

Sustaining and Restoring a Connected Forested Landscape for Nature and People



© Appalachian Corridor



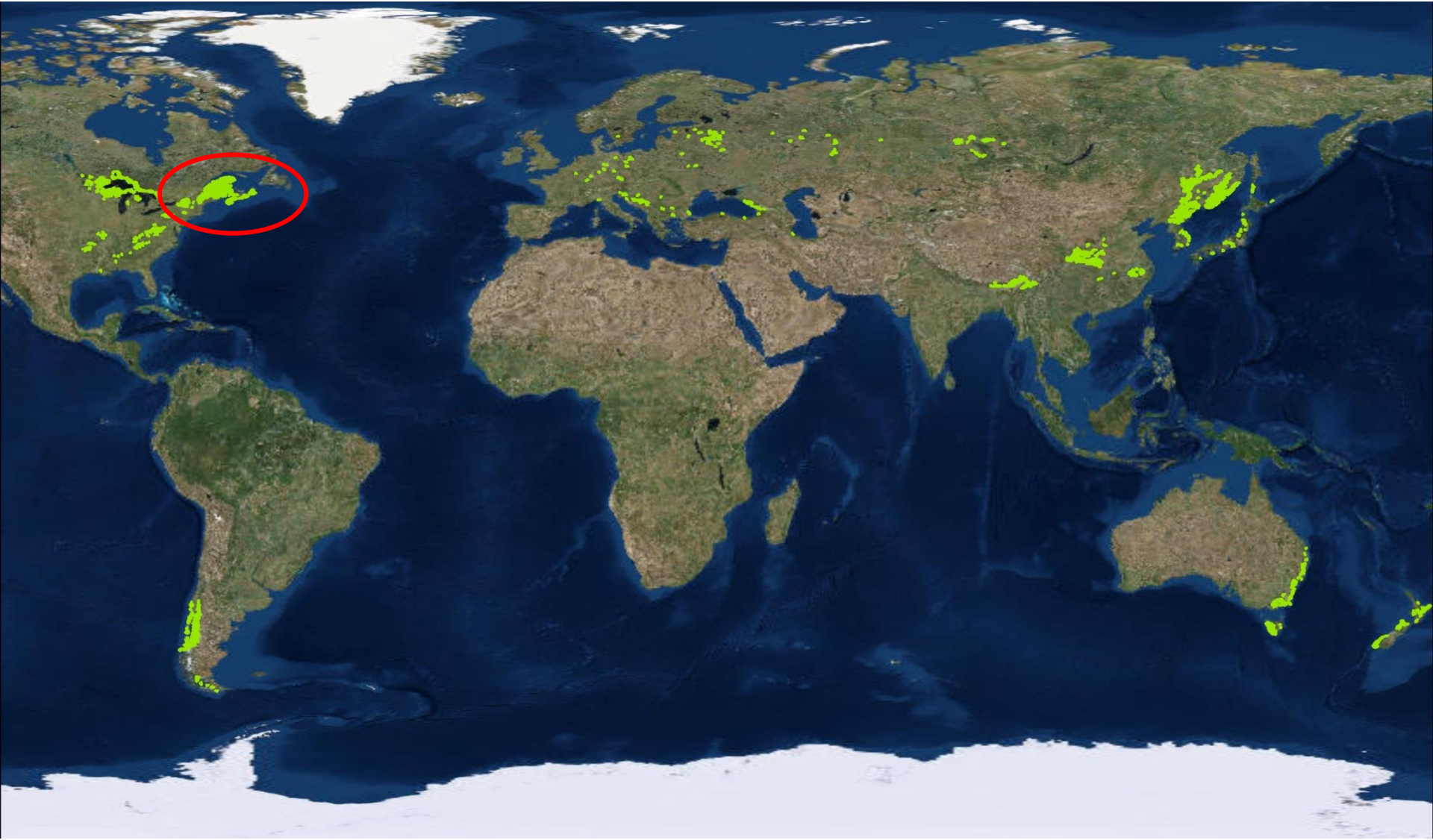
**RCP Network Gathering
November 16, 2017**

