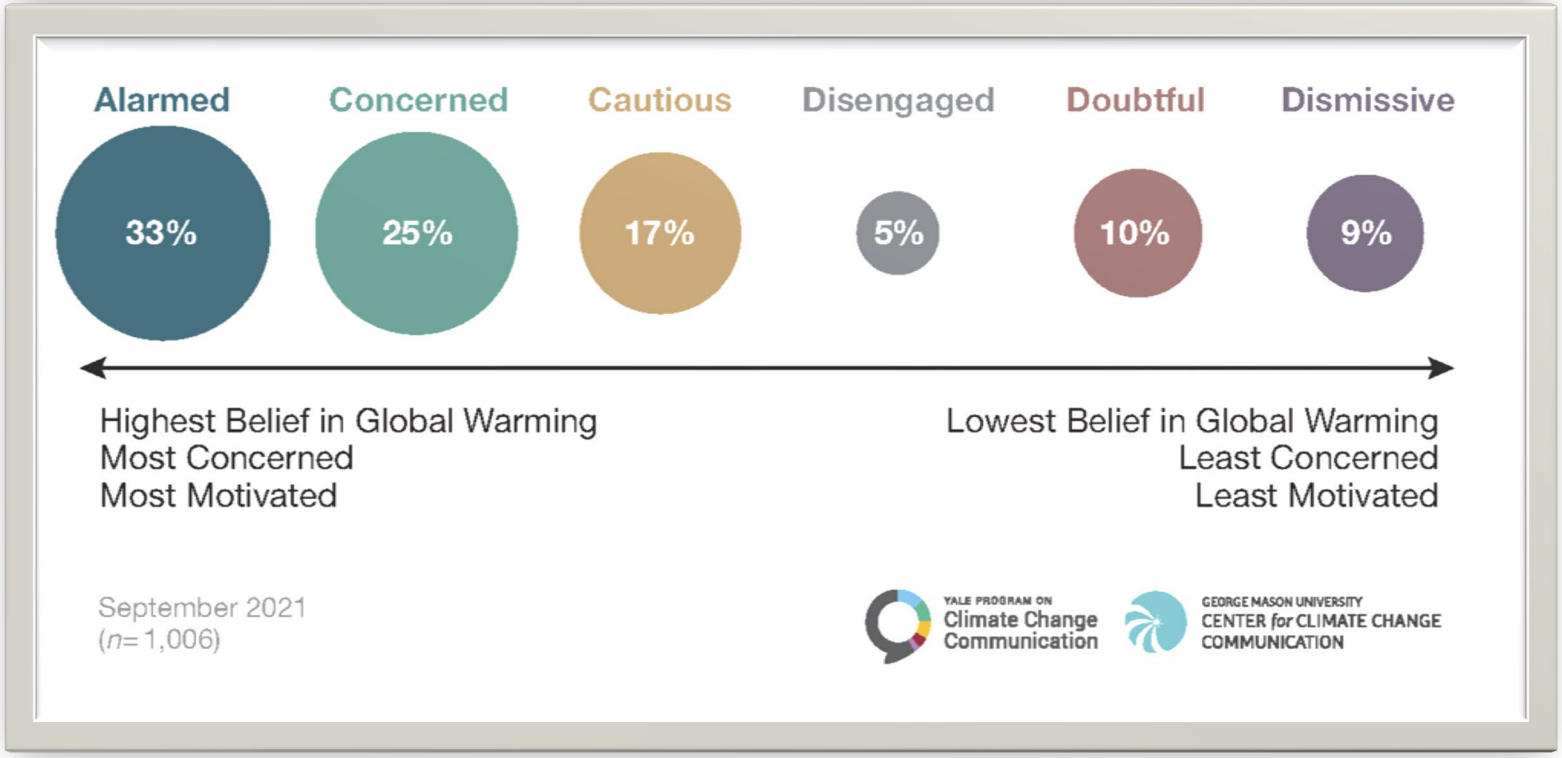
Mass Audubon

NIACS Northern Institute of Applied Climate Science

Massachusetts Woodlands Institute
A SUBSIDIARY OF FRANKLIN LAND TRUST

STEWARDSHIP AND CLIMATE CHANGE

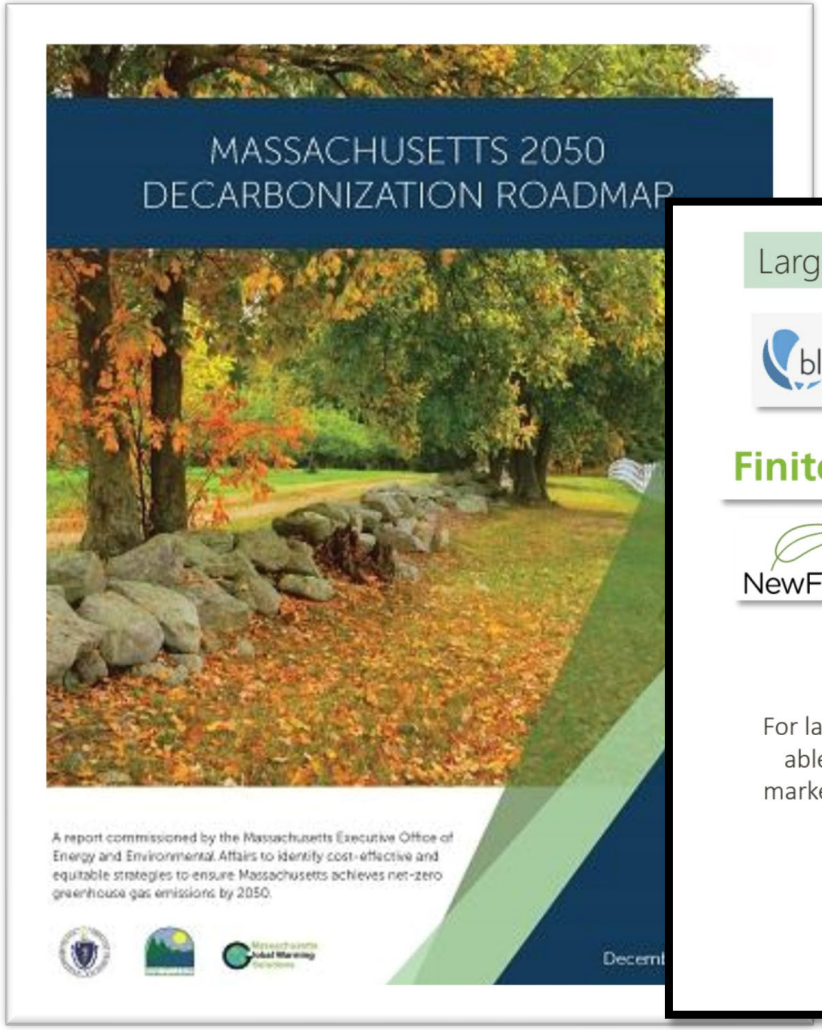
- We’re all seeing some aspect
  - Winters have changed significantly
  - Freeze thaw issue
  - Summer temperatures
  - Larger rain events
- Stressors
- Anxiety about climate



dcr
Massachusetts

STEWARDSHIP AND CLIMATE CHANGE

- New programs and new policies



Development of the Clean Energy and Climate Plan for 2025 and 2030

Public Engagement

Topic	Agency/Office	Public	More Information

Larger forestlands

bluesource

THE CLIMATE TRUST

FiniteCarbon

ep carbon

NewForests

SIG Carbon

GreenAssets

For larger forestlands, projects may be able to enroll under California ARB market/registry or in voluntary market registries (e.g., ACR)

*not exhaustive; there may be newer developers or developers for specific types of projects there are not included here

Smaller forestlands

Forest Carbon Works

Approved under California's ARB market/registry

CORE CARBON By FiniteCarbon

Approved under ACR registry

NCX

Independent market, registry, and developer
In process of approval with VCS registry

FAMILY FOREST CARBON PROGRAM

American Forest Foundation

The Nature Conservancy

In process of approval with VCS registry

Urban Forests

CITY FOREST CREDITS

For more information and links to these developers, see www.northeastforestcarbon.org

Alexandra Kosiba

CHANCE FOR FORESTERS TO LEAD

- Just like Foresters for the Birds
  - Tweaks to management
  - Climate forward
  - *Can be active!*
- Put you and your landowner in a good place to take advantage of climate programs and policies
- Understand the conversation
- Be able to speak about climate change on a policy level and with your landowners

SUPPORTING DOCUMENTS

- Caring for your Woods - Setting Goals landowner guide—the items in this goals booklet are also part of a checklist in the FSP template and include checkboxes for both climate change and carbon, which provides a potential avenue for monitoring.

- Caring for your Woods - Adapting to Changing Conditions landowner guide – led by NIACS and summarizing best practices and no-regrets practices from our work; could be adapted to other states/regions

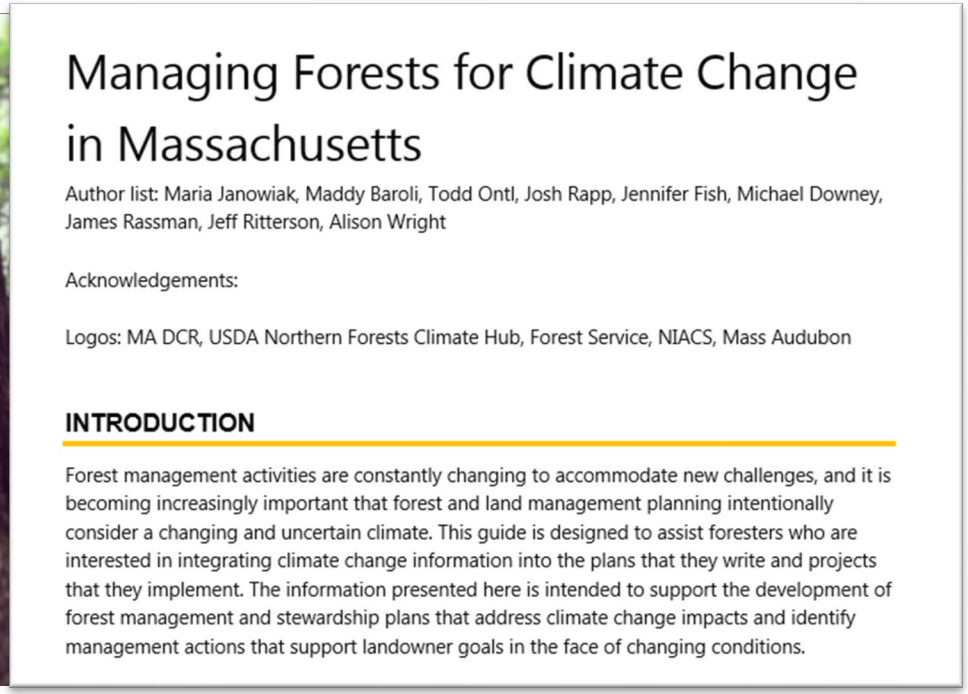
- Caring for your Woods - Managing for Forest Carbon landowner guide – also led by NIACS broadly applicable to other states/regions

SUPPORTING DOCUMENTS

- Forester Guide – Adaptation

- ***Managing Forests for Climate Change Adaptation in Massachusetts*** **forester guide, that is parallel to a guide developed for the Forestry for the Birds program. The guide summarizes climate change impacts on forests in MA and provides an overview of how to integrate climate change consideration into developing management plans (broadly, not just FSPs) based on our Adaptation Workbook process.**
- **Design and Printing**

- Forester Guide – Carbon
  - In process



Managing Forests for Climate Change in Massachusetts

Author list: Maria Janowiak, Maddy Baroli, Todd Ontl, Josh Rapp, Jennifer Fish, Michael Downey, James Rassman, Jeff Ritterson, Alison Wright

Acknowledgements:

Logos: MA DCR, USDA Northern Forests Climate Hub, Forest Service, NIACS, Mass Audubon

INTRODUCTION

Forest management activities are constantly changing to accommodate new challenges, and it is becoming increasingly important that forest and land management planning intentionally consider a changing and uncertain climate. This guide is designed to assist foresters who are interested in integrating climate change information into the plans that they write and projects that they implement. The information presented here is intended to support the development of forest management and stewardship plans that address climate change impacts and identify management actions that support landowner goals in the face of changing conditions.

