

Lisa Hayden
New England
Forestry Foundation



NEW ENGLAND
FORESTRY
FOUNDATION

My MassConn Woods

On-going initiative focused on landowner outreach for conservation & forest management since 2013




American Forest Foundation




NEW ENGLAND
FORESTRY
FOUNDATION

mymassconnwoods.org



OUR REGION WHAT'S NEW LANDOWNER RESOURCES GET HELP! ABOUT US



Sign up for our eNewsletter!

Stay informed about the latest My MassConn Woods news and events.

First Name

Last Name

E-Mail Address

SIGN UP!

Family Woodlands are Vital to Our Region!

[Upcoming Events](#)

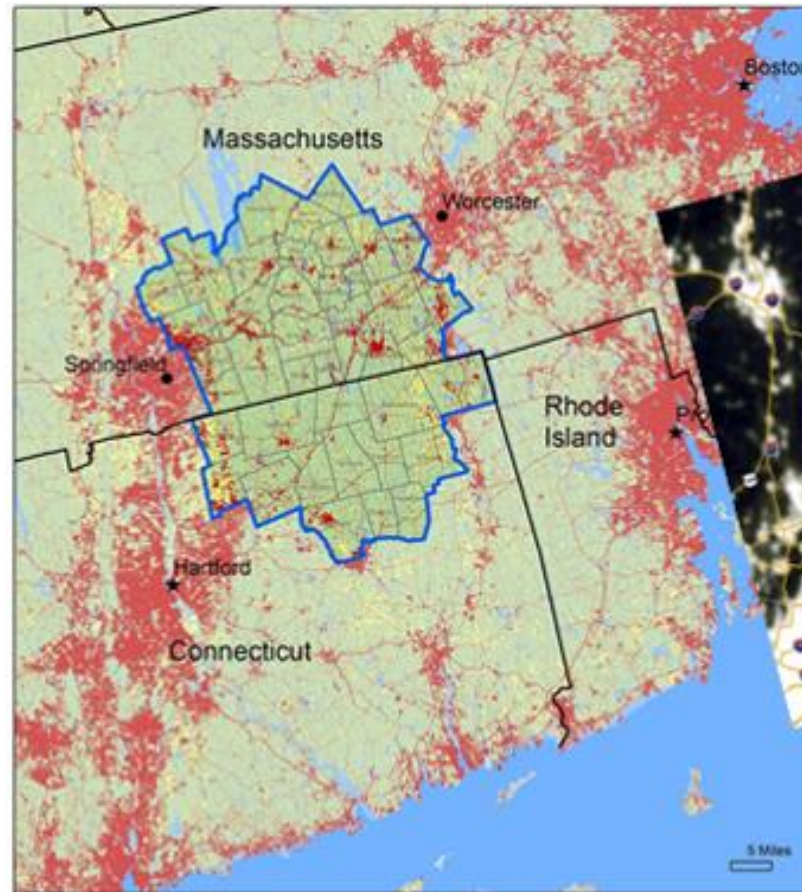


MassConn Sustainable Forest Partnership

- 38 towns MA, CT
- 760,000 acres
- 76% forested
- 23% protected

Conservation Goal:

- 80,000 acres
- 33% of region

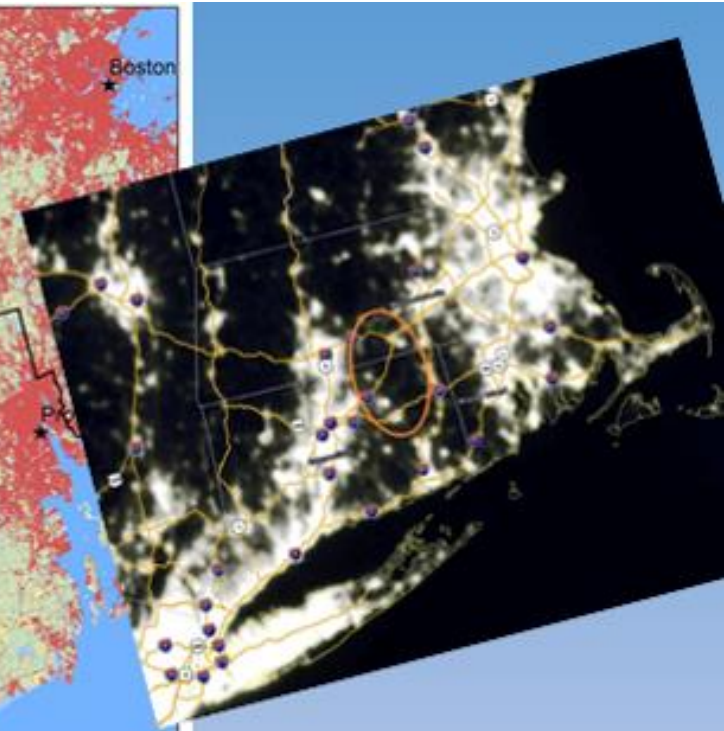


MassConn Sustainable Forest Partnership



Land Cover (NLCD2011)

- Water or Wetland
- Grassland/Herbaceous
- Forest or Shrub/Scrub
- Developed
- Agriculture



MassConn Outreach since 2014

- “Touched” all 2,500 landowners owning 10+ acres in 10-town pilot region at least once
- 400 landowners owning >10,000 acres responded to 1 or more offers – expanded to all 38 towns
- Seeking repeated engagement over time – events, email & offers for information or experts



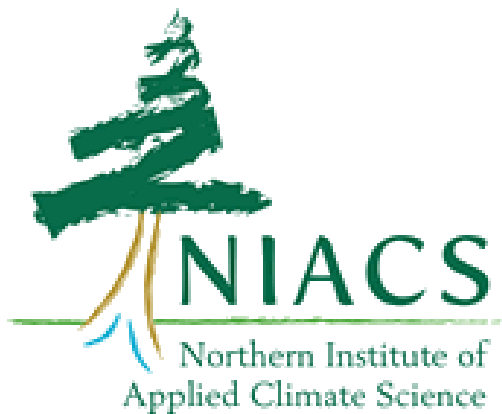
First, a few questions...



- Has your land trust tried **pro-active outreach** to landowners? What have you done?
- Has your organization **addressed climate change** in some way? And have you communicated about it?
- Do you have a property or place in mind that may be **vulnerable to climate change**? If so, how?

Wildlife Conservation Society grant - 2016-17

How do we incorporate climate change into stewardship?



...Help foresters talk with landowners...

Boiling it down for landowners...

Considerations for Your Woodlot

The following are general recommendations to keep your woods healthy and able to adapt to changes into the future. While all of these actions are important, the checked recommendations are most applicable to your woods and your situation. To learn more, consult our fact sheet, consider working with a professional to implement these practices on the ground or visit our website at <http://mymasscomwoods.org/>.

Top Forest Stressors to Keep an Eye On	Extreme Weather Vulnerabilities
<input checked="" type="checkbox"/> Protect water and soils on your land	
<input type="checkbox"/> Improve ability of your trees to resist bugs and disease	
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Keeping Your Woods Healthy Through the Years Ahead

Whether you spend time outside in your woods, or just enjoy the beauty of your trees and wildlife from your window, you likely love your woods and want to keep them healthy.

Forests are always changing and adapting to new conditions. Some changes are an anticipated part of the progression of green summer leaves to the bright red and gold of fall foliage, or annual return of brightly colored migratory songbirds. Other changes in our woodlands are only visible when comparing differences across many years or decades.

Our climate is changing in ways that farmers have never experienced before, resulting in rising temperatures and shifts in seasonal precipitation patterns. You may be noticing some of these changes in your woods – such as earlier dates for the first signs of spring leaf-out, unusual weather patterns, longer dry periods in summer, or even an increase in fast-growing, invasive plants such as green ash.

In particular, temperature and precipitation patterns in the MassCom Woods area of northern Connecticut and north-central Massachusetts have changed over the course of our lifetime. For example, the heaviest rainfall events have increased 70% in the Northeast US, from 1950 to 2010 – more so than in any other part of the country! Additional changes are expected by the time our grandchildren are having grandchildren of their own.