**Jessie Levine
Laura Marx
Bridget Butler
Phil Huffman**

Temperate deciduous and mixed forests



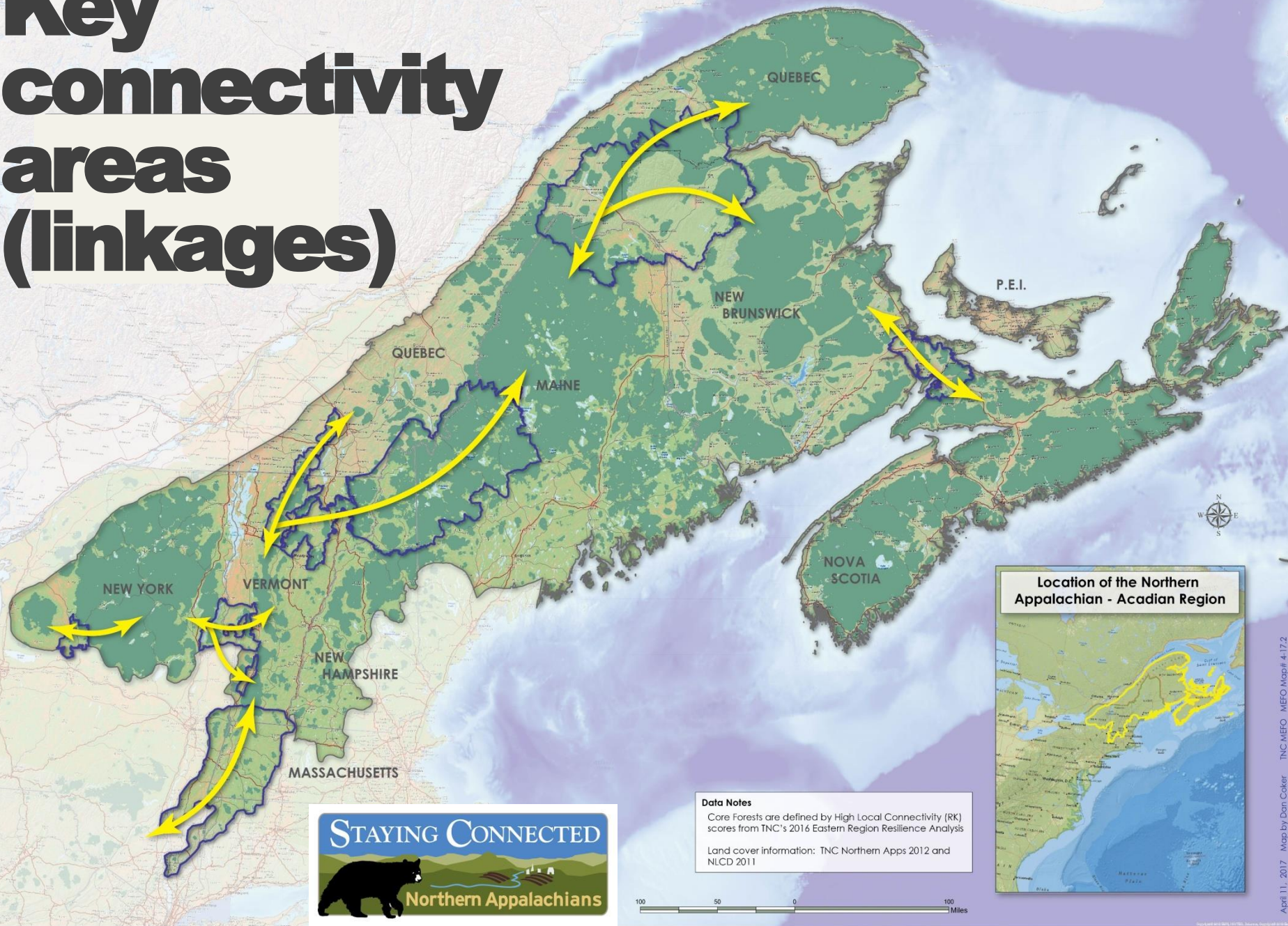
Northern Appalachian-Acadian ecoregion



Northern Appalachian- Acadian ecoregion



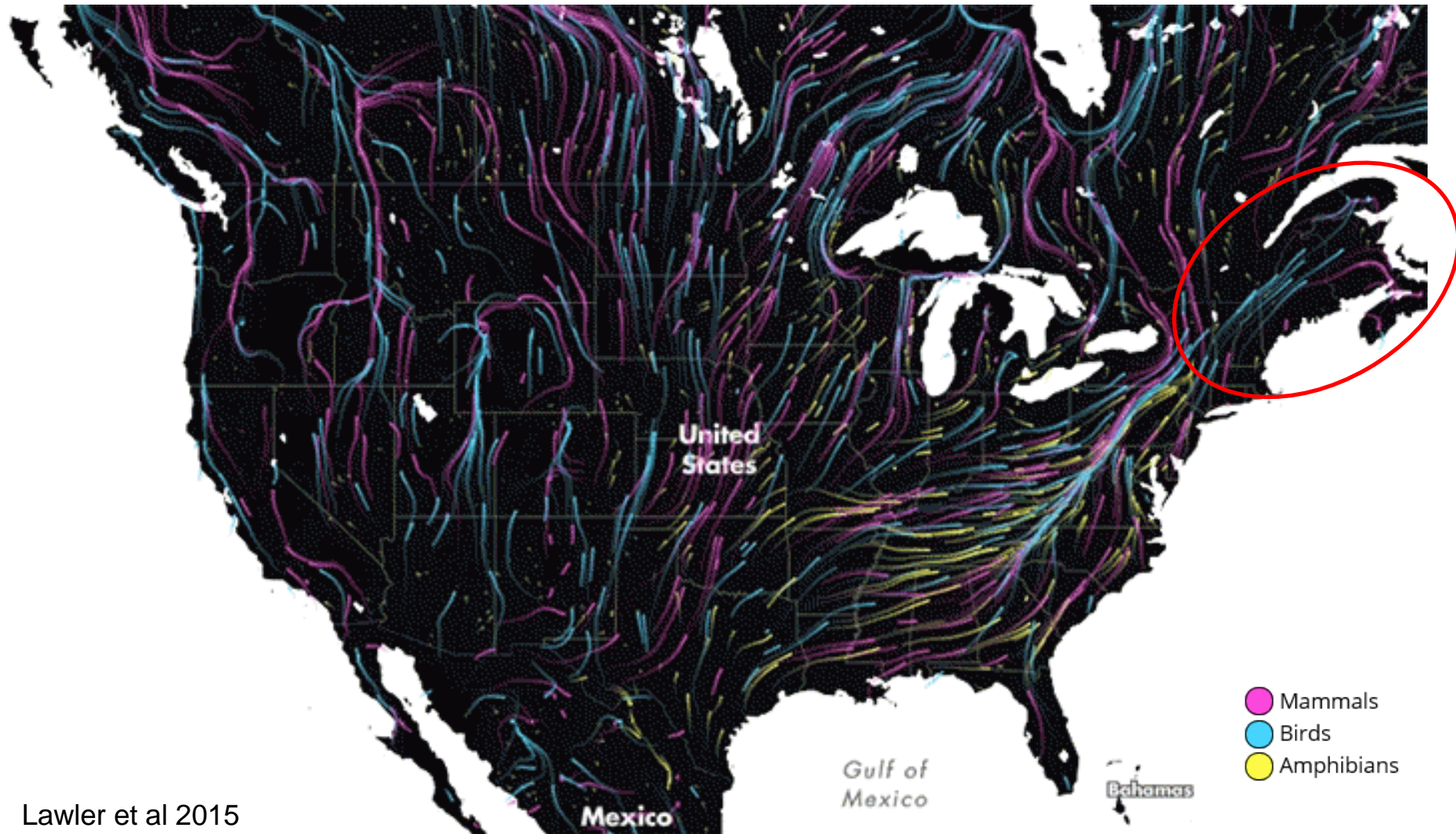
Key connectivity areas (linkages)





**Landscape
connectivity**

Connectivity and climate



Lawler et al 2015
Animation by Dan Majka, TNC

In partnership





Multiple scales and multiple strategies



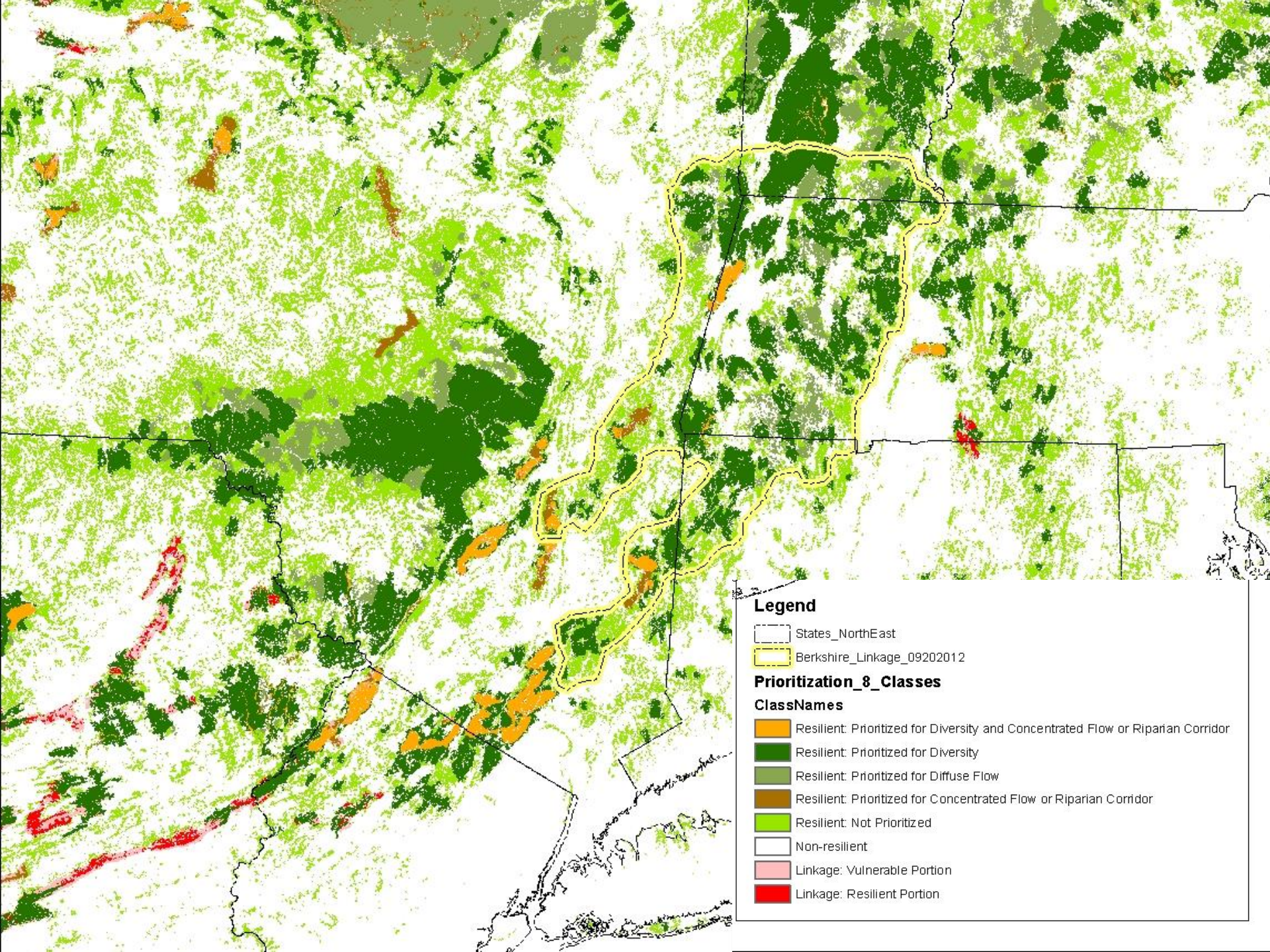
Science
Land protection
Land use planning
Outreach to landowners
Transportation mitigation
Policy

Science - from computer to ground









Legend






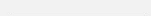
- States_NorthEast
- Berkshire_Linkage_09202012