MANAGEMENT PLAN DIRECTIONS AND TEMPLATE

- Alison Wright-Hunter will cover in depth on the 23rd
- We've created the directions so that any format can be combined
  - stew, stew/ch61, stew/birds, stew/climate, stew/climate/birds
- We plan on having all new plan forms and directions posted on the DCR website by 19th
- If you've bookmarked the laws forms and directions page you'll need to re-bookmark it

CERTIFICATION

- Similar to Foresters for the Birds
- Training
- Write plan with help
- Write plan on own with review
- Climate smart people always there to answer your questions
- Follow up trainings as the landscape changes

QUESTIONS?

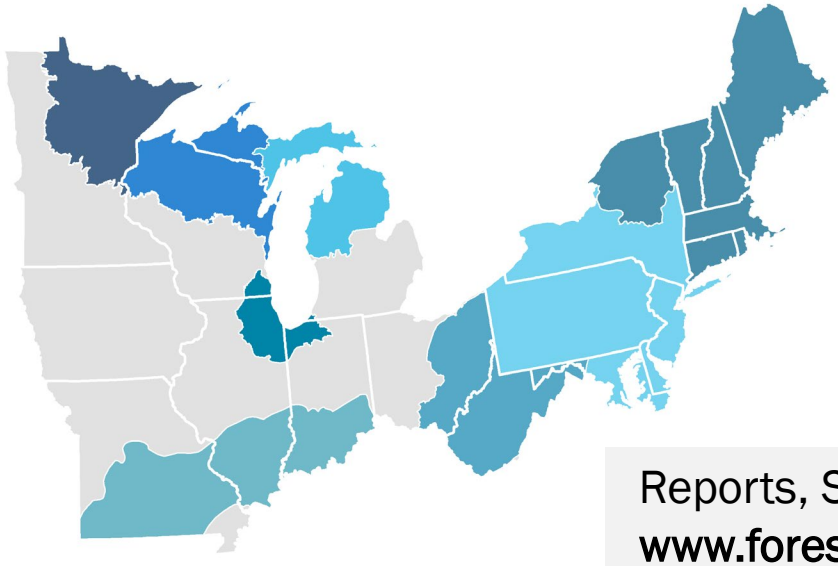
CLIMATE CHANGE IMPACTS IN WESTERN MASSACHUSETTS

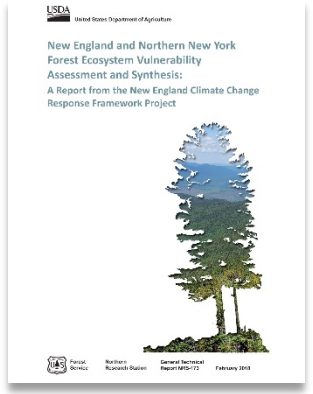
CLIMATE CHANGE PRESENTS MANY CHALLENGES…

- Forests and ecosystems are changing and will continue to change due to a changing climate.
- We are experiencing the impacts of climate change – now!
- Climate change impacts are exacerbating underlying issues and worsening current challenges.
- One-sized-fits-all answers to these problems are insufficient.

VULNERABILITY ASSESSMENT & SYNTHESIS

- Series of reports for **natural resource professionals**
- Focus on **tree species and forest ecosystems**
- Examine a **range** of future climates
- Evaluate **key ecosystem vulnerabilities** to climate change
- Does **not make recommendations** or assess vulnerability to changes in mgmt., land use, policy

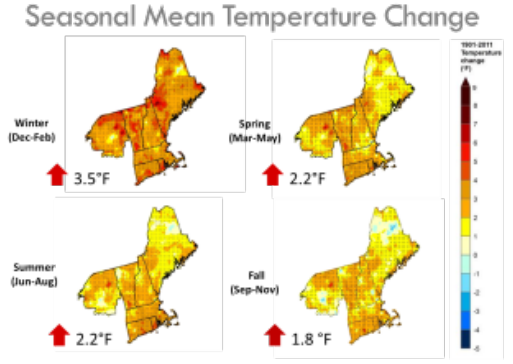


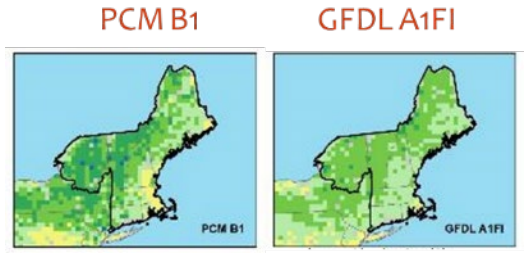


Reports, Summaries and StoryMaps:
www.forestadaptation.org/vulnerability-assessment

VULNERABILITY ASSESSMENT & SYNTHESIS

- Synthesizes state/regional assessments and scientific literature
- Incorporates results from forest impact models: **Climate Change Tree Atlas, LINKAGES, LANDIS**
- Draw on local expertise of **scientists and land managers**





34 authors – General Technical Report – 234 pages

THIS PRESENTATION…

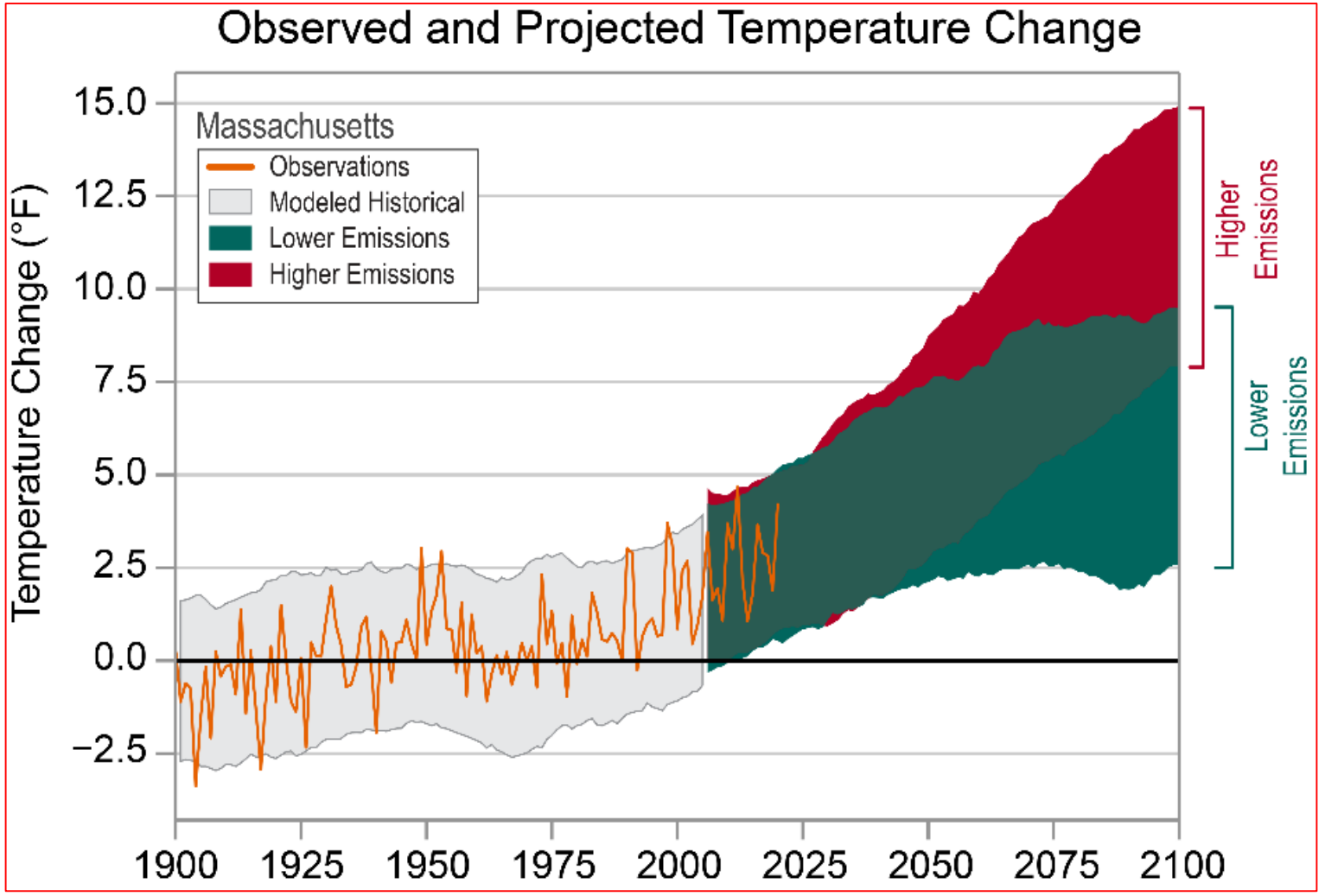
I'll talk about…

Shifting seasonality
Disturbance
Extreme Events
Sea-level rise
Wildfire Risk
Interacting stressors
Forest pests and disease
Altered precipitation
Invasive Plants
Tree species changes