- Annual precipitation has increased by 3.5 inches in the MassCom Woods area, and is projected to rise at least another inch over the next 100 years. At the same time, extreme or very heavy precipitation events are expected to occur more often, and warmer temperatures will result in more rain than snow! This means your stream crossings and culverts will need to accommodate dramatically increased flow at times.
- By the end of this century, average annual temperatures are projected to increase somewhere between 2 to 10 degrees Fahrenheit, increasing both the length of the growing season and the frequency and severity of extremely hot days!
- A longer growing season, warmer temperatures, and more variable summer rain are likely to increase summer moisture stress leading to potentially harmful droughts.
- As the climate conditions change, the MassCom area is expected to become less favorable to the traditional northern trees we are familiar with and more favorable to typically southern species that are now at the northern reaches of their range. This means that many common trees such as maple, birch, and hickory are likely to experience greater stress, and new species more typical of the oak-hickory forest may have more opportunities!




New Tools for Parcel Assessment Visits

Equipping foresters for the conversation...

- Day-long training covering local climate effects, with working groups and field portion
 - 100% of foresters surveyed found this training useful
 - Forester companion piece: “field” cheat sheet to adaptation workbook

Climate Change & Our Forests

Guidance for Foresters and Land Managers



Forests are a defining feature of the landscape in “the MassConn Woods” of northeastern Connecticut and south central Massachusetts. These natural systems, so crucial to our history and current quality of life, provide many environmental, economic, and social benefits to the region.

These forests, primarily in private family or individual ownership, will increasingly be affected by a changing climate. Understanding these potential impacts is an important first step to sustaining healthy forests in the face of changing conditions.

THE CLIMATE HAS CHANGED

The Earth’s climate is changing. Many trends have been tracked across the globe, some reaching back hundreds of thousands of years. Although the climate has always changed, the changes that have occurred over the past century are more profound than anything that has happened since the start of human civilization and have important effects on our current environment.

The average annual temperature in the area has risen more than 2°F since the late 1800s.^{1,2} Temperatures warmed in all seasons, with winter warming by more than 3°F. Temperature records show that warming has accelerated in recent decades.

Winter temperatures increased by more than 3°F since the turn of the last century, and heavy rainfall events have become more common.

Precipitation also increased during this period, ranging from increases of approximately 3 inches across most of Connecticut to more than 5.5 inches in central Massachusetts.¹ The greatest increase in precipitation has been in the fall, with smaller increases during spring and summer. Extreme precipitation events have increased substantially, particularly over the past several decades³.

CHANGES WILL CONTINUE

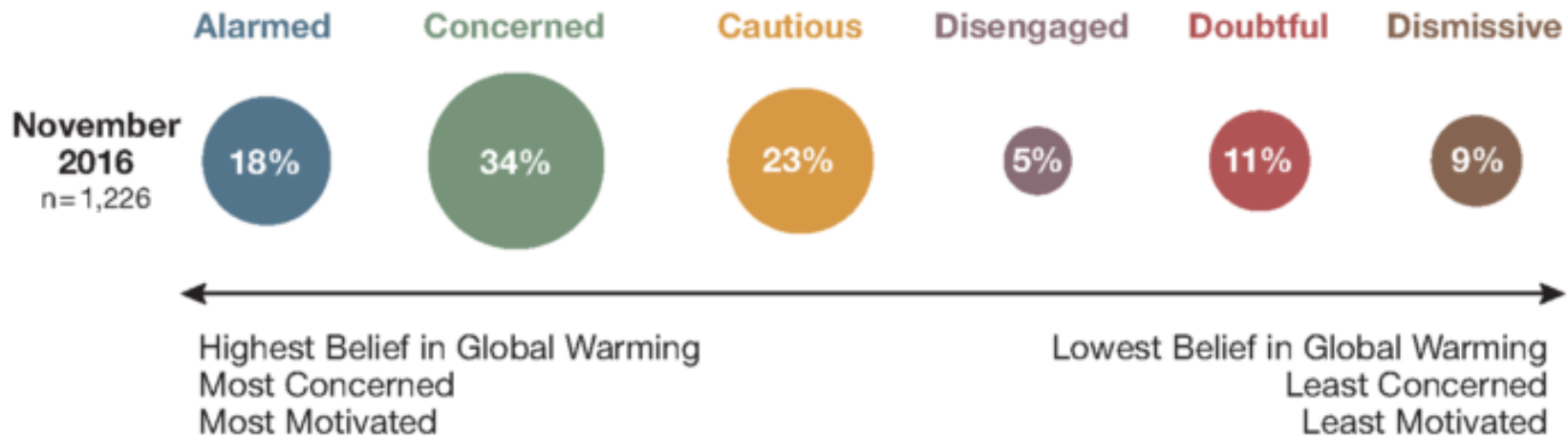
It’s impossible to predict exactly what will happen in the future, so global climate models can help us understand how the climate may react under various scenarios. There are many different models available and they provide an opportunity to understand the range of potential changes that may occur depending on the carbon-intensity of future energy sources.