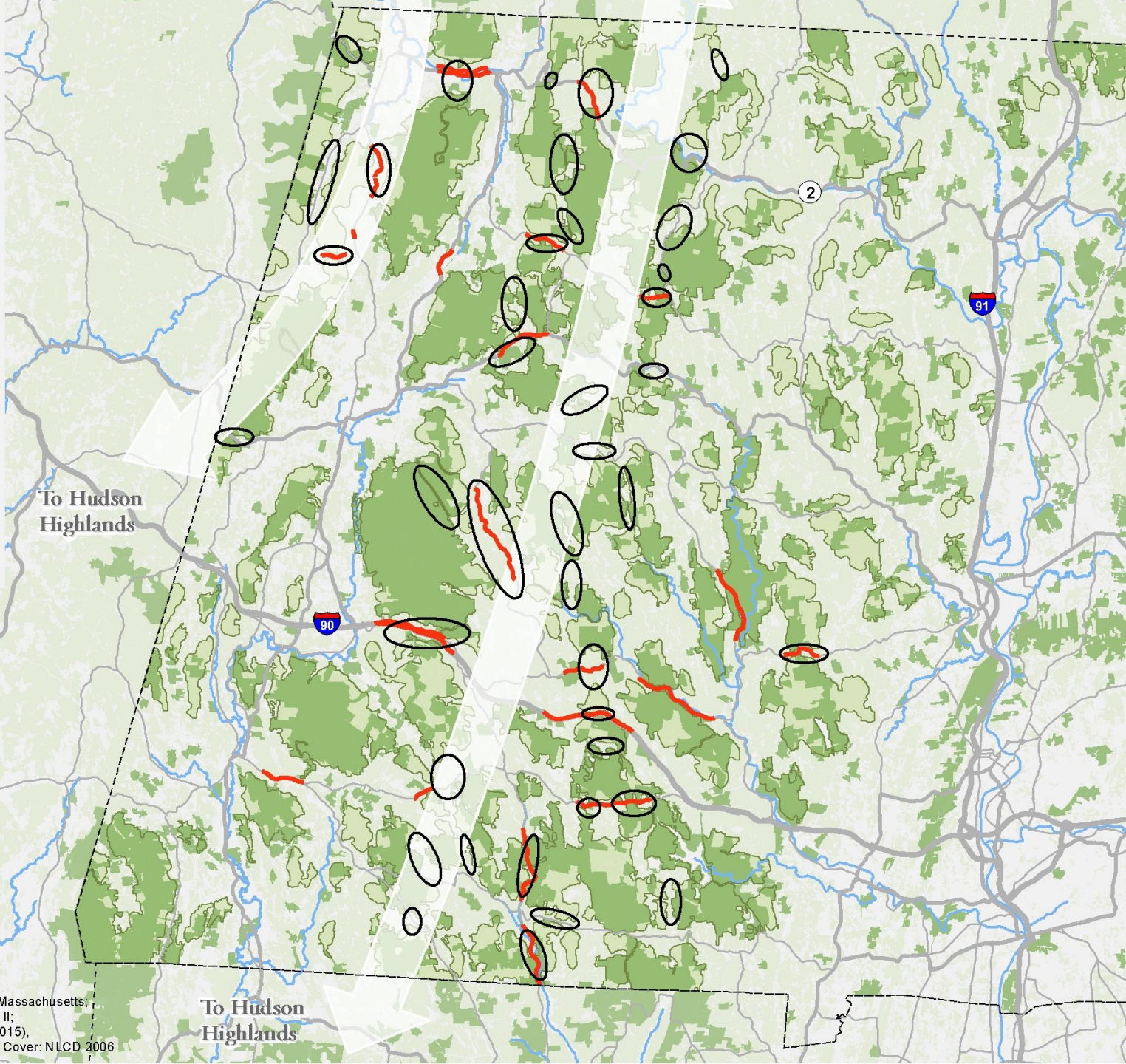
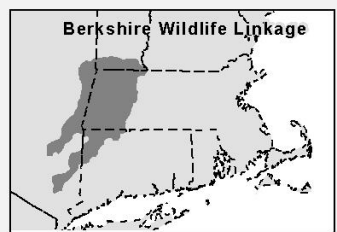
Prioritization_8_Classes

ClassNames

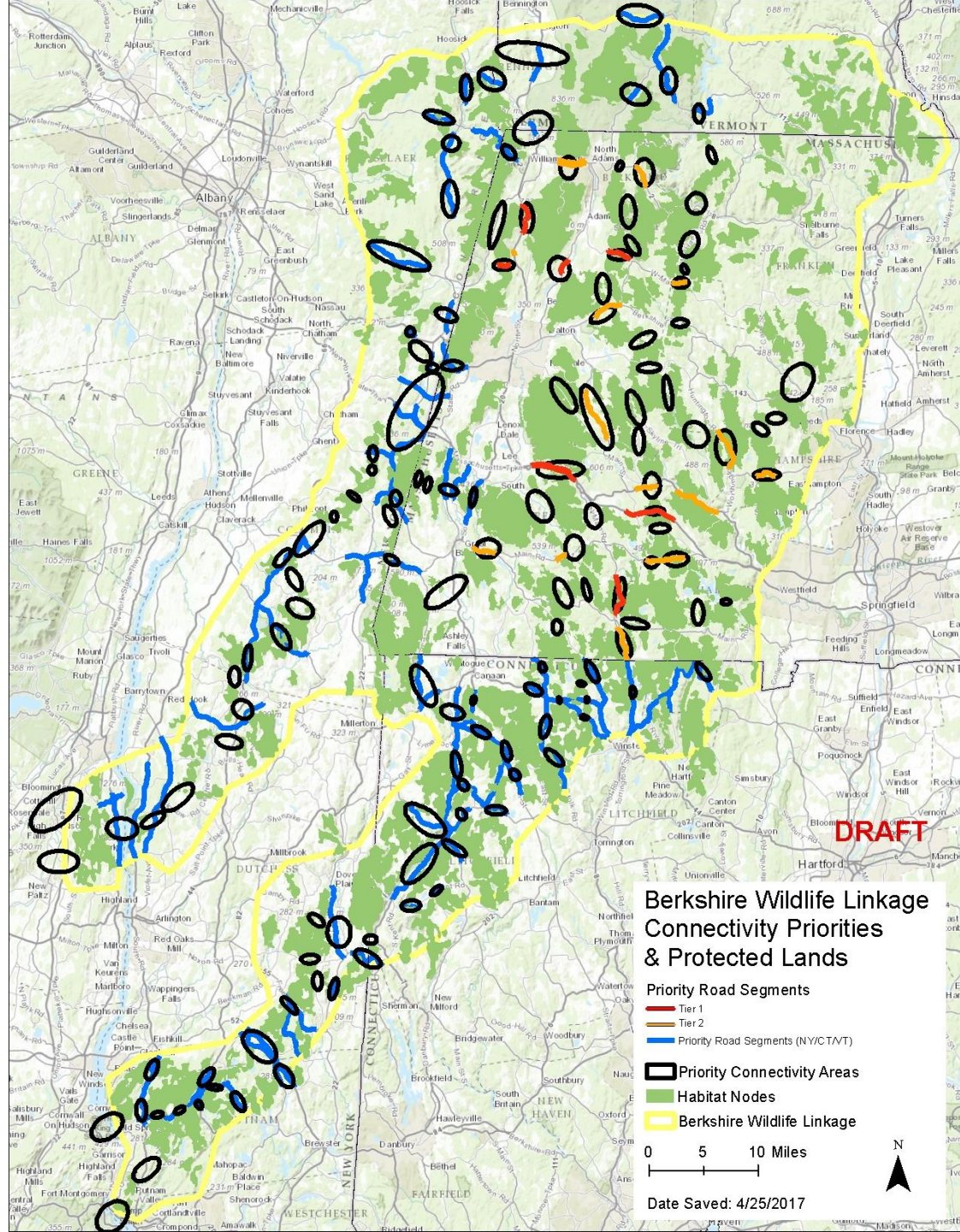
- Resilient: Prioritized for Diversity and Concentrated Flow or Riparian Corridor
- Resilient: Prioritized for Diversity
- Resilient: Prioritized for Diffuse Flow
- Resilient: Prioritized for Concentrated Flow or Riparian Corridor
- Resilient: Not Prioritized
- Non-resilient
- Linkage: Vulnerable Portion
- Linkage: Resilient Portion

Greens to Hudson Pathway

-  Priority Road Segments
-  Priority Connectivity Areas
-  Habitat Nodes
-  Protected Open Space
-  Protected Open Space
-  5 Miles



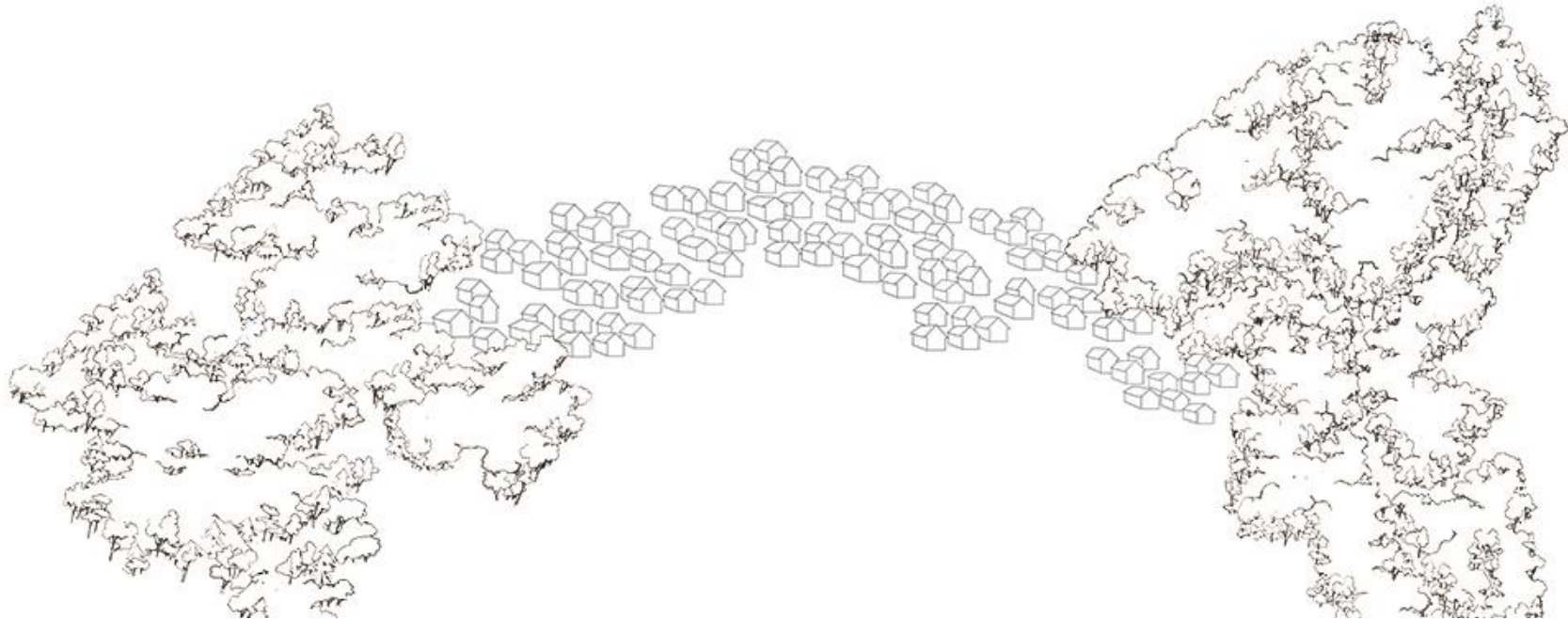
Data Sources:
Road Segments and Connectivity Areas: TNC Massachusetts;
Habitat Nodes: UMass Critical Linkages Phase II;
Protected Lands: MassGIS Open Space (v. 5/2015),
TNC Secured Lands 2013 (VT, NY, CT), Forest Cover: NLCD 2006