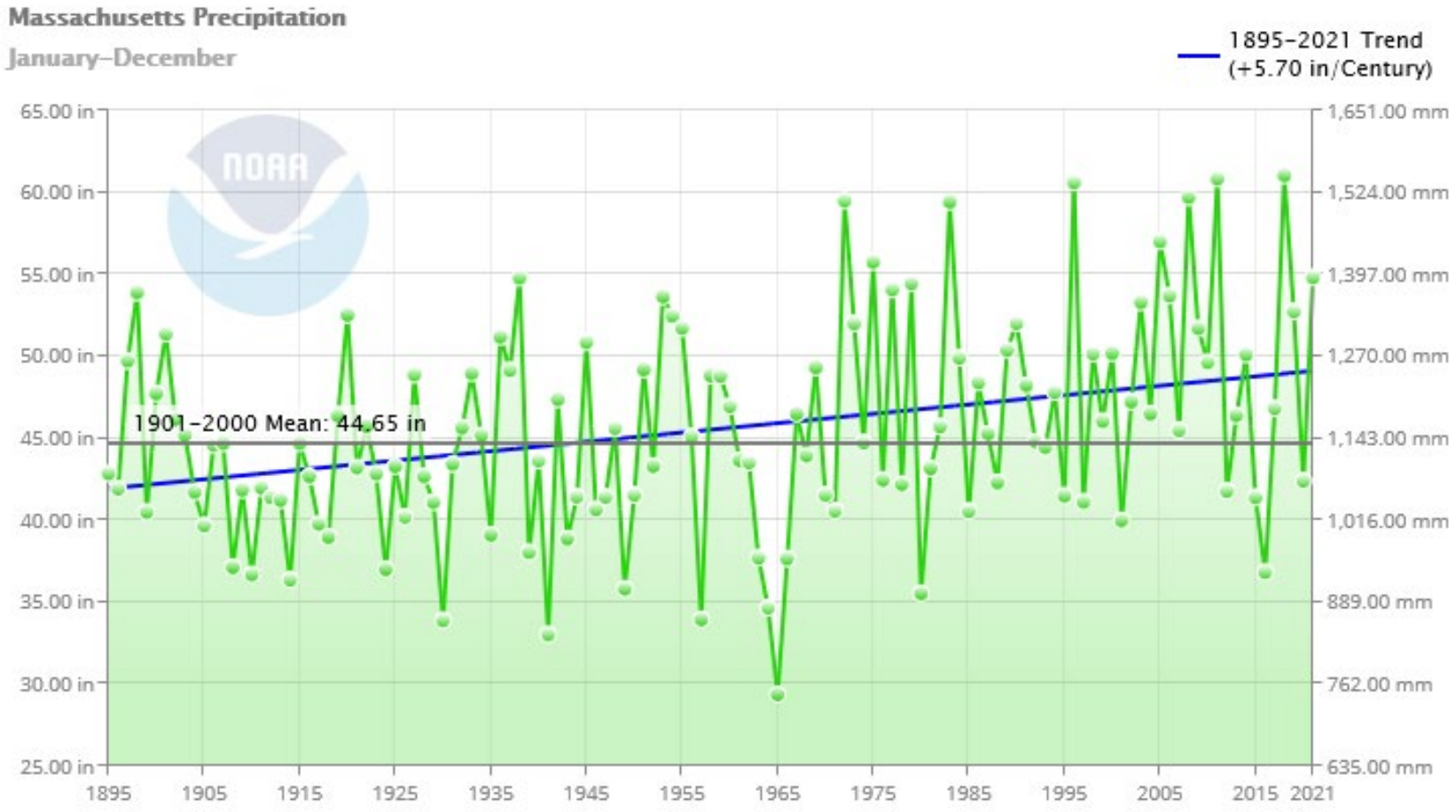
You think about…

What's at risk in YOUR forest?

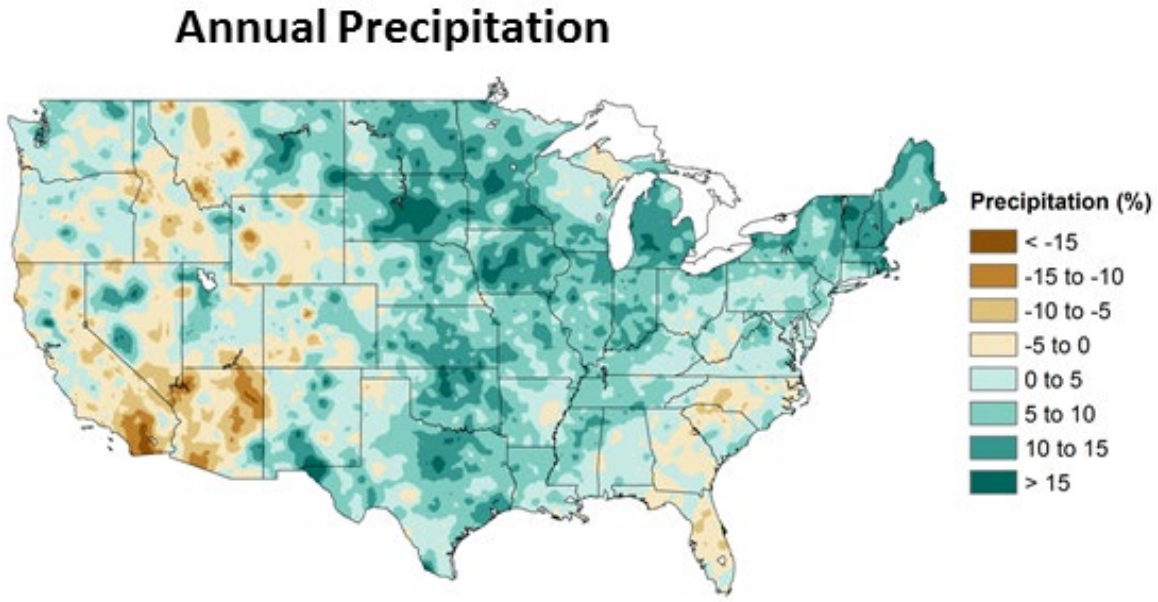
ALL MODELS PROJECT INCREASED TEMPERATURES

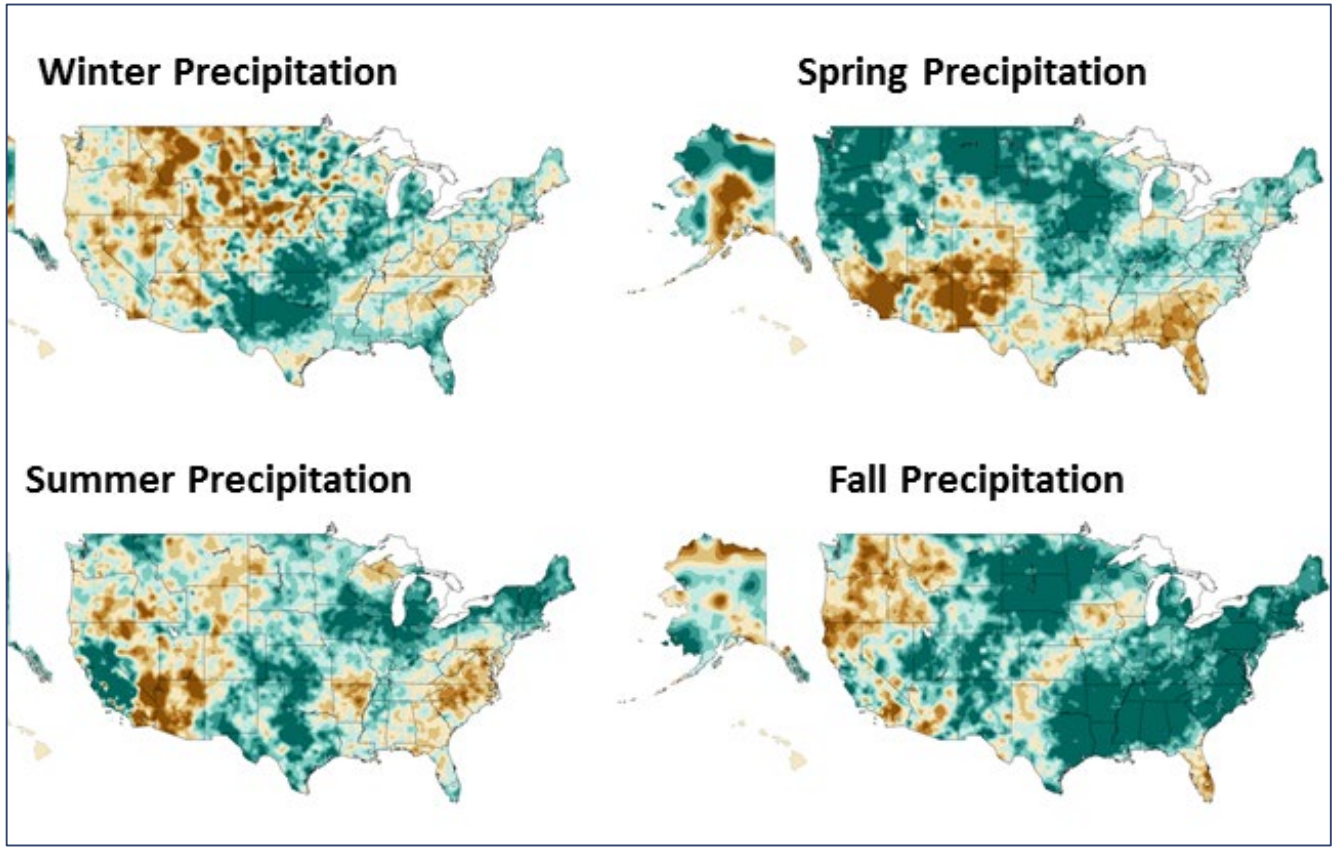


OBSERVED CHANGES IN PRECIPITATION



MODELS PROJECT SEASONAL CHANGES IN PRECIPITATION



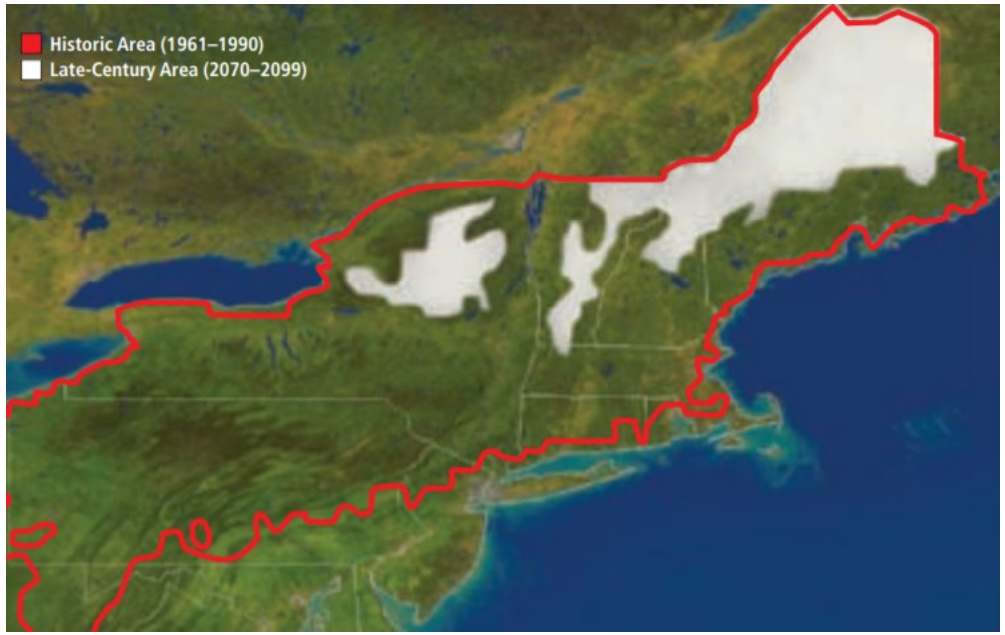


SHORTER WINTER (LESS SNOW)