Temperatures will increase

Climate models agree that temperatures will increase across all seasons in the region over the next century. The projected increase in annual temperature ranges from 3 to 10°F by the end of the century, depending upon future scenarios.^{2,4} Growing seasons will continue to get longer as a result of warmer temperatures.



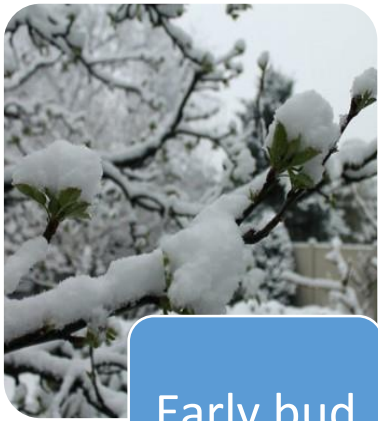
Know your audience. What do they really believe?



Proportion represented by area

Source: Yale / George Mason University

Find common ground.



Early bud
break



Wash-
outs



Extreme
weather



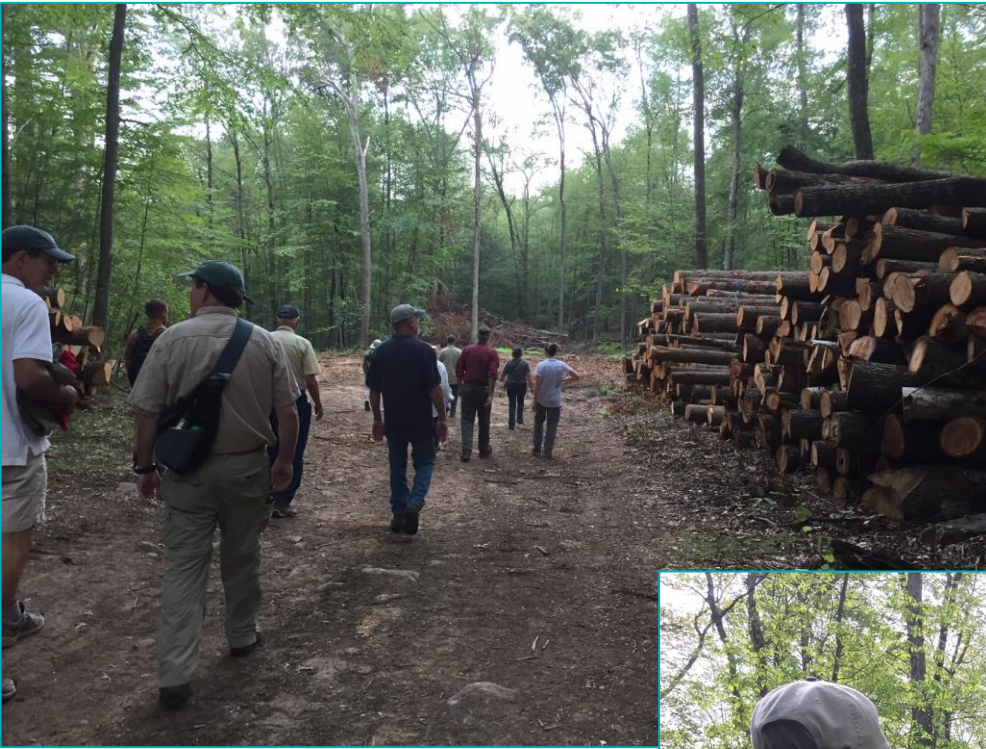
Moisture
stress

A “Four’easter” March



Harvest & Habitat Walks at Norcross Sanctuary

Folded Hills Forest
40-acre management site
August 2016

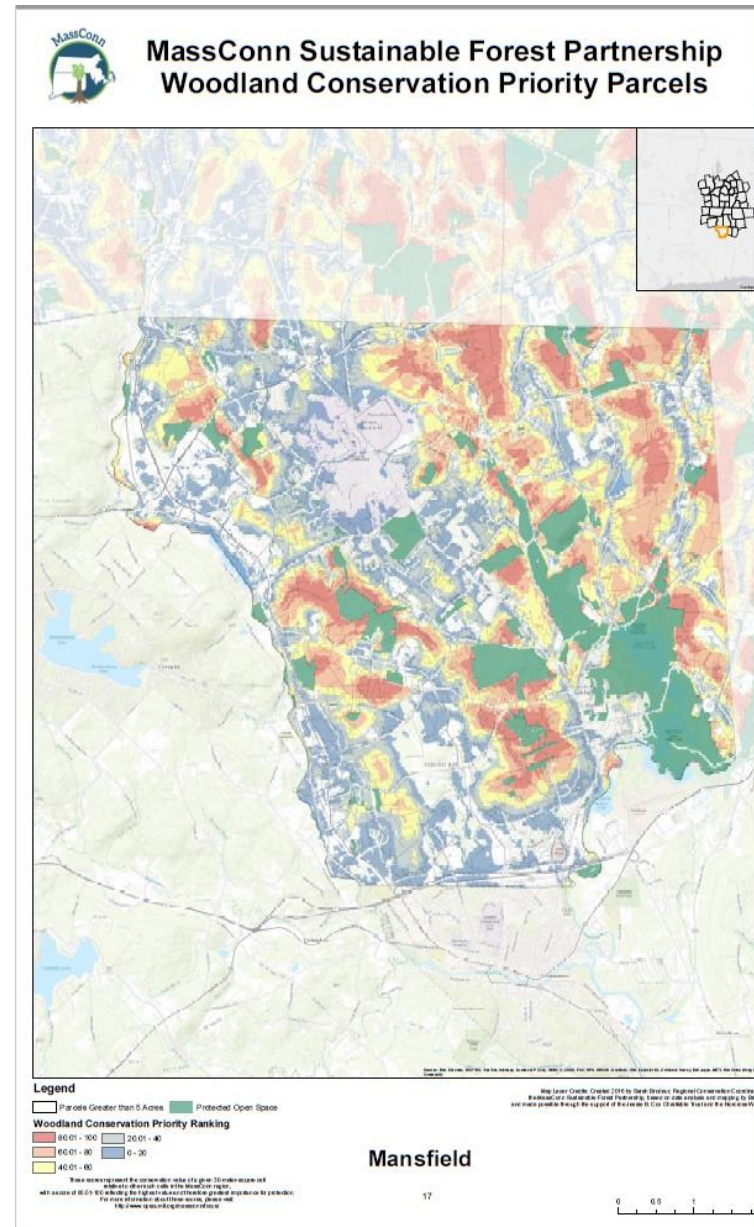


Whaleback Ridge Forest
20-acre harvest site
May 2016

Targeting Outreach

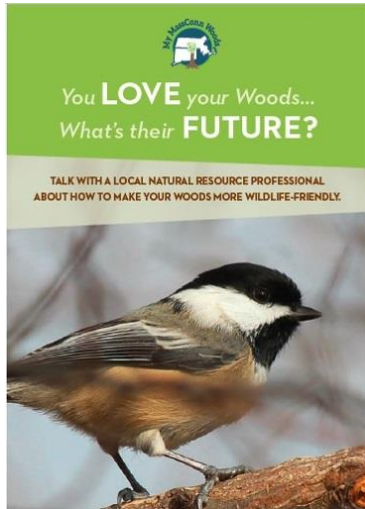
- Heat map: MassConn Ecological Priorities – Red = top 20%
- Tool for strategic landowner outreach:

Using GIS data to pull mailing list for outreach from high-ranking parcel ownerships – 25+ acres



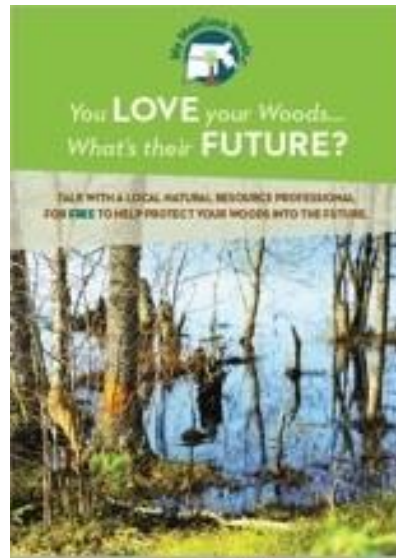
Talking Climate Change...