Land protection





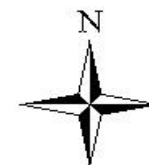


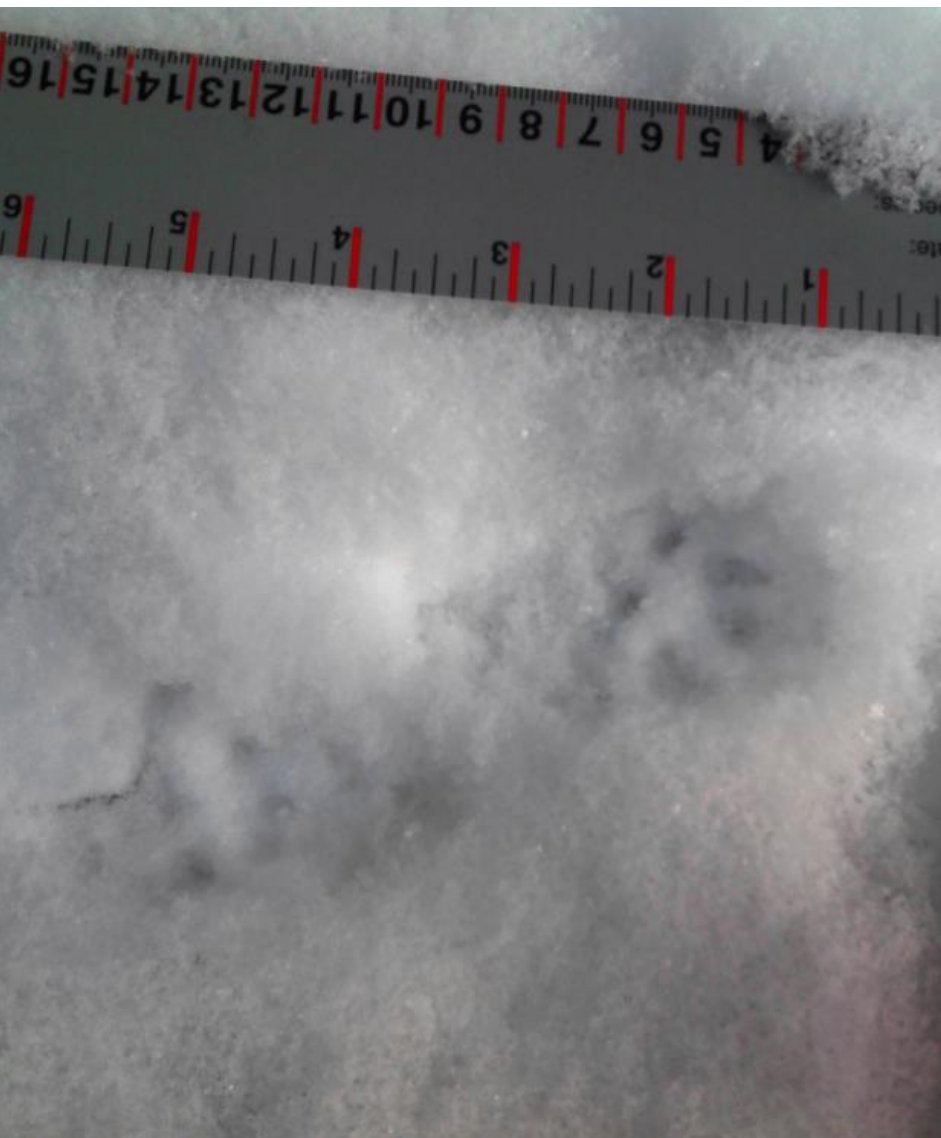
Legend

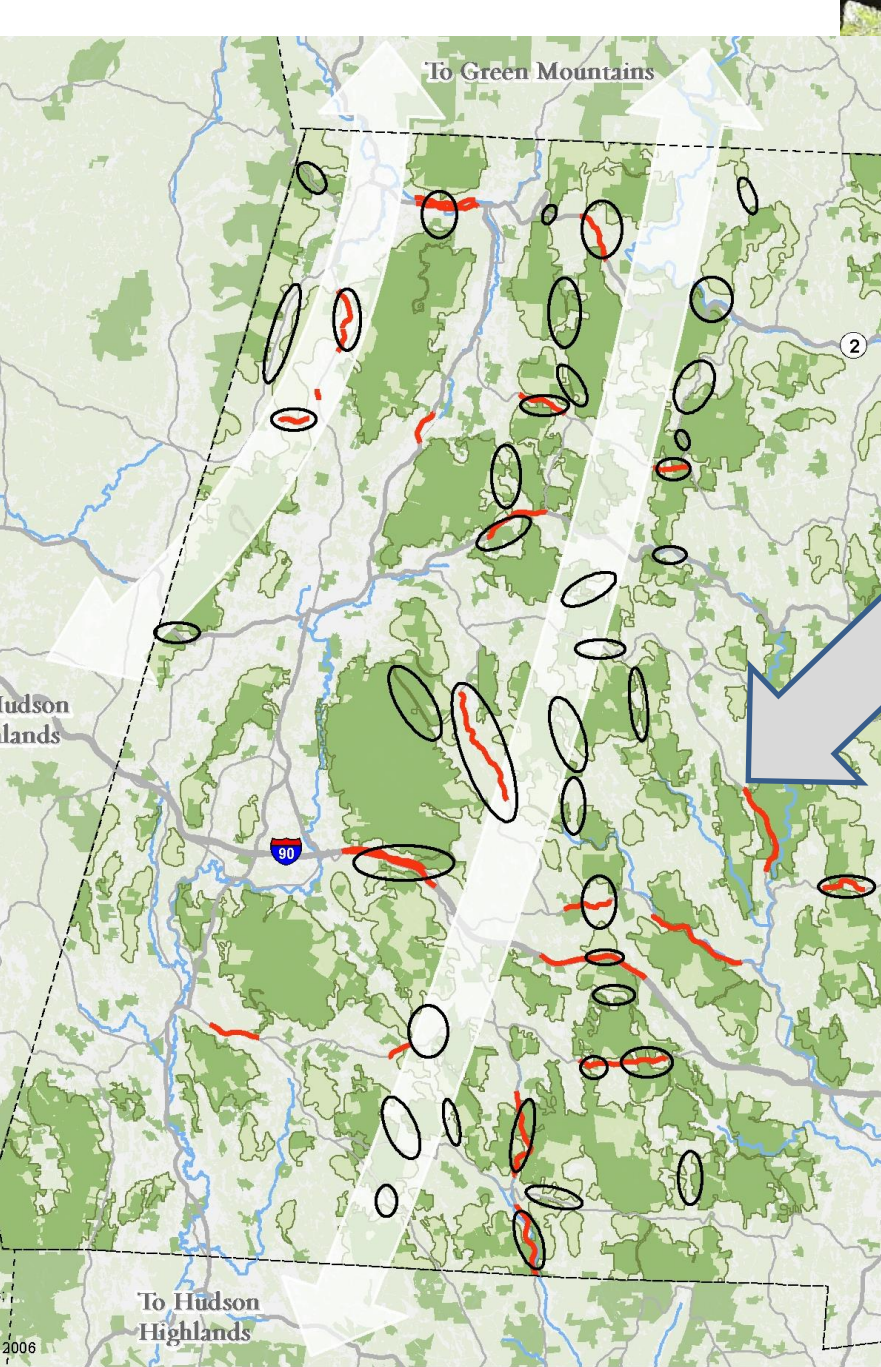
- HLT CR
- HLT FEE
- Federal
- State
- Private CRs, APRs

