

Implementing Natural Solutions to Climate Change

Essex County Open Space Conference Webinar –
December 2, 2020

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NEFF's Mission

Through our core expertise in conserving forestland and advancing Exemplary Forestry, New England Forestry Foundation (NEFF) helps the people of New England to sustain their way of life, protect forest wildlife habitat and ecosystem services, and mitigate and adapt to climate change.





FORESTS & CLIMATE SOLUTIONS

ADAPTATION - MITIGATION

Conservation is a Climate Action!

...Building resilience through land protection



Synergy of Forest Resilience and Carbon

- Without successful adaptation of our forests to a rapidly changing climate, this carbon sink may not be a permanent one
- Climate-informed silviculture is an important tool available to keep our forest ecosystems healthy so they can bounce back from disturbance and remain functional



SEEING THE FOREST

A SYSTEMS APPROACH



Part 1: End Forest Conversion

Whether for agriculture in the Amazon or for homes near Amherst deforestation releases carbon already stored and eliminates future potential to store more





Part 2: Manage Forests Better

NEFF'S EXEMPLARY FORESTRY

**Enhance
Wildlife Habitat**
for full suite of
species present

**↑ Wood Quality &
Quantity** produced &
retained in stands over
time

**Enhance Role of
Forests in
Mitigating Climate
Change**

- ✓ Operating at landscape scale
- ✓ Specific, measurable metrics
- ✓ Enhancing ecological values from water quality to carbon sequestration



Part 3: Build Wood Buildings

METRO MAYORS COALITION
REGIONAL HOUSING TASK FORCE

About Guiding Principles Strategies Story

Housing Metro Boston

15 cities and towns united in a landmark regional commitment to housing production.



THE TASK FORCE

ARLINGTON Adam Chapdelaine Town Manager	BOSTON Martin Walsh Mayor	BRAINTREE Joseph Sullivan Mayor	BROOKLINE Mel Kieckhefer Town Administrator	CAMBRIDGE Louis DePasquale City Manager	CHELSEA Thomas Ambrosino City Manager	EVERETT Carlo DeMaria Jr. Mayor	MALDEN Gary Christenson Mayor
MEDFORD Stephanie Burke Mayor	MELROSE Gail Infurna Mayor	NEWTON Ruthanne Fuller Mayor	QUINCY Thomas Koch Mayor	REVERE Brian Amigo Mayor	SOMERVILLE Joseph Curatone Mayor	WINTHROP Austin Fallon Town Manager	

“The Metro Mayors Coalition will need to add 185,000 housing units from 2015 – 2030 in order to meet demand and reduce – or at least stabilize -- housing costs.”

Forests to Cities Climate Challenge

- ✓ Substitute for more carbon-intensive materials (plastic, steel, concrete)
- ✓ Long-term carbon storage in the products themselves – including mid-rise wood buildings

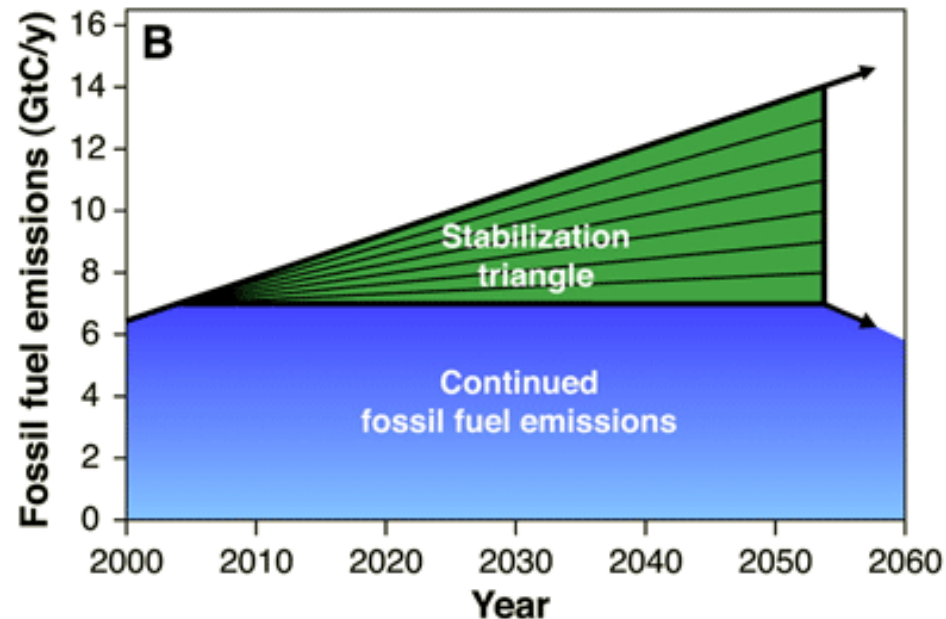


NEFF: <https://foresttocities.org/>

A Systems Approach



Pacala & Socolow 2004



Grow, Build, Live - Webinar Series

**Join NEFF and Massachusetts
Woodland Institute for three 90-minute
webinars in 2021:**

**Trees to Table – January
Woods to Home – February
Forests to Cities – March**

Request Link to Register:

<https://docs.google.com/forms/d/e/1FAIpQLSfYYxxFZWKLt2A2gLYcS7FoU6eswoeO7AEyBoowAGEBBHoMUA/viewform>

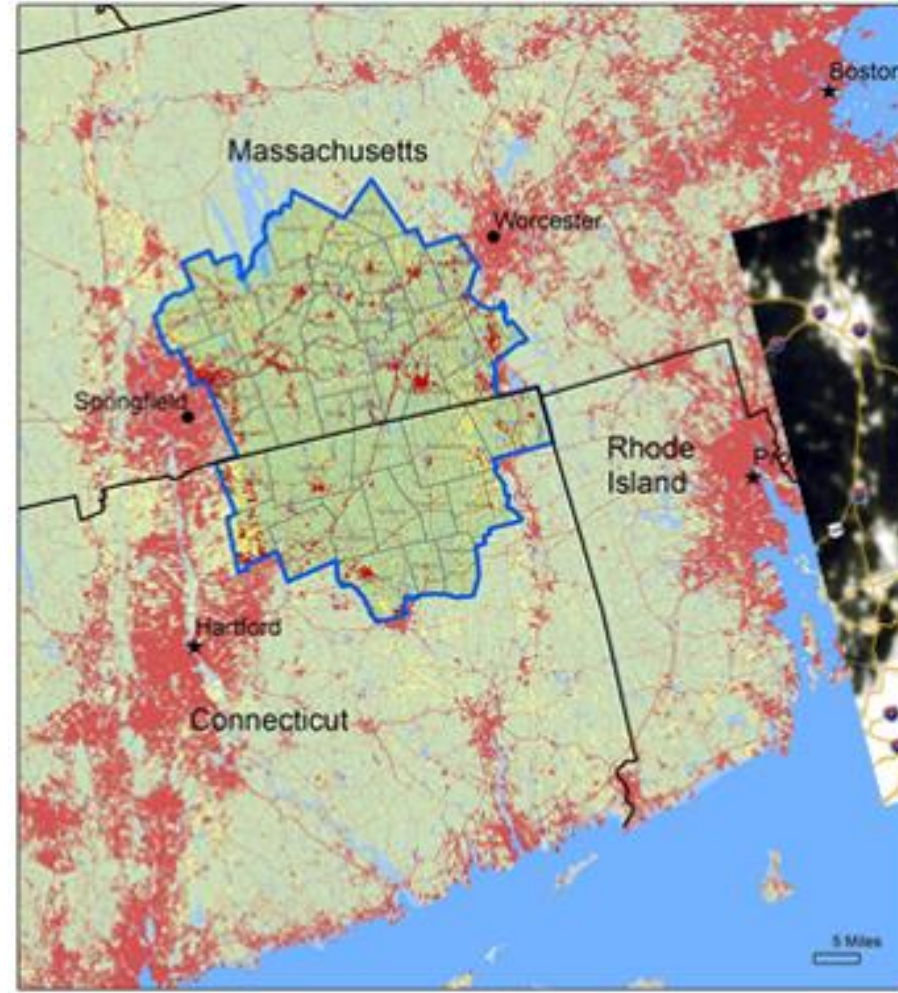
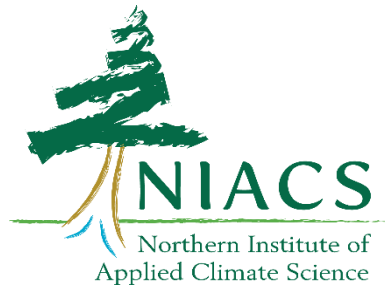


HOW CAN WOODLAND OWNERS ADAPT?

IDENTIFYING RESILIENCE PRACTICES

Landowner Outreach in the MassConn Woods

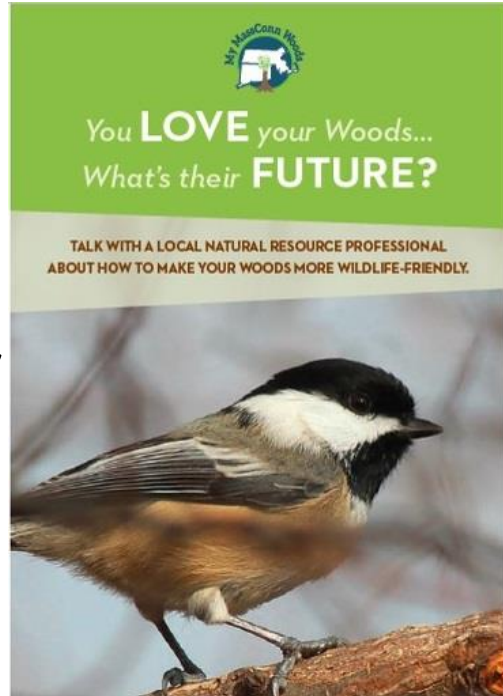
- Climate adaptation visits by NIACS-trained foresters (NEFF, American Forest Foundation, MassConn partnership)
- 102 private owner visits completed on combined 8100 acres in 38-town, 2-state region since 2016