Projected decreases in snow fall, cover, and depth

- 30-70% decreases in snowfall
- Greatest loss in December/January

Area with some snow on ground for 30 days per year



Red = historic
White = high emissions

Notaro et al. 2014, Figure: Frumhoff et al. 2007

SHORTER WINTER (LESS SNOW)

Projected decreases in snow fall, cover, and depth

- 30-70% decreases in snowfall
- Greatest loss in December/January

Decreased snowpack

- Increased soil freeze-thaw cycles can damage roots and alter soil processes

What may be at risk: The ability to do winter timber harvest when it is preferred to prevent damage to forest soils and residual forest; tree species sensitive to soil freeze-thaw

SHORTER WINTER (LESS SNOW, MORE RAIN)

More rain

- Warmer temperatures
- Increased precipitation
- Extreme rain events

Earlier peak stream flows

- Flashiness and episodic high flows may increase

Dale et al 2001, Huntingon 2004, Parmesan 2006

SHORTER WINTER (LESS SNOW, MORE RAIN)

More rain

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Earlier peak stream flows

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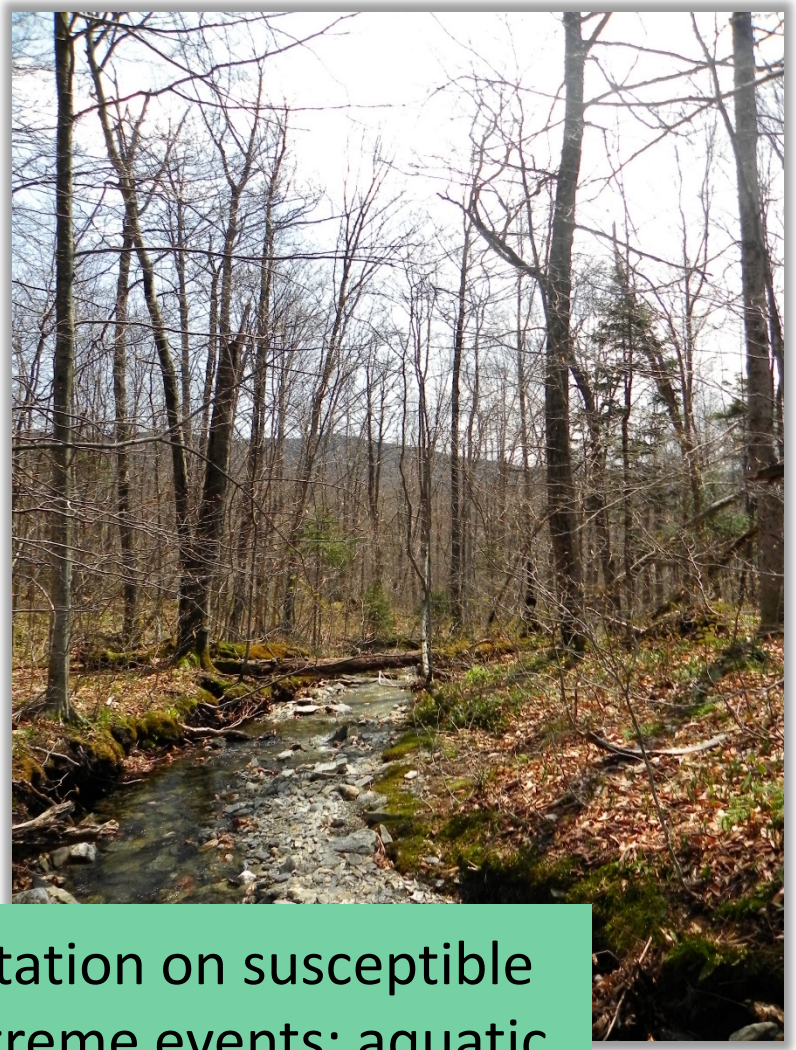


Dale et al 2001, Huntingon 2004, Parmesan 2006

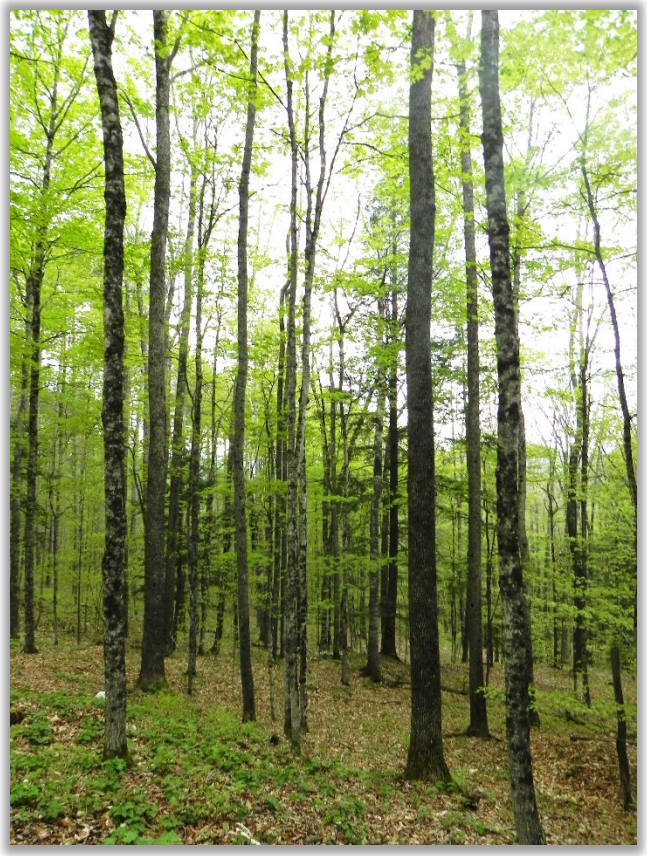
What may be at risk: Increased erosion/sedimentation on susceptible sites; culvert washouts and road damage from extreme events; aquatic habitats and species

LONGER GROWING SEASON

Warmer temps result in longer growing seasons

- Evidence of phenological shifts
- Projected to increase 3-7+ more weeks

Longer period for plant growth



Melillo et al. 2014, Nelson Center 2014

LONGER GROWING SEASON

Warmer temps result in longer growing seasons

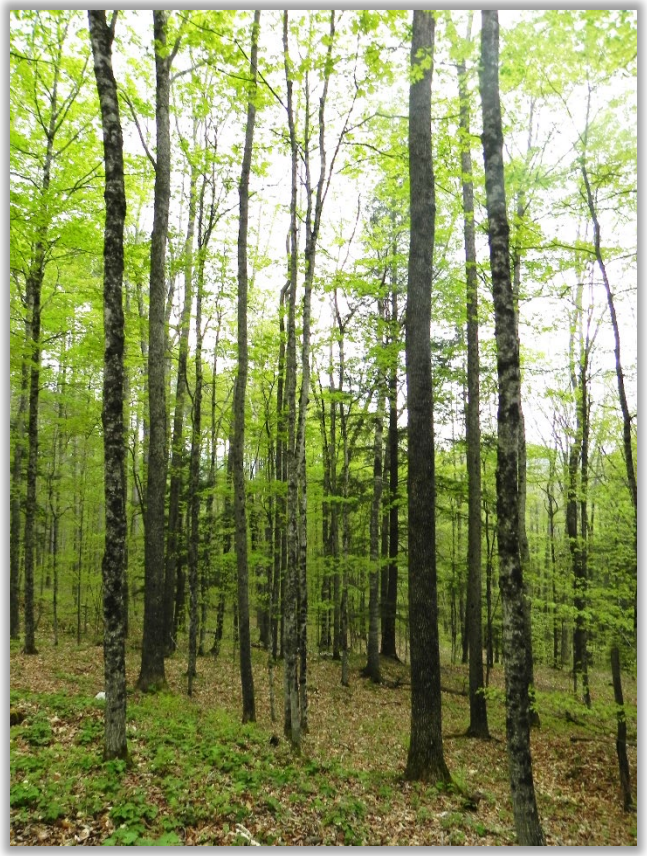
- Evidence of phenological shifts
- Projected to increase 3-7+ more weeks

Longer period for plant growth

Phenological changes/mismatches

- Early bud break and frost damage

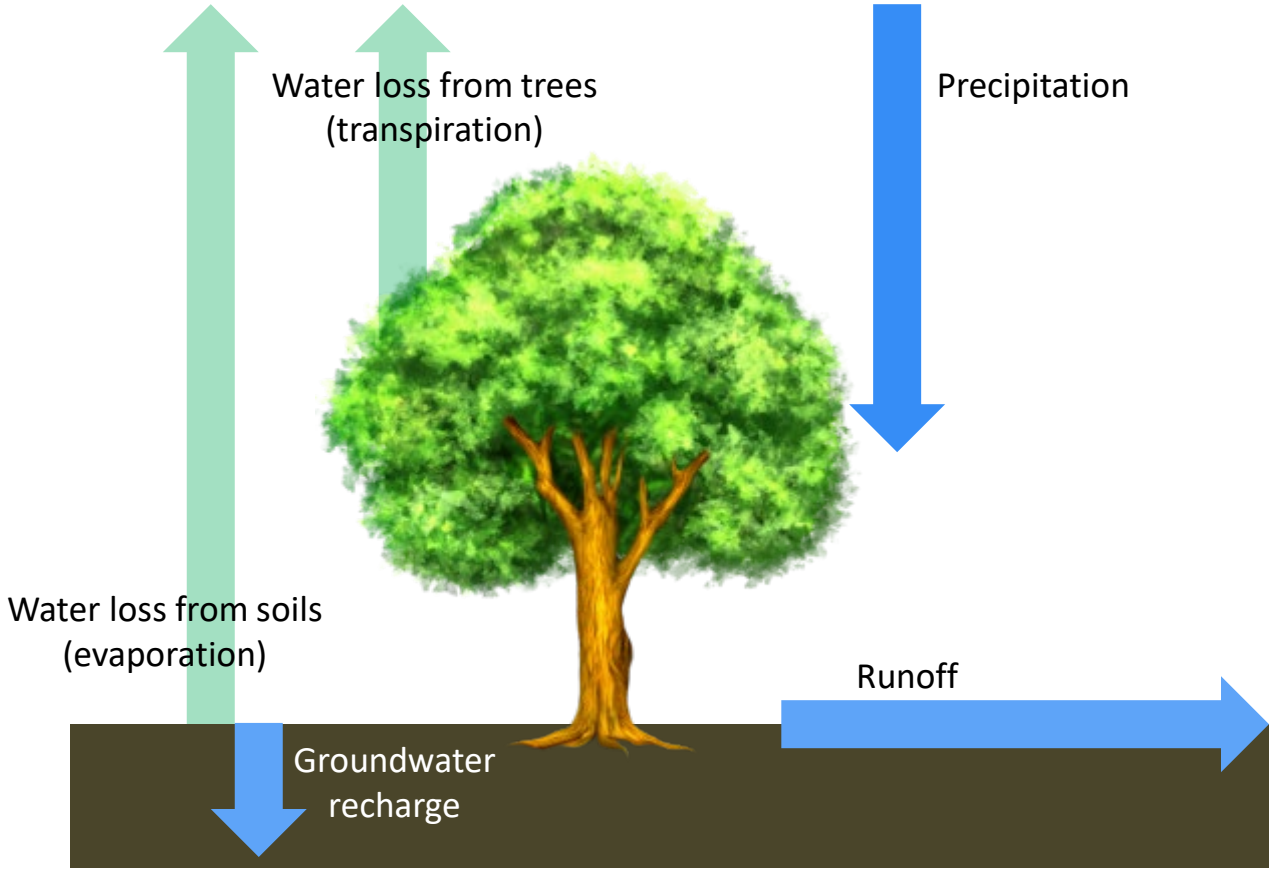
spring freezing.