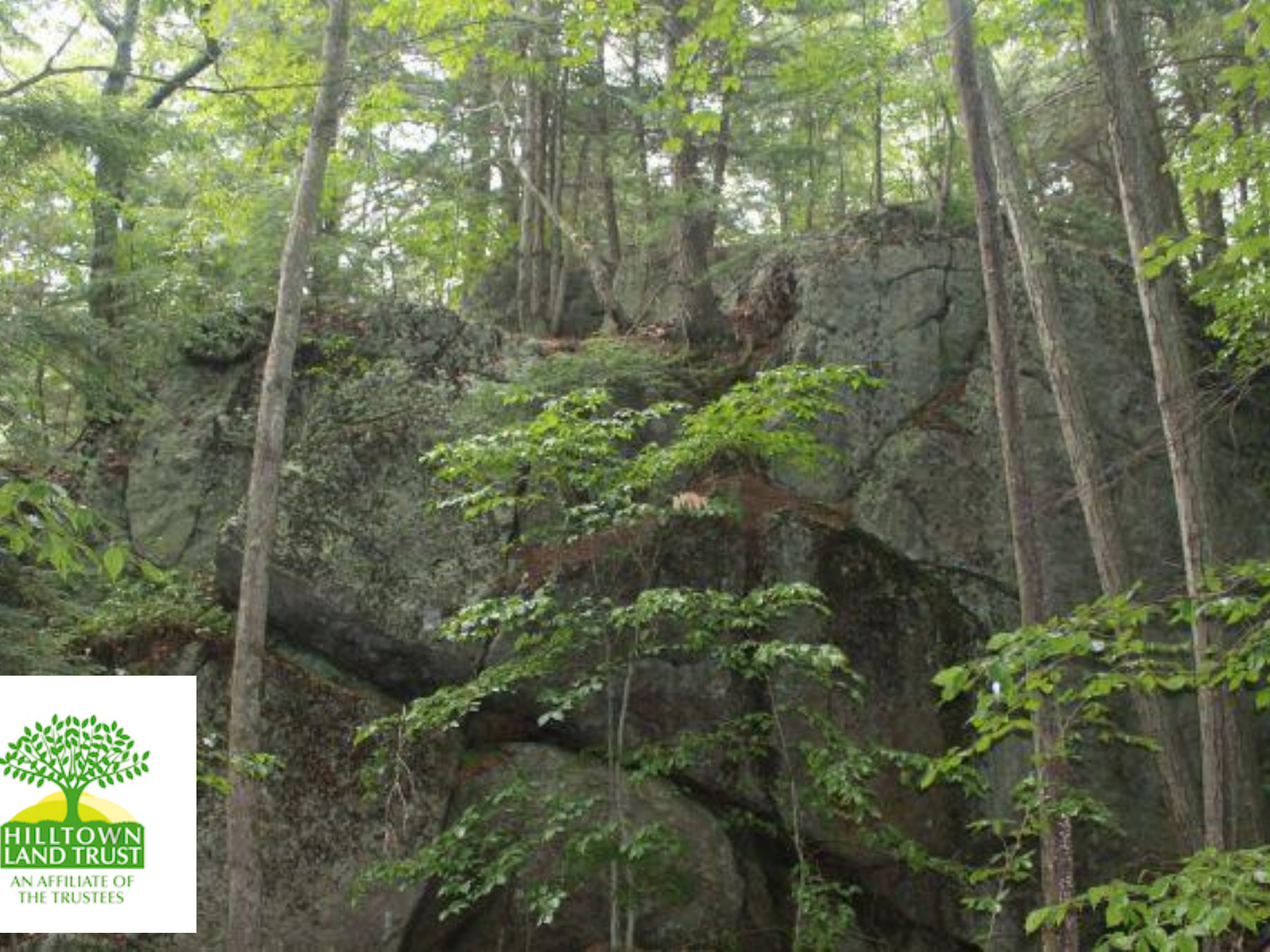
Cook land Conservation Context

0 0.15 0.3 0.6 Miles









**HILLTOWN
LAND TRUST**

AN AFFILIATE OF
THE TRUSTEES

Land Use Planning for Connectivity

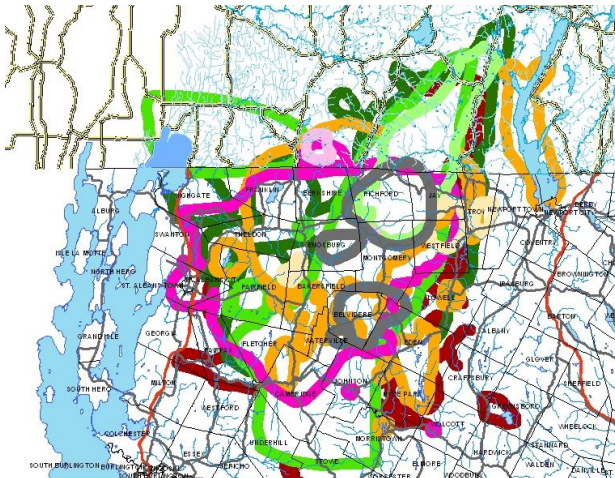
Phil Huffman
The Nature Conservancy in Vermont



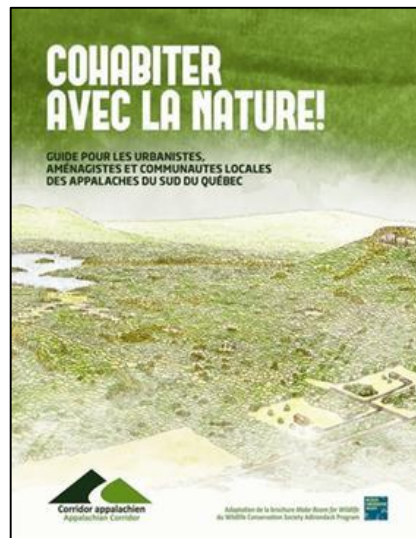
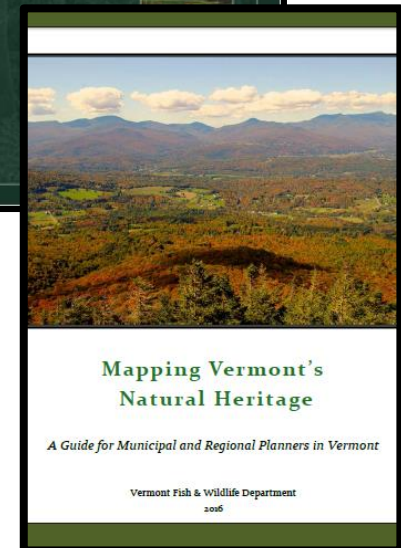
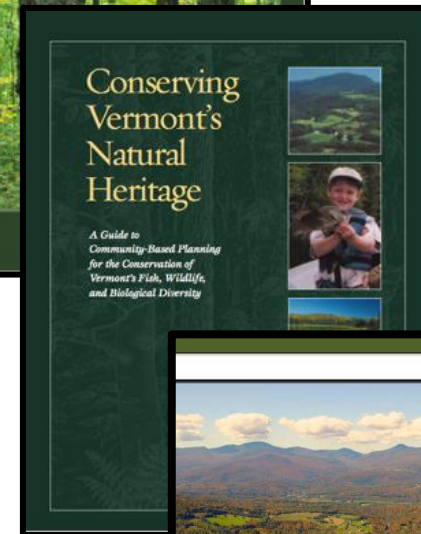
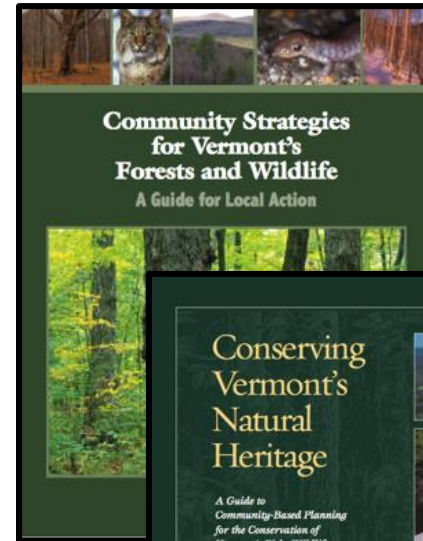
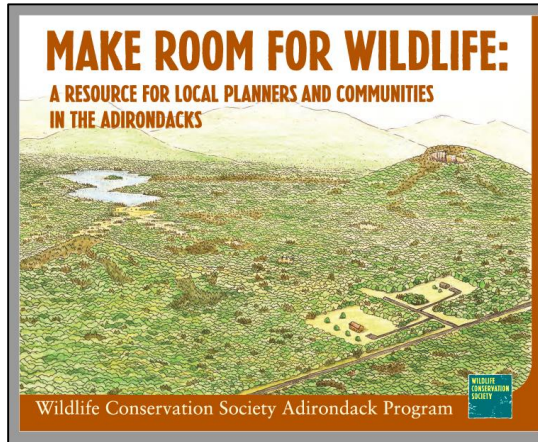
Why Land Use Planning?