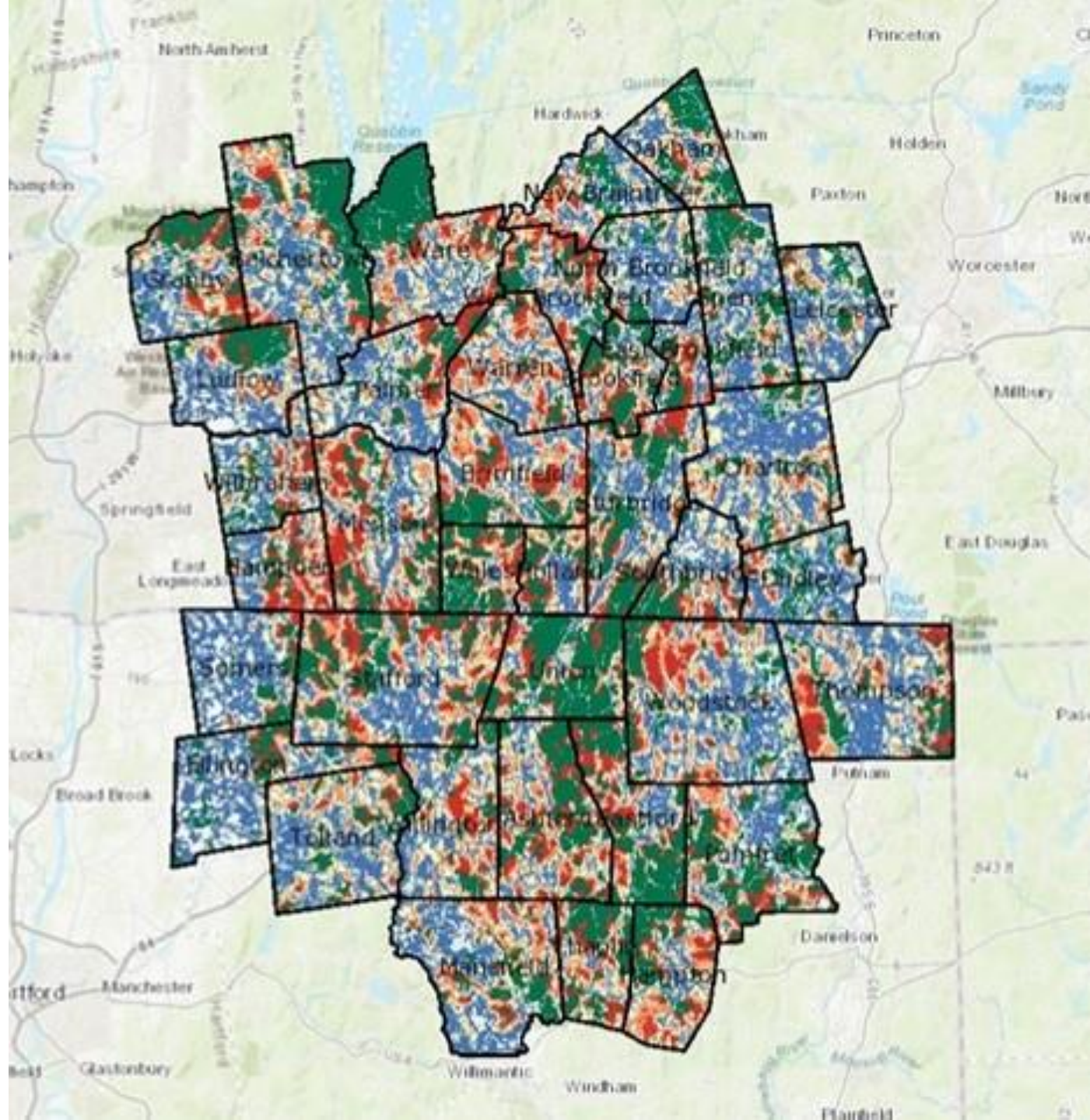
MassConn Sustainable Forest Partnership



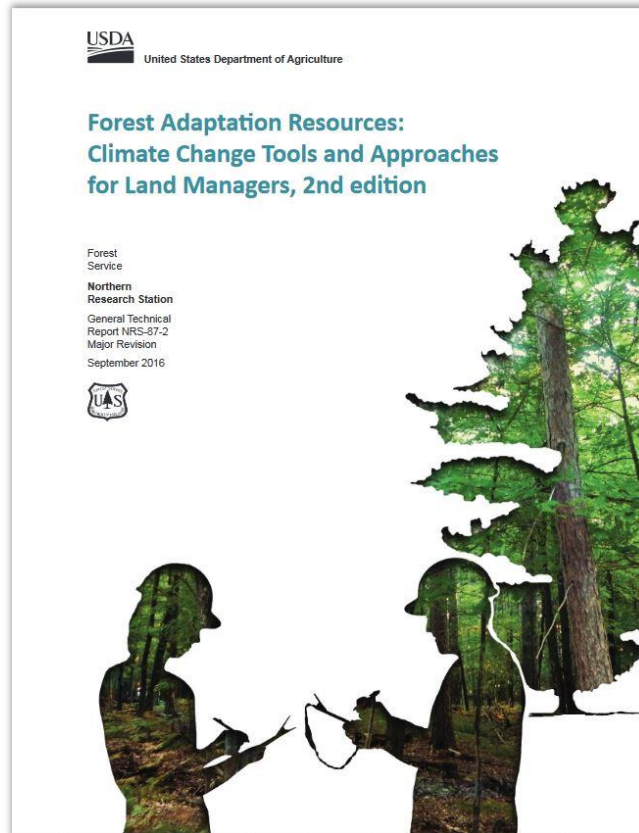
- MassConn ecological priorities – Red = top 20%
- Tool for strategic landowner outreach:
25+ acres,
high-ranking
parcels for
conservation/
resilience