What messages resonate?

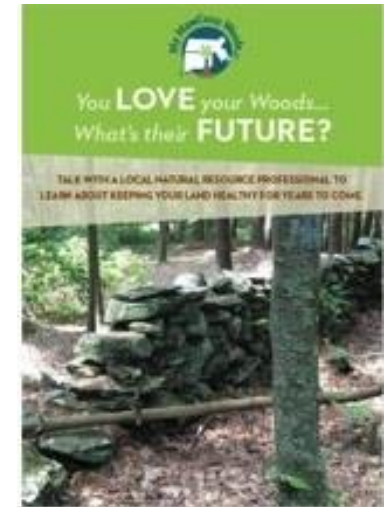


Wildlife

- Direct mail to 613 MA, 424 CT owners of 30+ acres across 38 towns
- Also offered “free” forester visits at MassConn events and Woodland Ambassador workshops



Extreme Weather



Healthy Woods

Considerations for Your Woodlot

Southbridge/Dudley, MA
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)

Considerations for Your Woodlot

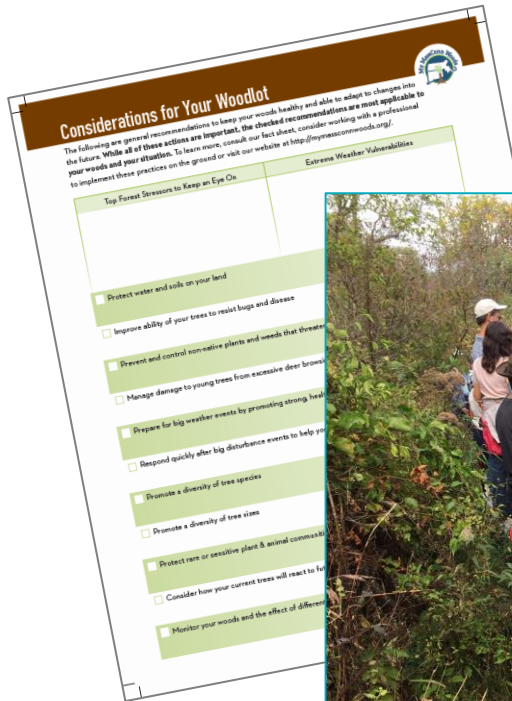
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Considerations for Your Woodlot

29 acres - Woodstock, CT



Forester Recommended:

- ✓ Continue to remove invasives, replace with natives (protect soil, H2O)
- ✓ Thin, release crop/mast trees (prepare for weather; promote strong trees)
- ✓ Release white pine regeneration (promote diversity of tree species)

Results

Exceeded Goal: 500 acres under climate-informed management

To Date:

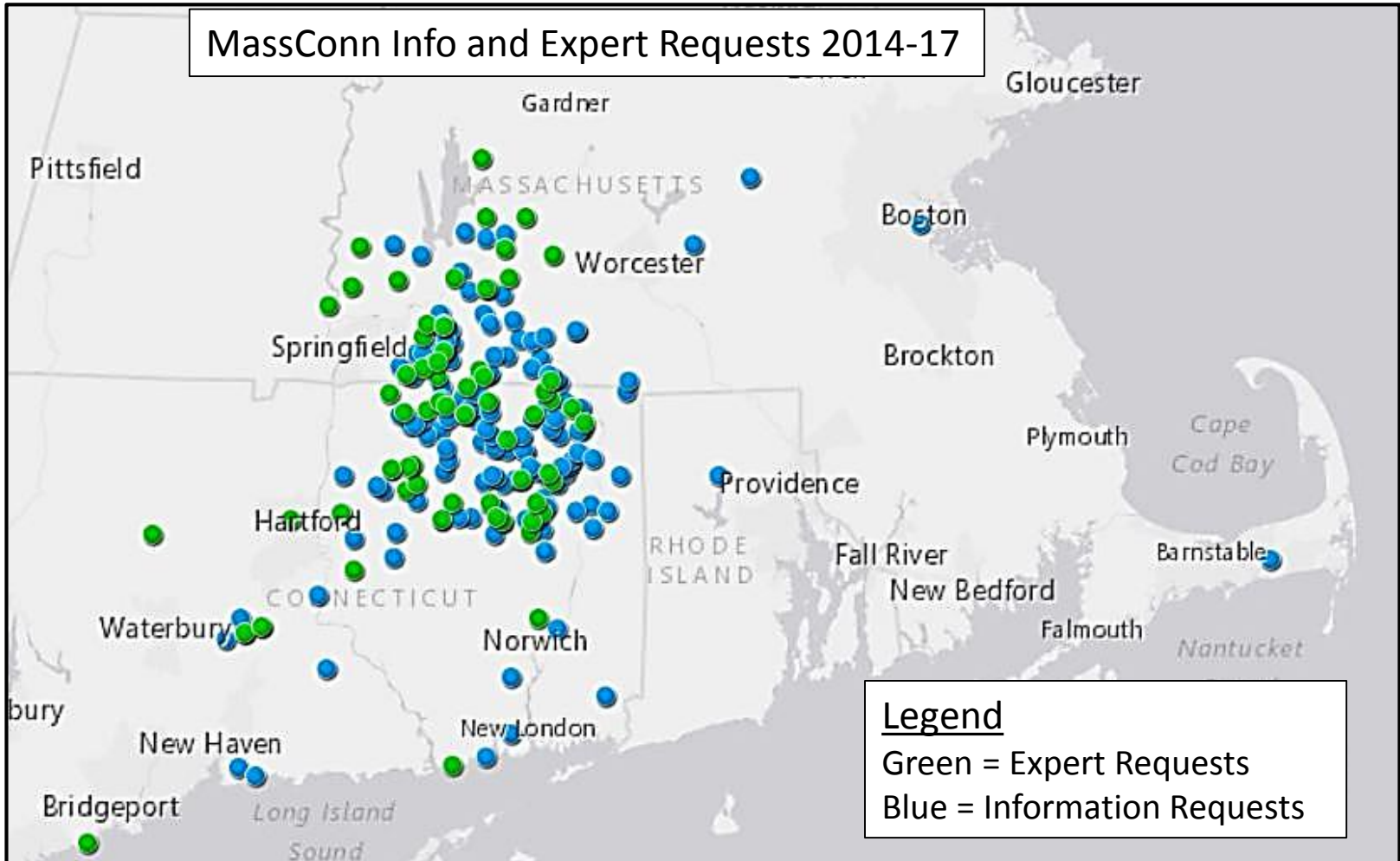
- Engaging landowners owning ~3,000 acres
- 40 parcel visits conducted by 6 trained consulting foresters
- Individual support for a dozen owners to apply for cost-share, incorporate climate in plans or practices



So far: 1,228 acres

- *Feeding the pipeline: 47 forest resilience info packets to 2016 non-responders*

MassConn Hand-raisers (by mailing address)



NEFF 3-year Forest Service grant

- Complete MassConn outreach with partners (more Checklist forester visits!)
- Identify demo sites in key CT & MA landscapes

OUTCOMES:

- Prioritize parcels that rank high for TNC Climate Resilience
- Train 25 more CT & MA foresters
- Adaptation assessments on 2500 acres; 50 owners with management plan or added climate component



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Conclusions

- Families and individuals provide tremendous opportunity for landscape-scale impact.
- We can reach and engage this critical ownership audience – even on complex issues like climate.



How can *you* address climate resilience?



- Considering forest management on land trust property?
- Interested in planning for climate change on your lands?

Tools are Available

- Parcel-level forest adaptation
- Climate messaging for owners

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

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

How do you communicate to your stakeholders about climate change?

The **Massachusetts Ecosystem Climate Adaptation Network (Mass ECAN)**, is a new community of practice for climate adaptation practitioners interested in ecosystem resilience and natural resources conservation in Massachusetts. Learn more and join at **massecan.org**

Do you have communications or outreach materials (newsletter article, mailing, op-ed, etc.) that discuss climate change and your work that you would like to share and showcase?

Mass ECAN's Communications Expert Work Group, with the Open Space Institute and Land Trust Alliance, are collecting **examples of land trust communications products addressing climate change.**

Email Melissa Ocana, mocana@umass.edu, or provide your email and we'll reach out.