Technical Assistance & Community Engagement – creating / affirming a shared vision



Sharing Resources and Best Practices



Many Ways of Moving Forward

Range of options

Education
& Outreach

Inventory

Town
Forests

Town
Plan

Conservation
Plan

Bylaws

Zoning

Non-regulatory

Regulatory

No one tool is right for every community

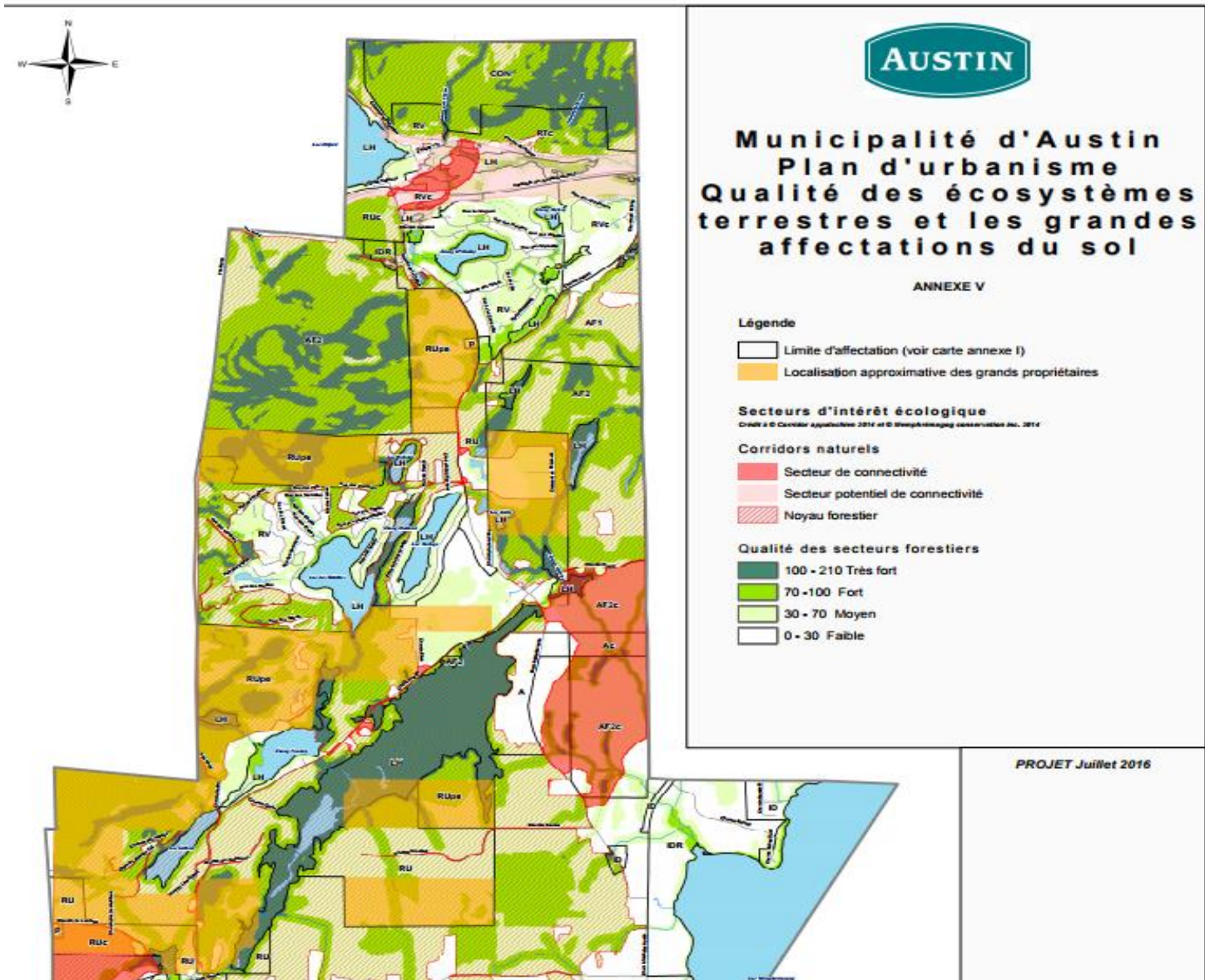
Enosburg, VT

Zoning Changes – 2013

- Goal: prevent fragmentation
- Approach:
 - Add clear, defensible definitions of what terms like “wildlife habitat” mean
 - Expand natural resources overlay district to include areas of connectivity mapped by VT Fish and Wildlife Dept
 - Require conditional review for developments on 50 acres or more in the agricultural district
 - Limit length of new roads
 - Strengthen conservation district uses



Austin, QC

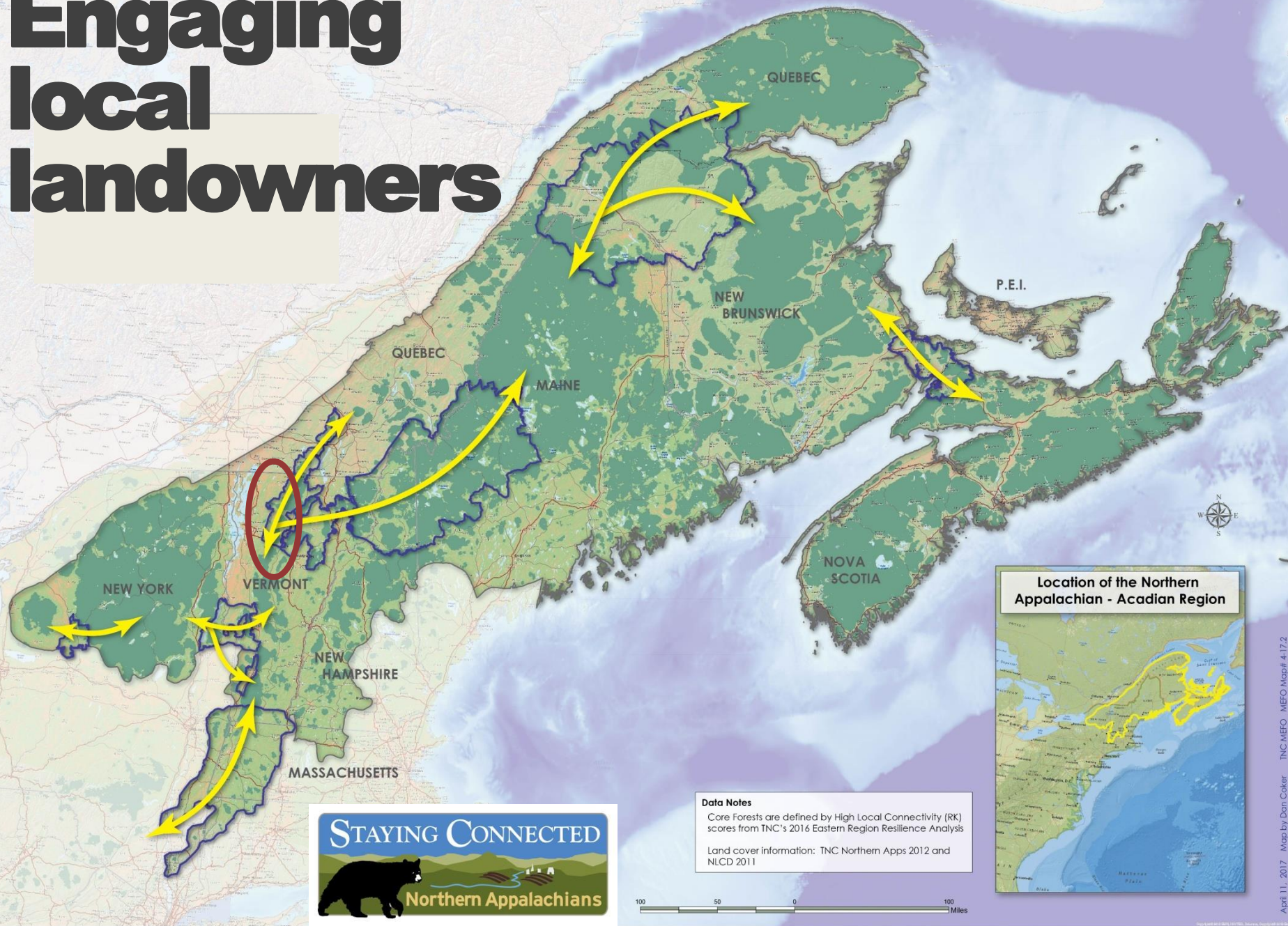




Thank You!

Questions?