TNC's Resilience Data



Forest Adaptation Resources



Swanston et al. 2016;
www.forestadaptation.org/far

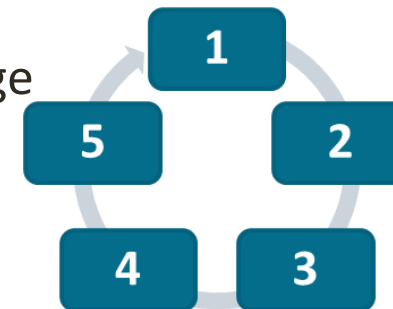
Strategies & Approaches

Menu of adaptation actions



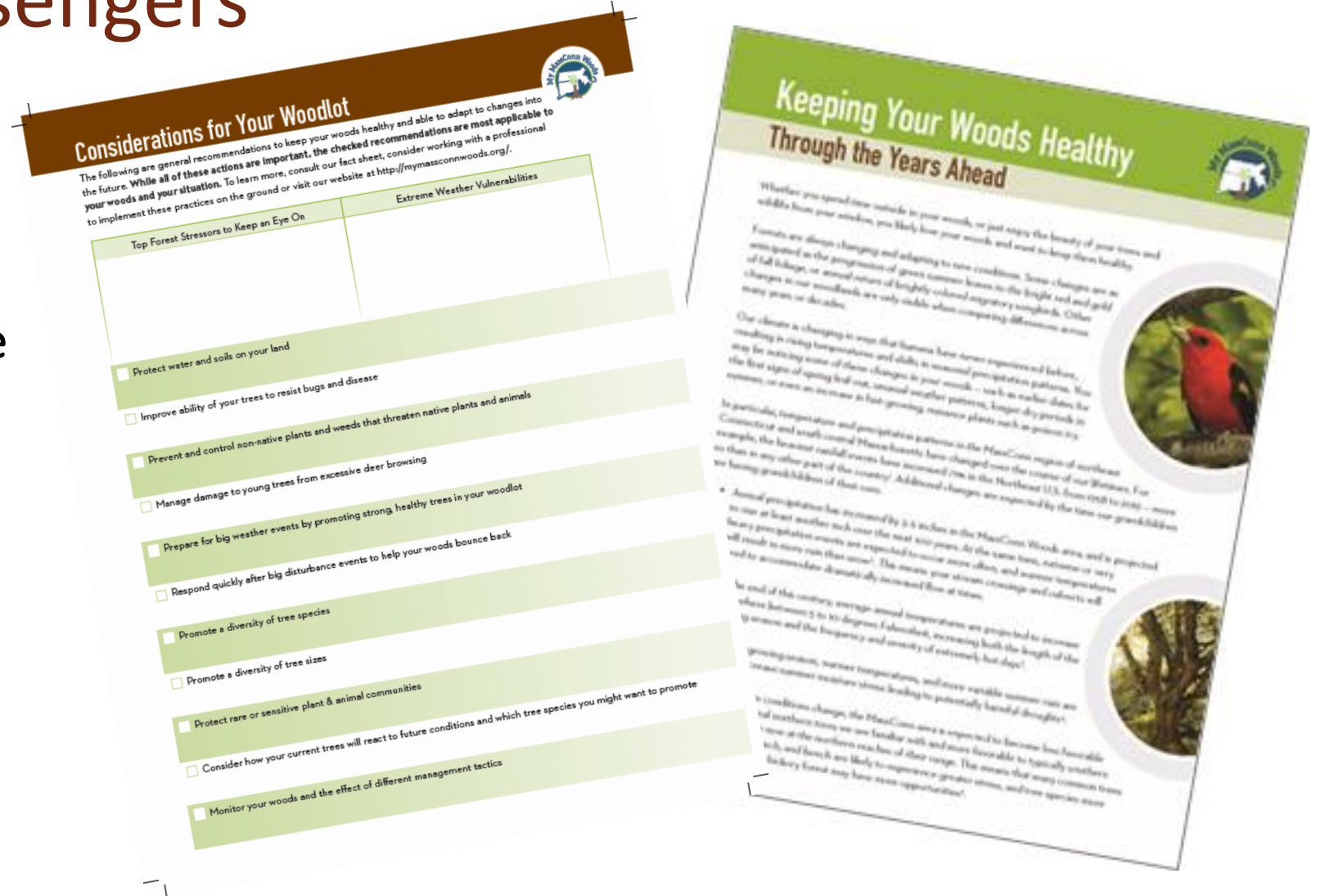
Adaptation Workbook

- Structured process to integrate climate change considerations into management
- Workbook approach



MassConn Woods goal: Equip Foresters to be Adaptation Messengers

- Find trusted spokespeople
- Lead with politically neutral messages