Melillo et al. 2014, Nelson Center 2014

INCREASED RISK OF MOISTURE STRESS

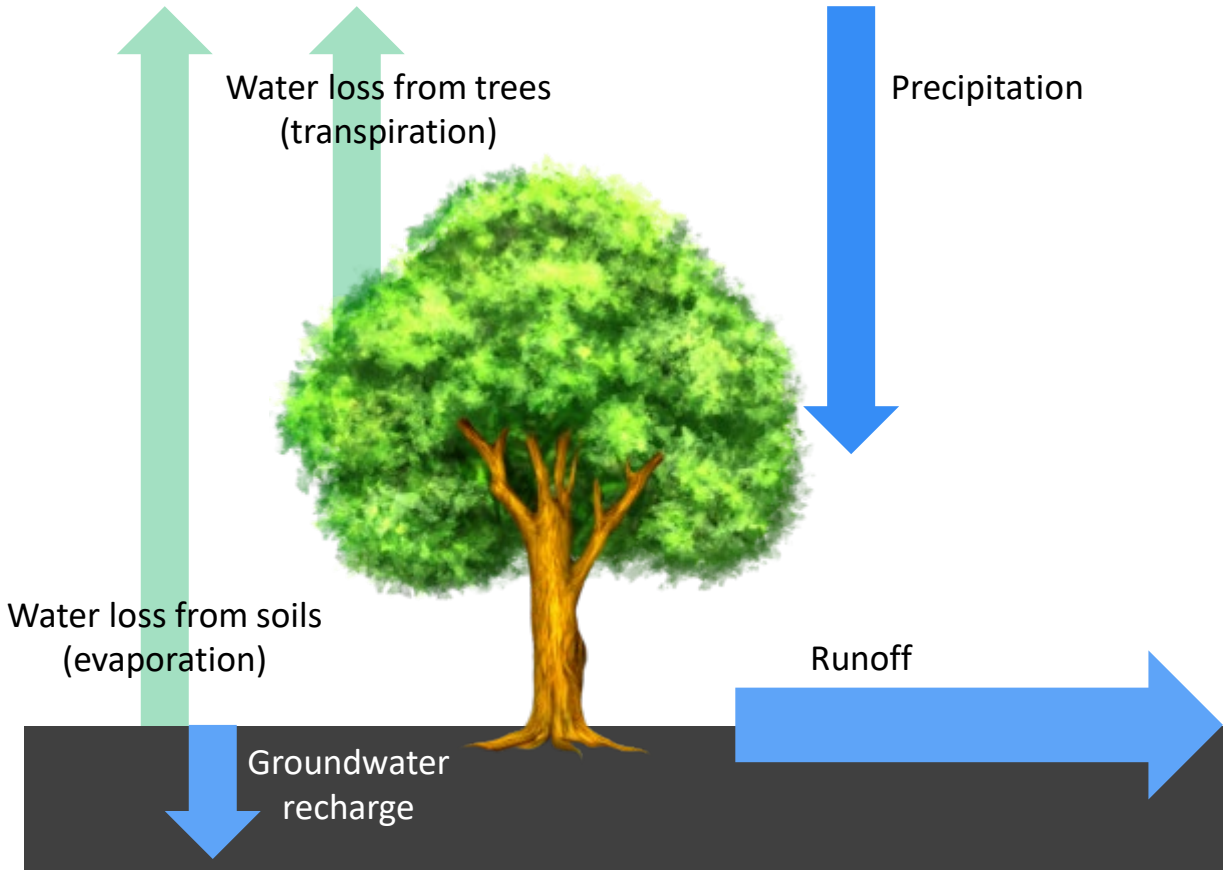
Longer and warmer growing seasons may lead to drier conditions during the growing season.



INCREASED RISK OF MOISTURE STRESS

Longer and warmer growing seasons may lead to drier conditions during the growing season.

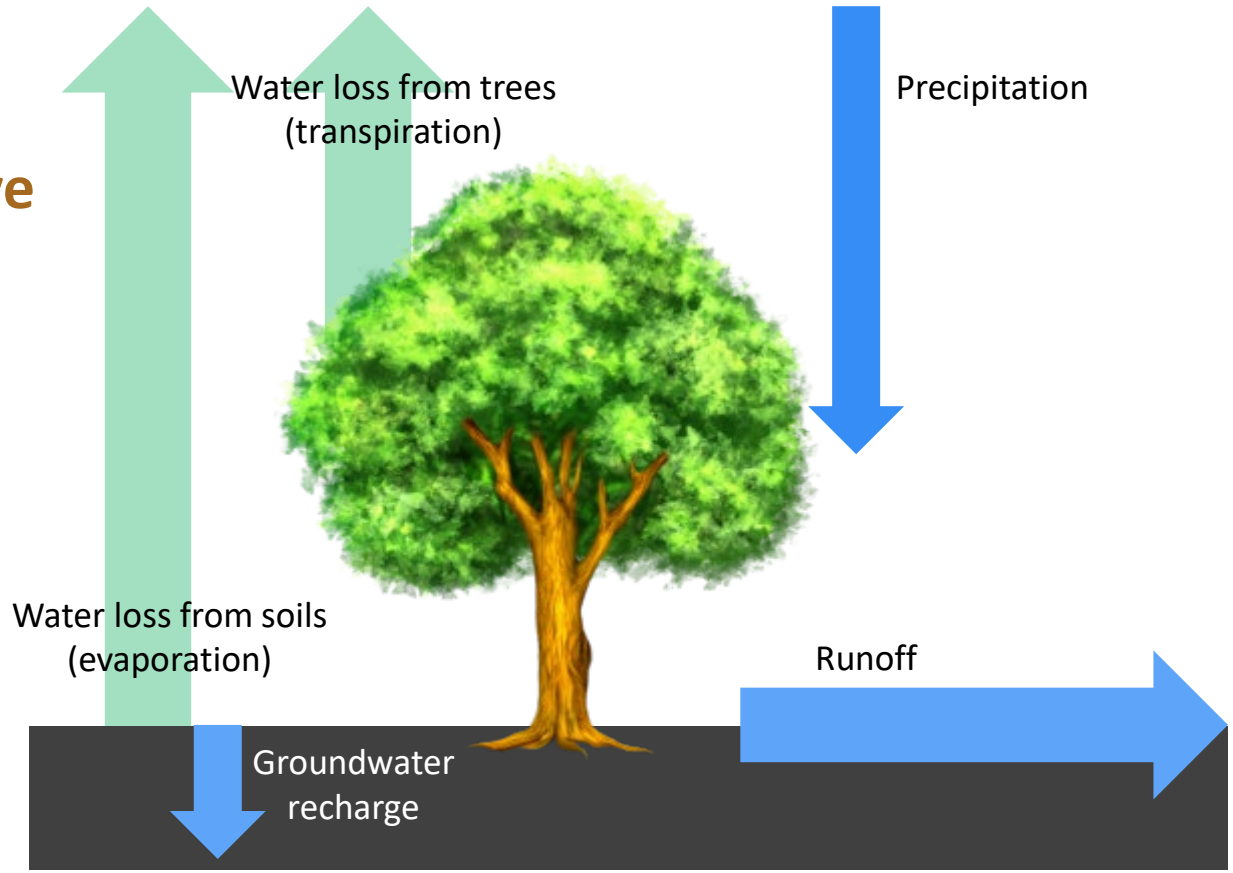
Earlier spring runoff and increased runoff during extreme rain events



INCREASED RISK OF MOISTURE STRESS

Longer and warmer growing seasons may lead to drier conditions during the growing season.