Engaging local landowners





COLD HOLLOW
TO CANADA

The Cold Hollow Woodlots Program

ENGAGING LANDOWNERS IN LANDSCAPE LEVEL STEWARDSHIP

www.coldhollowtocanada.org

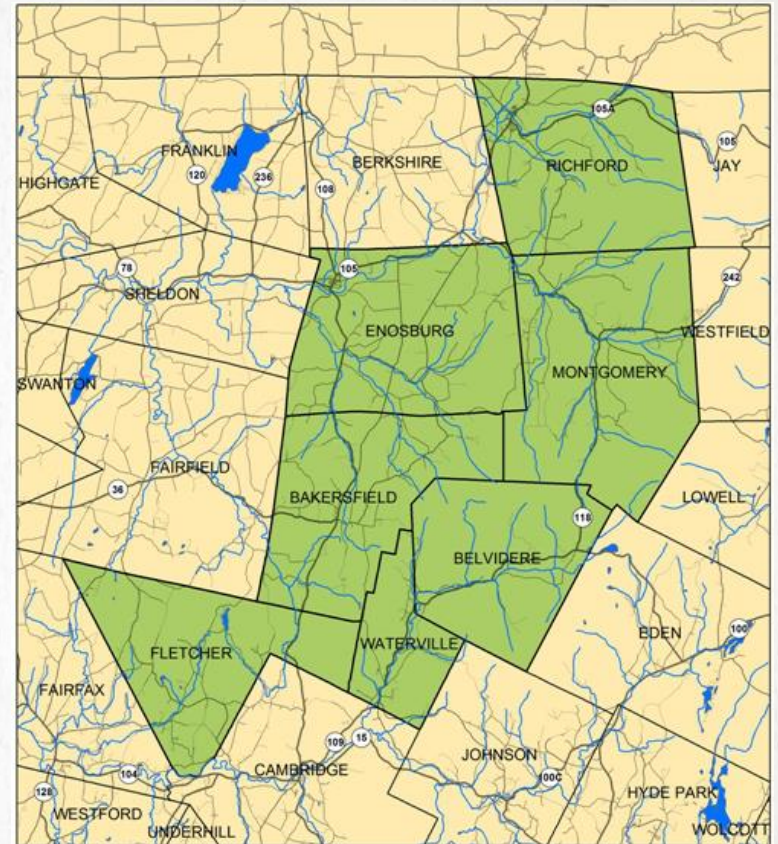


COLD HOLLOW TO CANADA

State Agencies
Vermont Land Trust
The Nature Conservancy
Staying Connected Initiative
Two Countries, One Forest
Regional Conservation
Partnerships

Cold Hollow to Canada

Towns
Conservation Commissions
Landowners
General Public

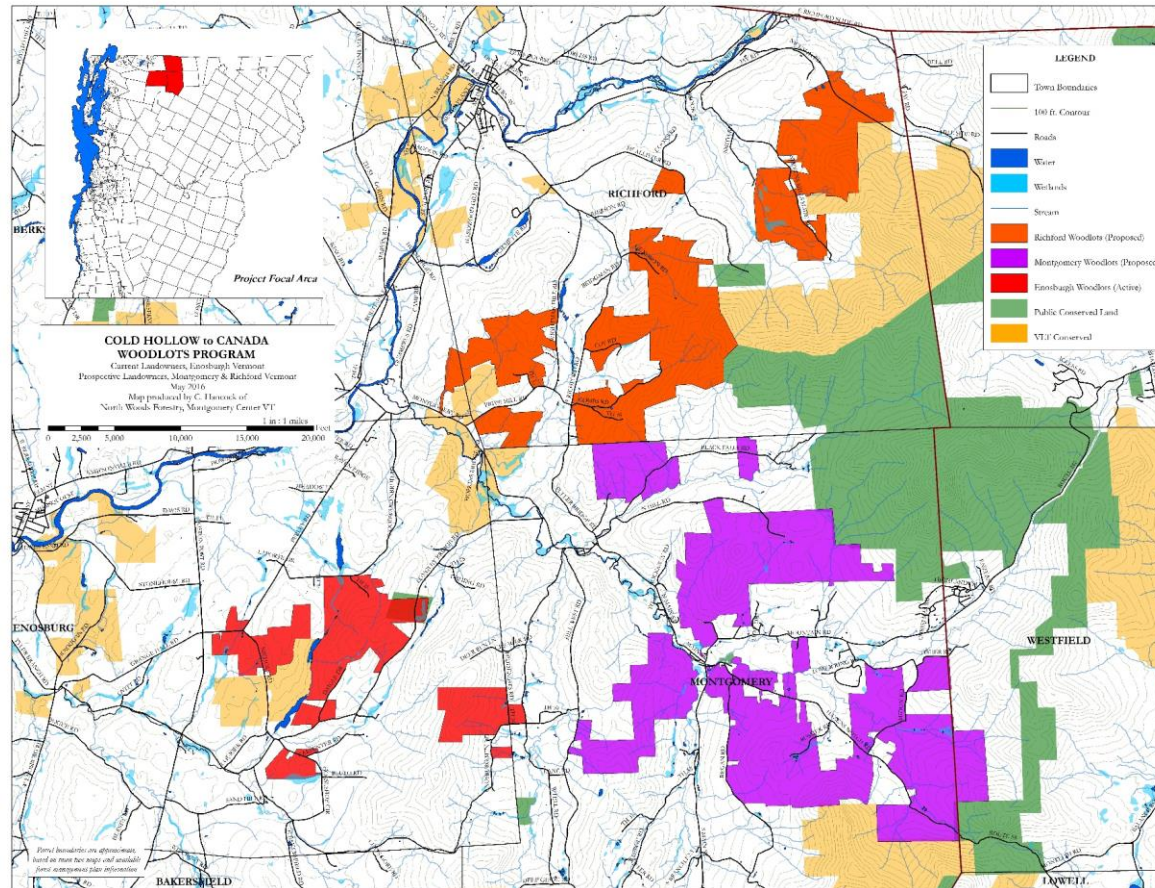


www.coldhollowtocanada.org



WHAT IS A WOODLOTS GROUP?

- High priority habitat blocks
- Contiguous Properties
- 50 acres or more



HOOKING LANDOWNERS



One
Love



Pride

Eye-
Candy



Fear



Honor



www.coldhollowtocanada.org



ONE LOVE: WORKING TOGETHER

- Quarterly Gathering
- Potluck Meal Together
- Bring In Experts
- Walking A Neighbor's Property



PARTNER PROGRAM STRENGTHS

- Roughly half of Vermont's birds will see their ranges shift or contract by 50% or more
- Silviculture with Birds in Mind by Audubon Vermont
- Member parcels undergo a bird habitat assessment by Audubon Vermont

C
F
i
A
C

Increasing Forest Resiliency for an Uncertain Future



Paul Catanzaro | Anthony D'Amato | Emily Silver Huff



CLIMATE CHANGE ADAPTATION & RESILIENCY

Take a big, scary thing & break it
down into collective action.



MONITORING & FOLLOW UP

- By design, Woodlots Groups are demonstration sites
- Through plan implementation; forest inventories & invasive monitoring
- Exploring opportunities to engage landowners as citizen scientist/monitors



THE COLD HOLLOW WOODLOTS MODEL



We believe the CHC Woodlots Program is a solutions based model for engaging an increasing number of individual and family forest owners in forest management practices.

2,000 Acres

500 Acres
Conserved

Leveraging
Resources

\$640K RCPP

\$105K
Conservation
Fund

\$50K LSR

www.coldhollowtocanada.org

Making roads safer





Monitoring key road crossings



53
2014-07-30 10:43:07 AM M 3/3

RECONYX
67°F



53
2015-02-26 10:14:04 PM M 1/3

RECONYX
-3°F



52

RECONYX



C86

RECONYX

Camera Trapping to Advance Wildlife Connectivity Implementation in Coos County, NH