- Focus on local impacts/responses

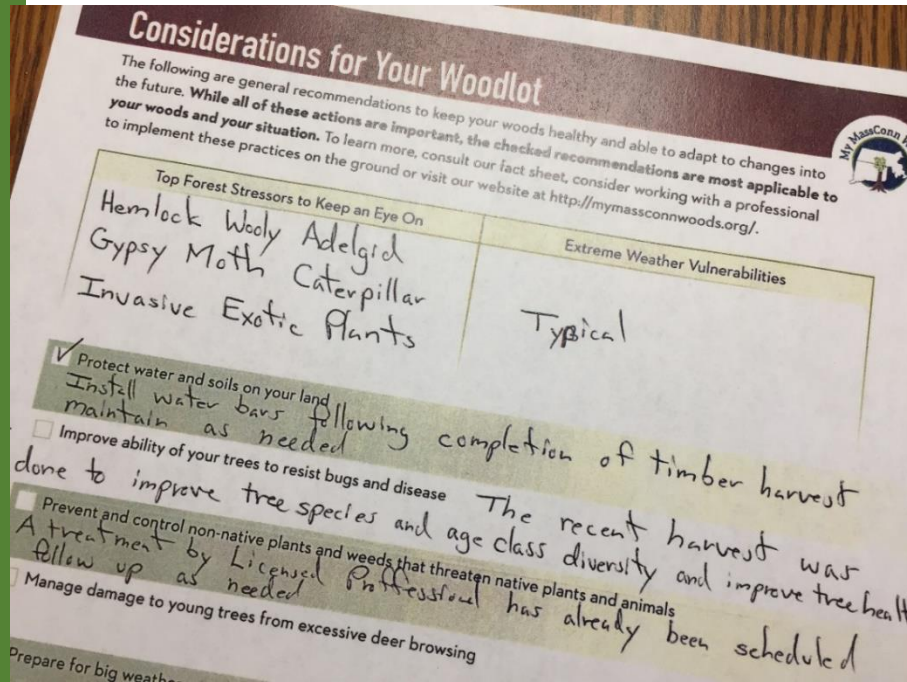


Considerations for Your Woodlot

Southbridge/Dudley, MA
Opacum Land Trust
140 acres

Climate-Informed Practices:

- ✓ Treated/removed invasives (12 acres - barberry, knotweed, multiflora rose)
- ✓ Timber harvested to diversify age classes & species (40 acres)
- ✓ Clear-cut with reserves for wildlife habitat (4.5 acres)



COMMUNICATING CLIMATE

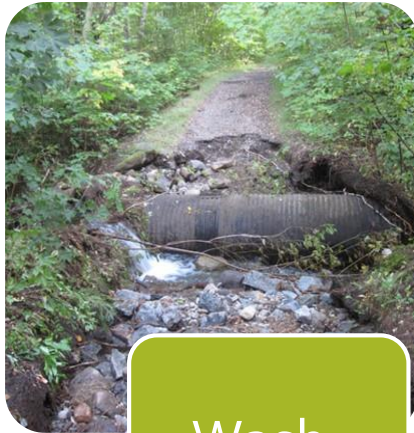
OUTREACH LESSONS

Talking climate...