Warmer temperatures drive water loss from soils and plants

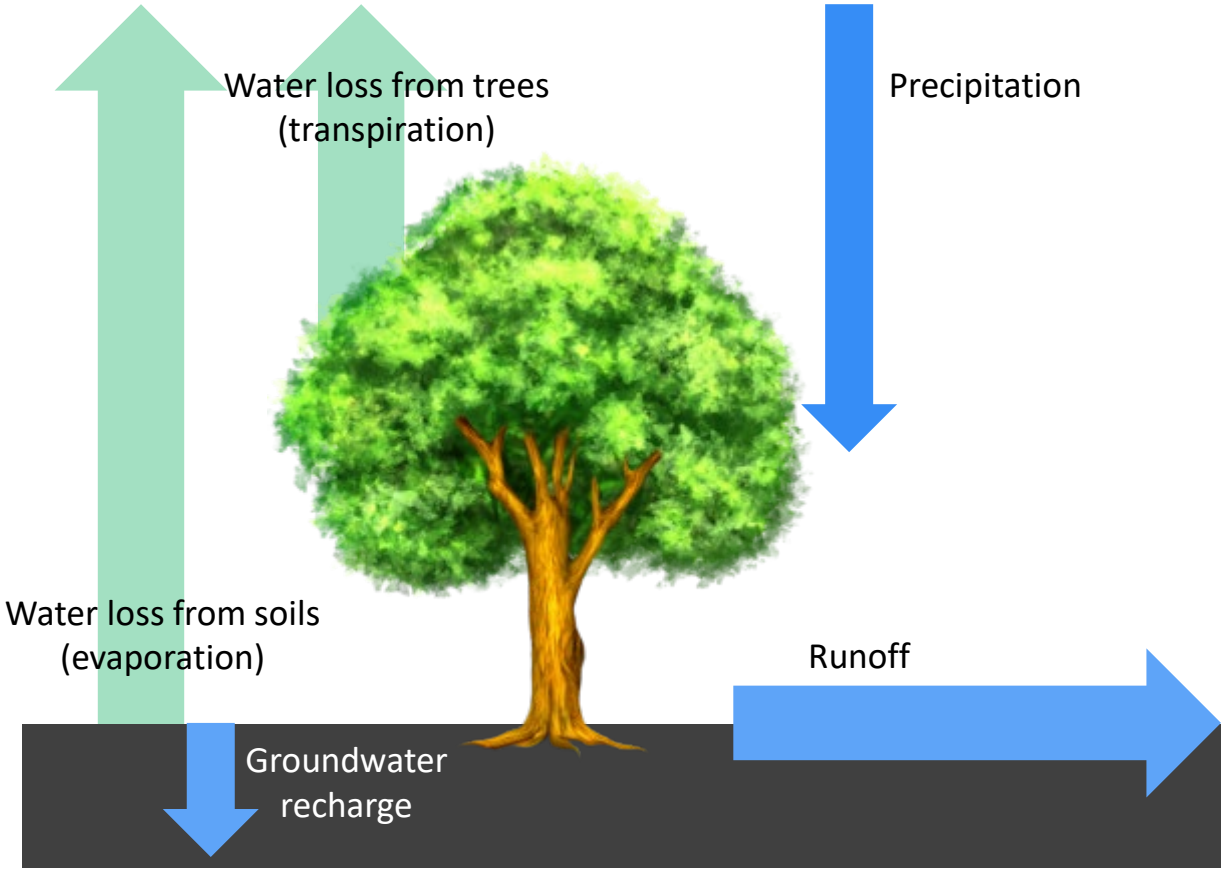


INCREASED RISK OF MOISTURE STRESS

Longer and warmer growing seasons may lead to drier conditions during the growing season.

Risk may be greatest:

- Sites with drought-prone or shallow soils
- South-facing ridges
- Mesic species on drier sites (marginal sites or off-site)



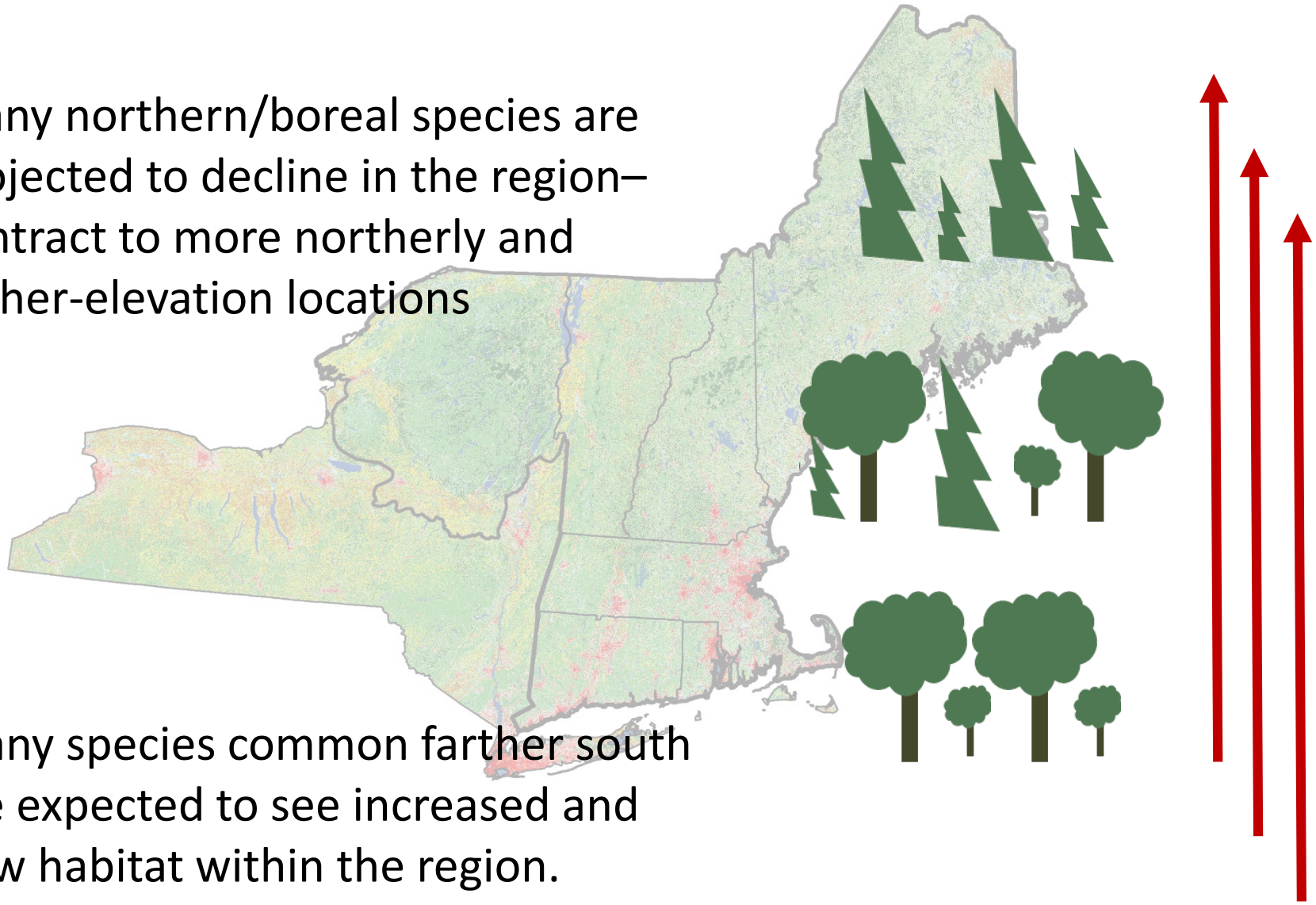
FUTURE CHANGES IN CLIMATE

Anticipated Change in Climate	Evidence	Confidence
Warmer temperatures increasing another 5.3 to 9.1 °F	●●●	●●●
Longer growing season increasing another 20+ days	●●●	●●●
Shorter, warmer winters with less snow fall and snow cover	●●●	●●●
Sea levels rising by another 2 to 4.5 feet	●●●	●●●
Altered precipitation patterns with increased annual rainfall	●●●	●●●
Intense precipitation events that are more frequent and severe	●●●	●●●
Altered soil moisture potentially both wetter and drier	●●	●●●
Increased risk of drought stress during the growing season	●●	●●

●●● = *robust/high*
●● = *medium*

CHANGES IN FOREST COMPOSITION

Many northern/boreal species are projected to decline in the region– contract to more northerly and higher-elevation locations

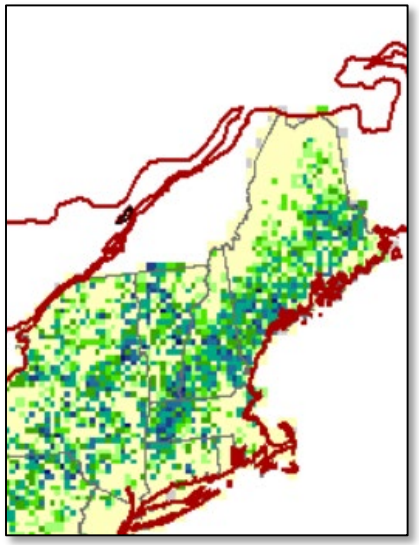


Many species common farther south are expected to see increased and new habitat within the region.

CHANGES IN FOREST COMPOSITION

Suitable Habitat: Eastern hemlock
(USFS Climate Change Tree Atlas)

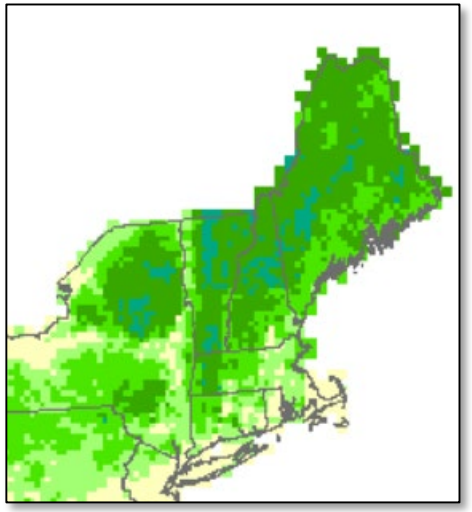
Current Distribution

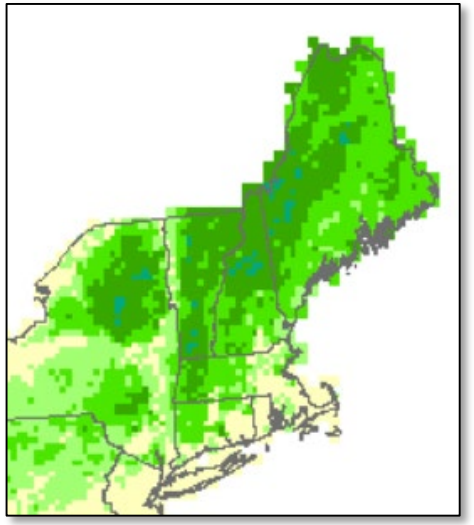


Importance Value
Low

High

2070-2100 Moderate





2070-2100 High

CHANGES IN FOREST COMPOSITION

CLIMATE CHANGE PROJECTIONS FOR INDIVIDUAL TREE SPECIES
MASSACHUSETTS

GOOD CAPABILITY	
American basswood	Northern red oak
American beech	Pignut hickory
American holly	Post oak
American hornbeam	Red maple
Black oak	Sassafras
Blackgum	Scarlet oak
Chestnut oak	Shagbark hickory
Eastern redcedar	Sugar maple
Flowering dogwood	White oak
Ironwood	Yellow-poplar
Mockernut hickory	

NEW HABITAT WITH MIGRATION POTENTIAL	
Chinkapin oak	Sweetgum
Common persimmon	Sycamore
Loblolly pine	Virginia pine
Shortleaf pine	Water oak
Southern red oak	

POOR CAPABILITY	
Atlantic white-cedar	Paper birch
Balsam fir	Pitch pine
Black ash	Quaking aspen
Black spruce	Red pine
Black walnut	Red spruce
Boxelder	Slippery elm
Bur oak	Swamp white oak
Eastern hemlock	Sweet birch
Eastern white pine	Tamarack (native)

FAIR CAPABILITY	
American elm	Green ash
Bigtooth aspen	Silver maple
Black cherry	White ash
Gray birch	Yellow birch

www.forestadaptation.org

NIACS
Northern Institute of Applied Climate Science

- Full results included as an appendix in the Forester Guide
- Results for broader southern and coastal New England region available forestadaptation.org/new-england
- ‘Zoom in’ to results for 1 degree latitude x 1 degree longitude using the USFS Climate Change Tree Atlas: www.fs.fed.us/nrs/atlas/

CHANGES IN FOREST COMPOSITION

- Many common tree species are projected to have reduced suitability in the future
- Changes will occur slowly—not instant dieback
- Mature and established trees should fare better
- Immense lags to occupy habitats

Risk may be greatest:

- Location is relatively near the southern extent of species range
- Trees are projected to decline and located on a marginal site
- Forest is composed of few species, esp. those projected to decline
- Something is “missing” from the ecosystem
- Other factors cause additional stress

EXTREME EVENTS

Extreme events may become more frequent or severe

- Heavy precipitation
- Ice storms
- Heat waves/droughts
- Wind storms
- Hurricanes
- **“Events” are not well modeled**

What may be at risk: Depends greatly on site conditions and susceptibility to different types of disturbance

Photo: Joe Klementovich, HBRF

INTERACTIONS: WILDFIRE

Future climate conditions suggest increased risk of fire.