A report to the

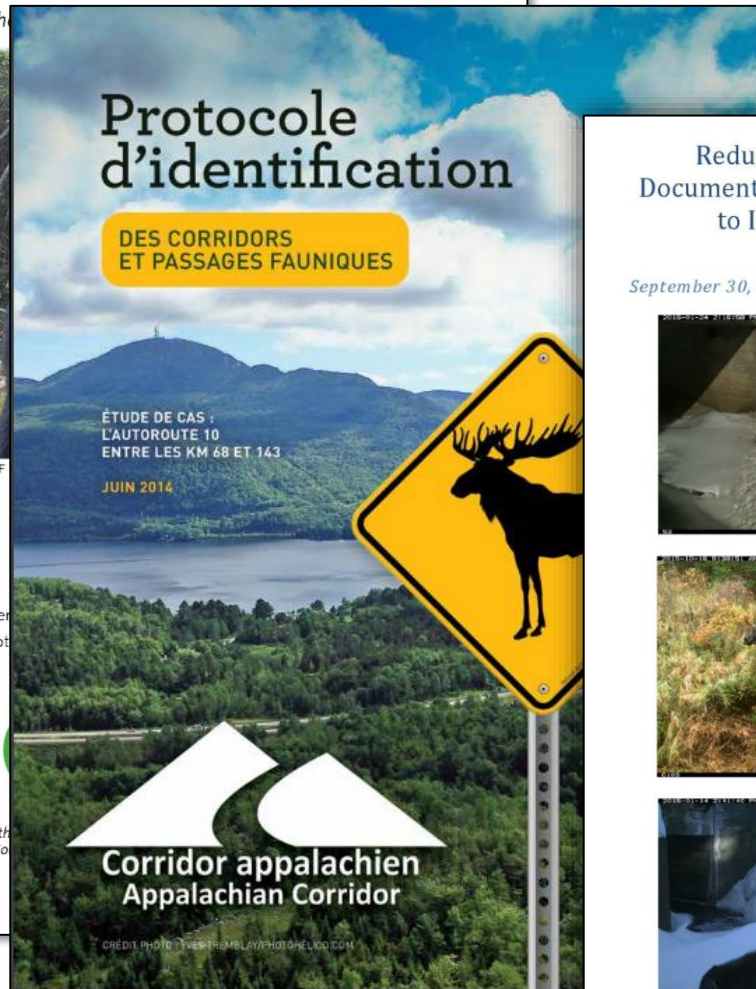


TNC-011 29741n 24F

Peter Steckler
Arianna Spear & Timot

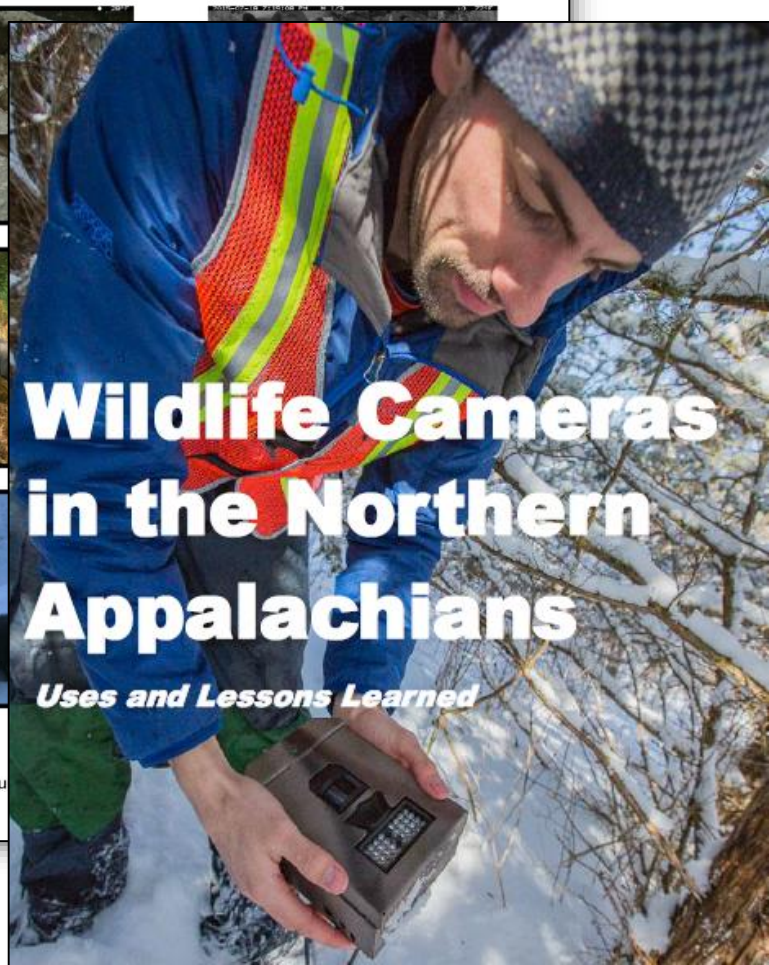
The Nature
Conservancy

This project is supported by funds from the
State of



Reducing Wildlife Mortality on Roads in Vermont: Documenting Wildlife Movement near Bridges and Culverts to Improve Related Conservation Investments

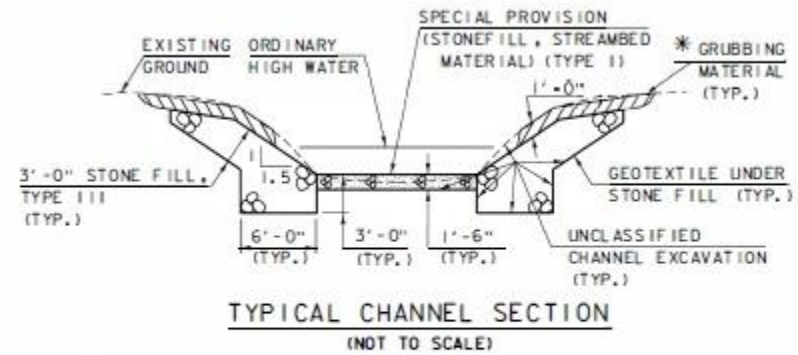
September 30, 2016



Paul Marangelo, The Nature Conservancy
Laura Farrell, PhD.



**Cost-effective
solutions**



*GRUBBING MATERIAL SHALL BE PLACED ON THE STONE FILL IN THE AREA UNDER THE BRIDGE. WHENEVER CHANNEL SLOPE INTERSECTS ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.



Wildlife-friendly designs

Wildlife-friendly designs





Meeting multiple goals

Sharing best practices





Colloque sur l'écologie routière
et l'adaptation aux changements
climatiques : de la recherche aux
actions concrètes



Leveraging investments

Private lands protected by
conservation easement

Culvert wildlife shelf
installation by NYS DOT

Busy road

Wildlife camera
monitoring by The
Nature Conservancy

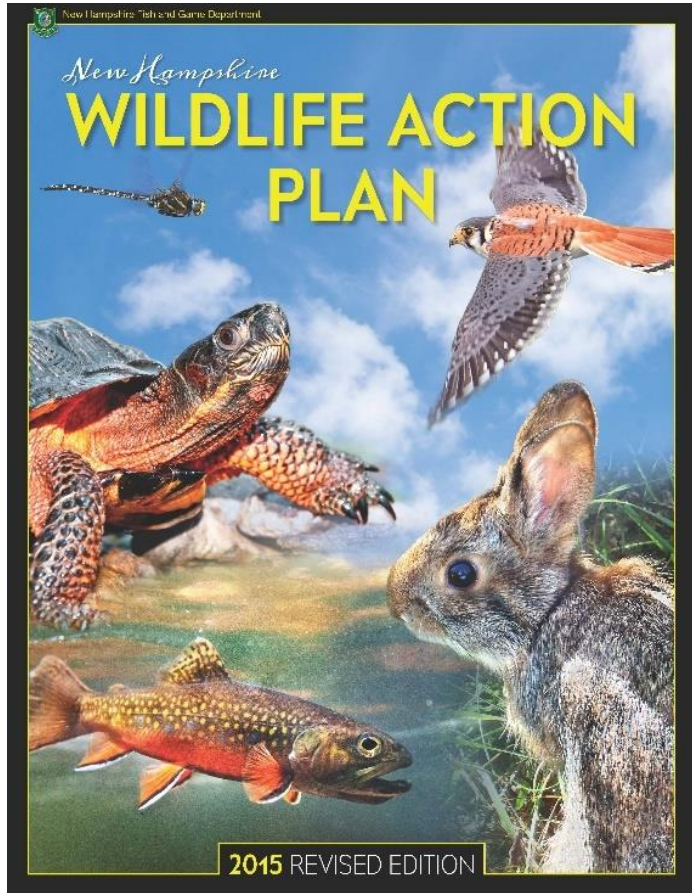


Institutionalizing Connectivity Conservation Through Sound Policy

Phil Huffman
The Nature Conservancy in Vermont



State-Level Action



Regional Action

New England Governors & Eastern Canadian Premiers



40th Annual Conference of New England Governors and Eastern Canadian Premiers - Boston Massachusetts 2018
40e Conférence annuelle des gouverneurs de la Nouvelle-Angleterre et des premiers ministres de l'Est du Canada

RESOLUTION 40-3

RESOLUTION ON ECOLOGICAL CONNECTIVITY, ADAPTATION TO CLIMATE CHANGE, AND BIODIVERSITY CONSERVATION

WHEREAS, the New England Governors and Eastern Canadian Premiers have shown international leadership through their collective action to address environmental protection and climate change, especially through work to expand use and production of renewable energy and other efforts to reduce greenhouse gas emissions; and

WHEREAS, the region's economy, culture, and identity are closely tied to and dependent upon its forests and water resources; and

WHEREAS, the region's cities and towns, infrastructure, and natural ecosystems are vulnerable to adverse impacts from climate change. Jurisdictions region-wide are taking steps to adapt to a changing climate, by making communities, infrastructure, and public investments more resilient; and

WHEREAS, the New England Governors and Eastern Canadian Premiers recognize the inherent connection between the region's forested landscape and its forest products economy, and the important role that private forest landowners play in the health and condition of its forests; and

WHEREAS, the Northern Appalachian-Acadian forest is globally significant as the most intact, contiguous temperate broadleaf forest in the world. The Northeastern coastal forest, including the coastal plain, and the Gulf of Saint Lawrence lowland forest provide a vital link for neotropical migrants of global significance. Boreal forests are globally important for millions of resident and migratory birds, including songbirds which depend on Boreal forests during different stages of their lifecycles. Together, these forests span portions of all six New England states and five eastern Canadian provinces. Global climate change is a prominent threat to the long-term health of these vital ecosystems. The spread of invasive species and wildlife disease, often exacerbated by global climate change, is another key threat; and

WHEREAS, Indigenous people historically have a strong connection to the land, and in the present day continue to recognize the traditional importance of a healthy environment to the social well-being and economic prosperity for future generations; and

WHEREAS, maintaining and restoring ecological connectivity is an important strategy for boosting the resilience of the region's native ecosystems and biodiversity, as well as its economy and human communities. Connected habitats provide the natural pathways necessary for fish, wildlife, and plants to move to meet their life needs and to find suitable habitat as climate conditions change. Intact

Resolution online at: coneg.org/negecp

Thank You!

Questions?





LEARN MORE

stayingconnectedinitiative.org

jlevine@tnc.org