Finding common ground



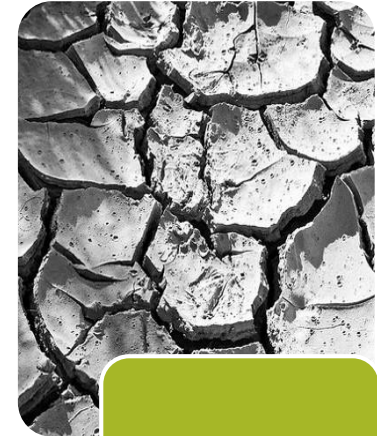
Early bud
break



Wash-
outs



Extreme
weather



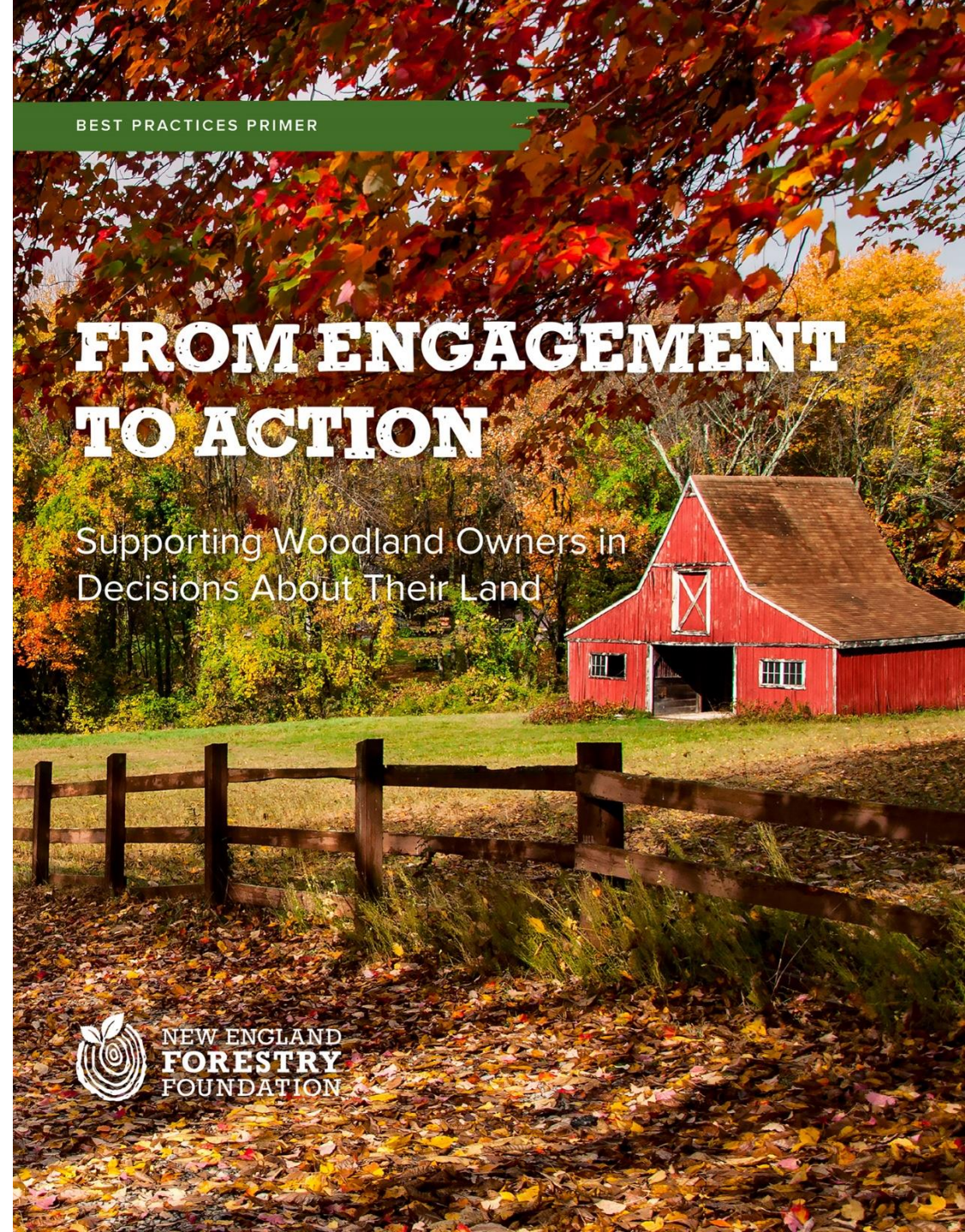
Moisture
stress

From Engagement to Action...

- NEFF report on importance of strategic and sustained outreach to landowners not already plugged into peer networks

Available for download from
NEFF's web site:

[https://newenglandforestry.org/
connect/publications/from-
engagement-to-action/](https://newenglandforestry.org/connect/publications/from-engagement-to-action/)



The crucial private landowner audience...

- **215,000 private New England woodland owners of 10+ acres**
 - **MA: 26,000 ownerships**
- Owners of undeveloped lands – whether permanently protected or not – will decide the future of our forests
 - Will we manage with exemplary forestry, for forest carbon and resilience?



Patterns of Landowner Engagement Over Time

Steps
on the
pathway...