Wildfire may increase:

- Warmer/drier summers
- Increased stress and mortality
- Shift toward fire-associated species like oaks and pines

Wildfire may not change:

- Spring/early summer moisture
- Current regeneration of more mesic species
- Spatial patterns of land use and fragmentation
- Fire suppression

What may be at risk: Fire-dependent forests or areas of tree mortality when fire is not suppressed.

Clark et al. 2014, Guyette et al. 2014

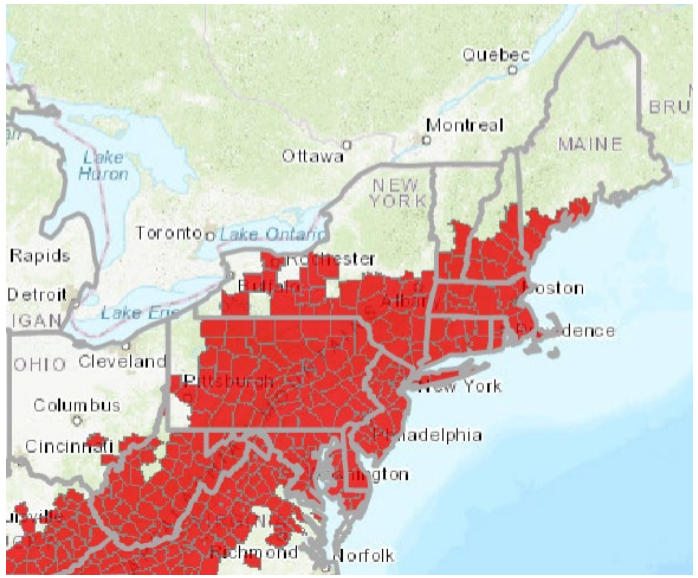
INTERACTIONS: INSECTS AND DISEASE

Increased damage from forest insects & diseases

Indirect: Stress from other impacts increases susceptibility

Direct:

- Pests migrating northward
- Decreased probability of cold lethal temperatures
- Accelerated lifecycles



Hemlock woolly adelgid incidence ~2015

Risk may be greatest: Presence of host species; pest is nearby; other factors reduce that forest vigor

Ayres and Lombardero 2000, Parmesan 2006, Dukes et al. 2009, Weed et al. 2013, Sturrock et al. 2011

INTERACTIONS: INVASIVE PLANTS

Increased habitat for many noxious plants

Indirect: Stress or disturbance from other impacts can affect the potential for invasion or success

Direct:

- Expanded ranges under warmer conditions
- Increased competitiveness from ability of some plants to take advantage of elevated CO_2

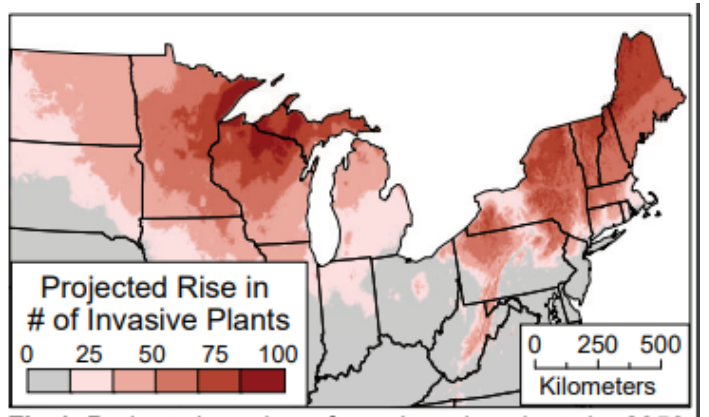


Fig 1. Projected number of new invasive plants by 2050.

Risk may be greatest: Presence of invasive species nearby; other factors that reduce forest/understory vigor

Dukes et al. 2009, Hellman et al. 2008; Figure: Northeast RISCC Management; Images: Invasives Plants Atlas of New England (www.eddmaps.org)

VULNERABILITY: *FOREST COMMUNITIES*

Forest communities across New England will be affected differently

Forest system	Potential impacts	Adaptive capacity	Vulnerability
Central hardwood-pine	Neutral-Positive	Moderate-High	Low
Northern hardwood	Positive and Negative	Moderate-High	Low-Moderate
Transition hardwood	Positive and Negative	Moderate-High	Low-Moderate
Lowland/riparian hardwood	Positive and Negative	Moderate-High	Moderate
Montane spruce-fir	Neutral-Negative	Moderate	Moderate-High

VULNERABILITY: *NORTHERN & TRANSITION HARDWOODS*

Impacts:

- Extreme storms
- Several diseases, pests, invasives
- Northern species projected to decline

Adaptive Capacity:

- Mixed species forests
- Southern species projected to increase
- Extensive type, exists farther south

VULNERABILITY: *SPRUCE-FIR*

Impacts:

- Warm temperatures
- Declines in boreal tree species
- Extreme storms

Adaptive Capacity:

- Generally slow to adjust to change
- Constrained by elevation/latitude
- Isolated mountaintops

VULNERABILITY: *CENTRAL HARDWOOD-PINE*

Impacts:

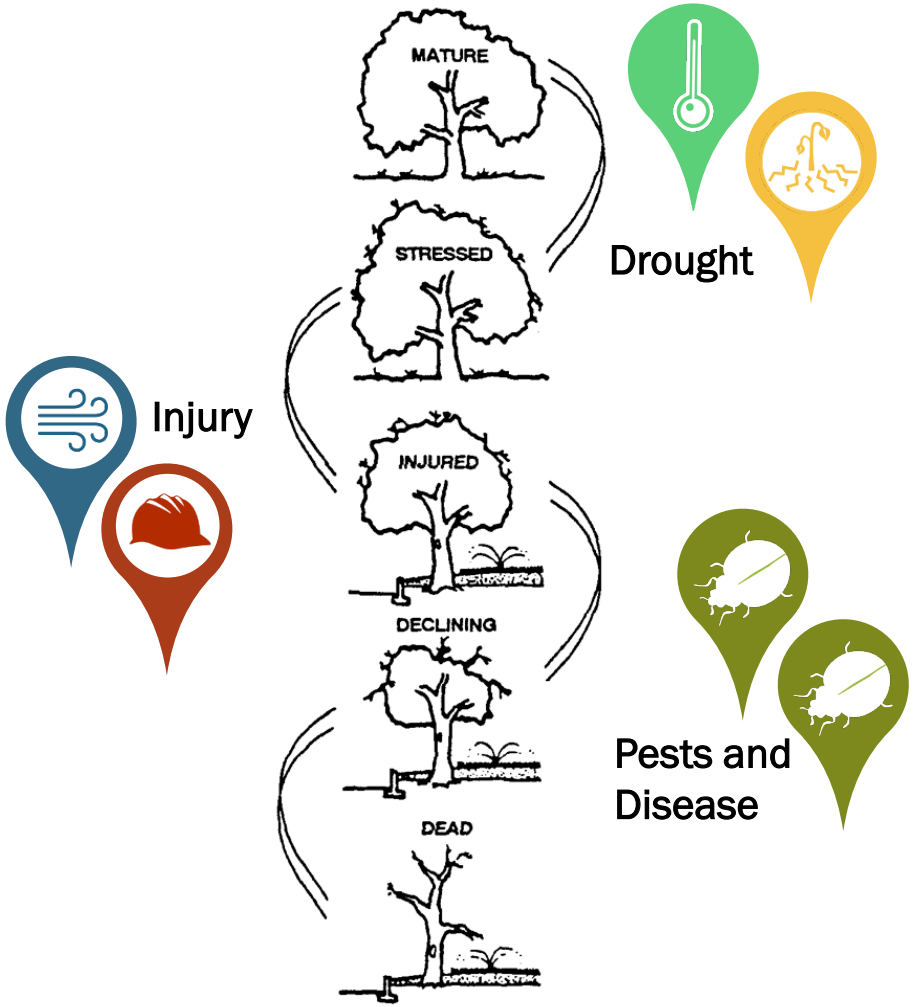
- Extreme storms
- Several diseases, pests, invasives
- Several northern species projected to decline

Adaptive Capacity:

- Mixed species forests
- Several southern species projected to increase
- Extensive type, exists farther south

A CHANGING CLIMATE POSES RISKS TO FORESTS

- Altered climate
- Extreme weather
- Chronic stress
- Disturbances
- Insect pests
- Forest diseases
- Invasive species
- Altered habitat suitability



Drawing: Bartlett Tree Experts

LAST SLIDE: LOCATION, LOCATION, LOCATION

Research and assessments describe **broad trends** but **local conditions** and **management** make the difference.

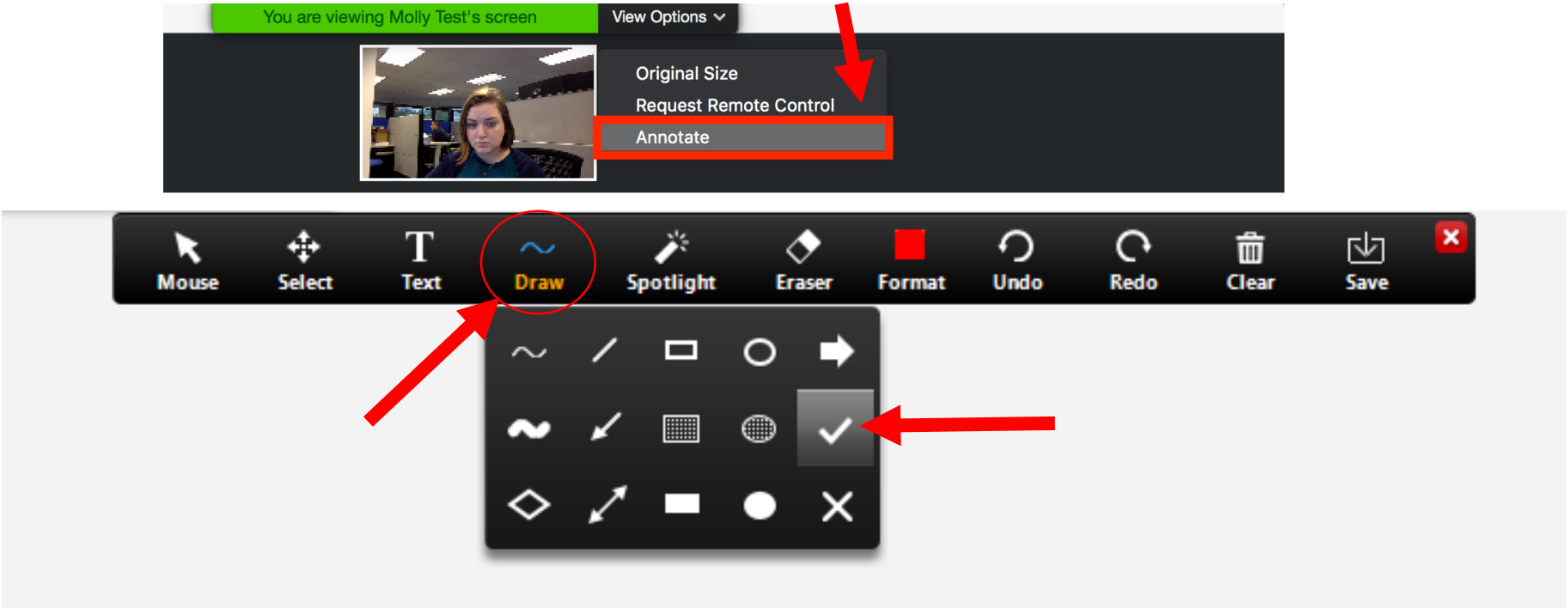

QUESTIONS ?