Connecticut
landowner
200 acres

A

\$ 2018

Applies for conservation easement funding, negotiations underway

2017

Adopts climate-informed management plan and begins work on controlling invasives



August 2016

Attends Norcross climate-informed forestry walk
Signs up for free forester visit during event



November 2015

Attends workshop about conservation funding programs



June 2015

Inquires about land trust visit card through neighbor and receives visit

Massachusetts
landowner
11 acres

B

\$ 2016

Develops forester plan for Massachusetts policy (Ch. 61) that saves landowners money on property taxes



Spring 2015

Calls to respond to postcard offering a free visit from land protection specialist



February 2015

Attends Monson estate planning forum, where experts walked landowners through planning for the future of their land



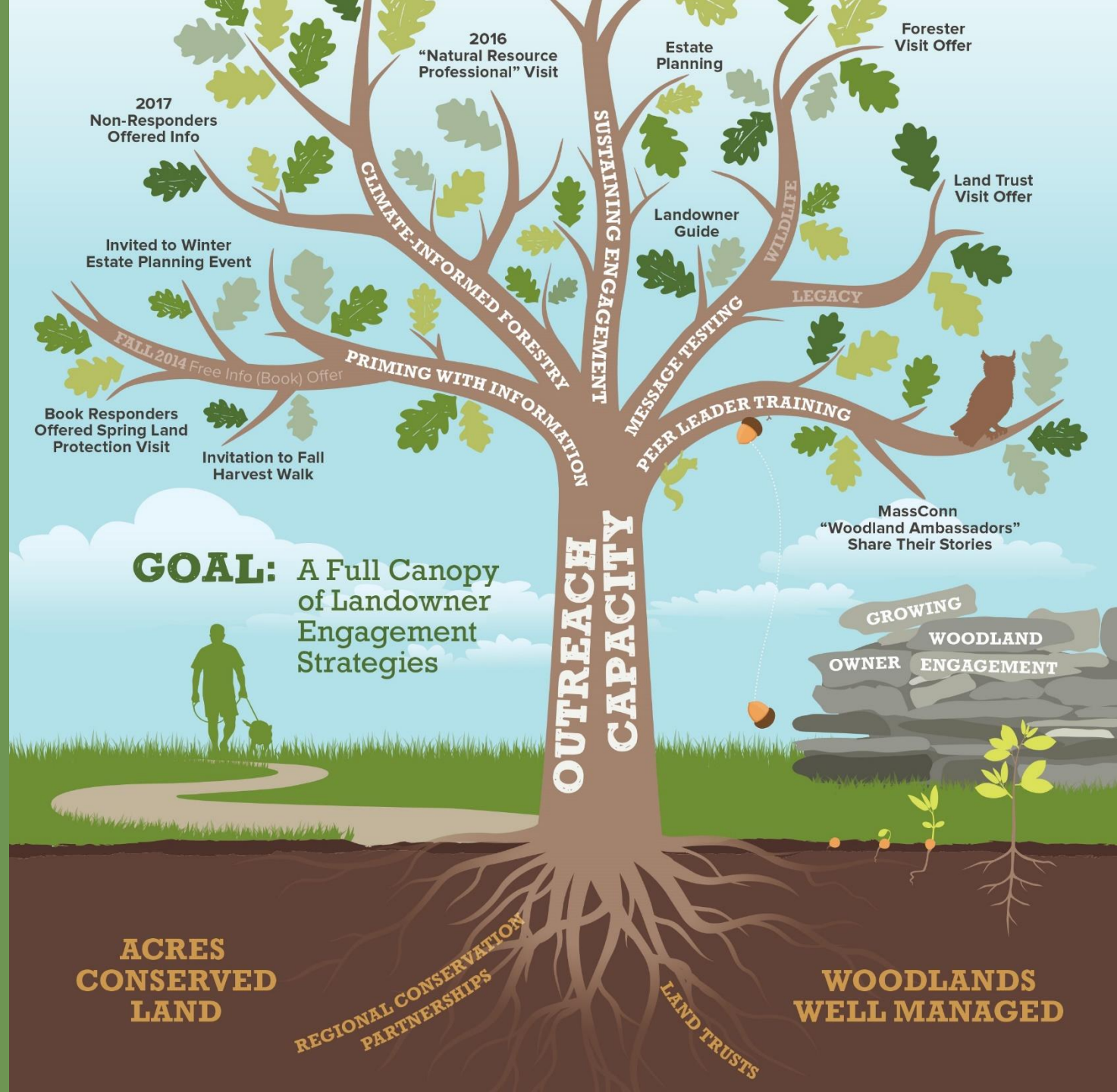
November 2014

Attends Norcross woods walk about how forest management can benefit wildlife habitat