CLIMATE IMPACTS IN YOUR REGION

What impacts are you <u>seeing</u> or <u>concerned</u> about at your focal property?

ANNOTATE TOOL

- Use the Zoom “annotate” feature to add a symbol on the next slide.



ANNOTATE MAP FOR PRACTICE

SELECT YOUR TOP CLIMATE IMPACTS – 3 VOTES

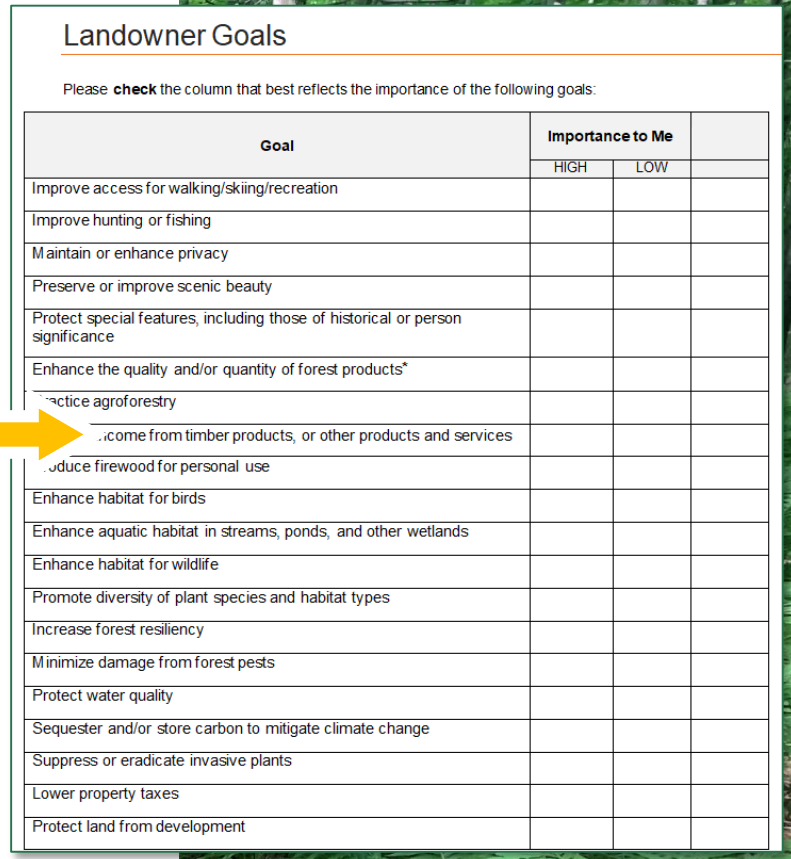
Impact	Your Votes Here:
Sea-level rise	
Warmer temperatures	
More days with extreme heat	
Fewer days with extreme cold	
Altered precipitation patterns/seasonality	
More frequent heavy precipitation events	
Less snow/shorter winter season, variable snow and ice	
Altered stream flows	
Increased water temperatures	
Reduced soil moisture in summer	
Longer growing season	
Changes in phenology or phenology mismatches	
Declines in northern/boreal tree species	
Increases in southern tree species	
More frequent and intense storms	
Potential changes in wildfire	
Increases in insect pests/forest pathogens	
Increases in nonnative plant species	
Changes in patterns of herbivory	


QUESTIONS ?

ASSIGNMENT

- **Identify property** that you will create or revise a FSP for with a climate-carbon focus
- **Identify broad landowner goals** using the Landowner Goals worksheet and Caring For Your Woods Landowner Goals booklet
- **Identify climate change impacts** for *one stand*
  - *Resources for exploring climate impacts are included in the Forester Guide and at adaptationworkbook.org/explore-impacts*

Questions? Share now or email NIACS or DCR staff



Landowner Goals

Please **check** the column that best reflects the importance of the following goals:

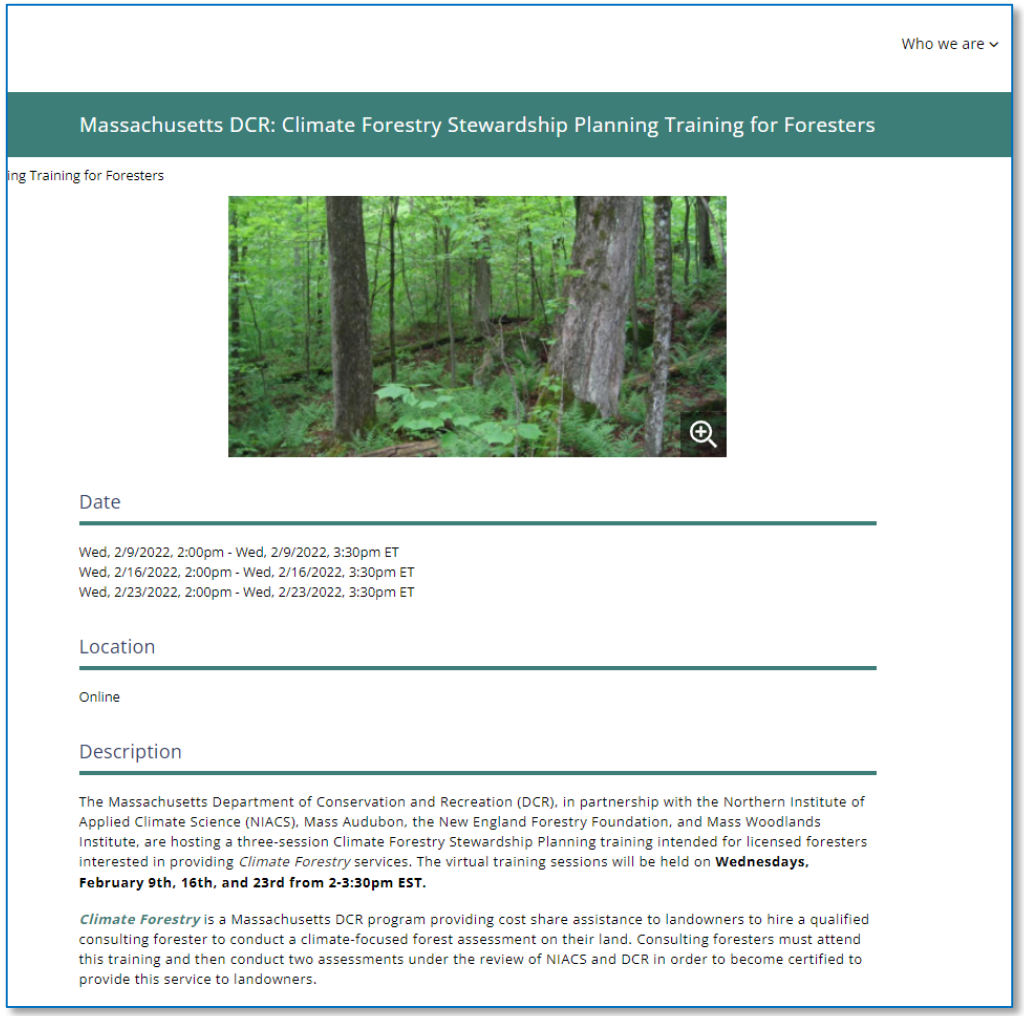
Goal	Importance to Me		
	HIGH	LOW	
Improve access for walking/skiing/recreation			
Improve hunting or fishing			
Maintain or enhance privacy			
Preserve or improve scenic beauty			
Protect special features, including those of historical or person significance			
Enhance the quality and/or quantity of forest products*			
ractice agroforestry			
come from timber products, or other products and services			
oduce firewood for personal use			
Enhance habitat for birds			
Enhance aquatic habitat in streams, ponds, and other wetlands			
Enhance habitat for wildlife			
Promote diversity of plant species and habitat types			
Increase forest resiliency			
Minimize damage from forest pests			
Protect water quality			
Sequester and/or store carbon to mitigate climate change			
Suppress or eradicate invasive plants			
Lower property taxes			
Protect land from development			

KEEP AN EYE OUT FOR *EMAILS*

And visit training webpage to access:

- Slides
- Agenda & assignments
- Links to relevant resources

NEXT SESSION:
Wednesday, February 16th
2:00-3:30pm EST



Who we are

Massachusetts DCR: Climate Forestry Stewardship Planning Training for Foresters

ing Training for Foresters

Date

Wed, 2/9/2022, 2:00pm - Wed, 2/9/2022, 3:30pm ET
Wed, 2/16/2022, 2:00pm - Wed, 2/16/2022, 3:30pm ET
Wed, 2/23/2022, 2:00pm - Wed, 2/23/2022, 3:30pm ET

Location

Online

Description

The Massachusetts Department of Conservation and Recreation (DCR), in partnership with the Northern Institute of Applied Climate Science (NIACS), Mass Audubon, the New England Forestry Foundation, and Mass Woodlands Institute, are hosting a three-session Climate Forestry Stewardship Planning training intended for licensed foresters interested in providing *Climate Forestry* services. The virtual training sessions will be held on **Wednesdays, February 9th, 16th, and 23rd from 2-3:30pm EST.**

Climate Forestry is a Massachusetts DCR program providing cost share assistance to landowners to hire a qualified consulting forester to conduct a climate-focused forest assessment on their land. Consulting foresters must attend this training and then conduct two assessments under the review of NIACS and DCR in order to become certified to provide this service to landowners.

forestadaptation.org/learn/training-and-workshops

dcr MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION

NIACS Northern Institute of Applied Climate Science

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