Fall 2014

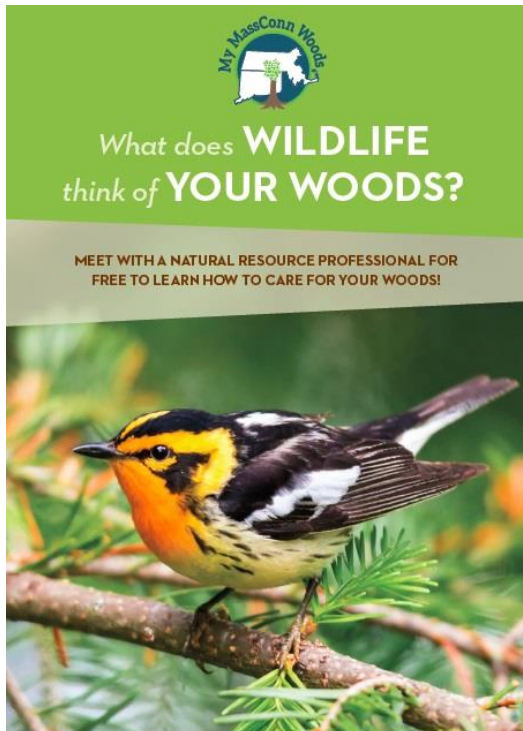
Returns postcard for free "More Than a Woodlot" book, an introduction to management



Key Resources

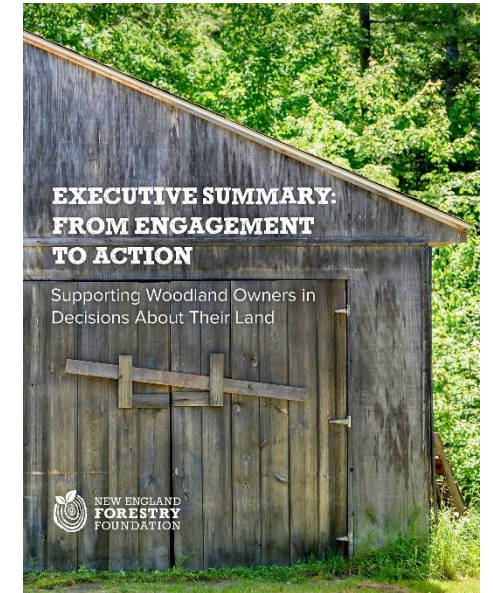
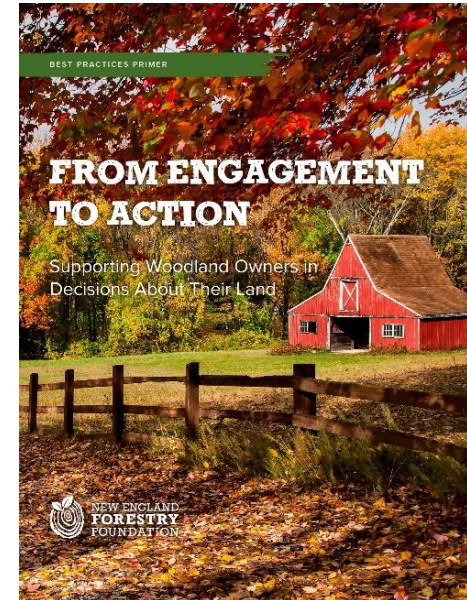
From Engagement to Action... Outreach report

<https://newenglandforestry.org/connect/publications/from-engagement-to-action/>



To access resources developed for the MassConn Woods RCP, visit:

<http://www.forestadaptation.org/massconn>



LTA/ MA ECAN Climate Communications recommendations:

<https://climatechange.lta.org/recommendations-for-communicating/>

Questions?



Do you talk about climate change?

To Family, relatives?....

Friends or neighbors?...

Landowners, members, donors?

Communicating about Climate Change

... 5 Research-based Recommendations (MA ECAN)

1. Lead with politically neutral messages
2. Find trusted spokespeople to deliver your message
3. Focus on local impacts/responses, rather than causes
4. Avoid technical jargon – keep it simple
5. Use photos to tell a story: faces, people doing desired actions

<https://climatechange.lta.org/recommendations-for-communicating/>

Sources and Resources

- **LTA/ MA ECAN Climate Communications recommendations:**

<https://climatechange.lta.org/recommendations-for-communicating/>

- **Annotated references for climate communications practices:**

<https://docs.google.com/document/d/1ZGqs4hdGNkJRe287Z7MOSix2iW7bdt2Mpy1NOImOciU/edit>

- **Six America's Super Short Survey (SASSY!)**

<https://climatecommunication.yale.edu/visualizations-data/sassy/>

- **Urgency and Risky Words:** <https://sparkneuro.com/case-studies/rebranding-climate-change/>

- **ecoAmerica – Let's Talk Climate: Messages to Motivate Americans:**

<http://ecoamerica.org/wp-content/uploads/2015/11/eA-lets-talk-climate.pdf>