

# STAYING CONNECTED

## Science to Action Across Scales



### What is the Staying Connected Initiative (SCI)?

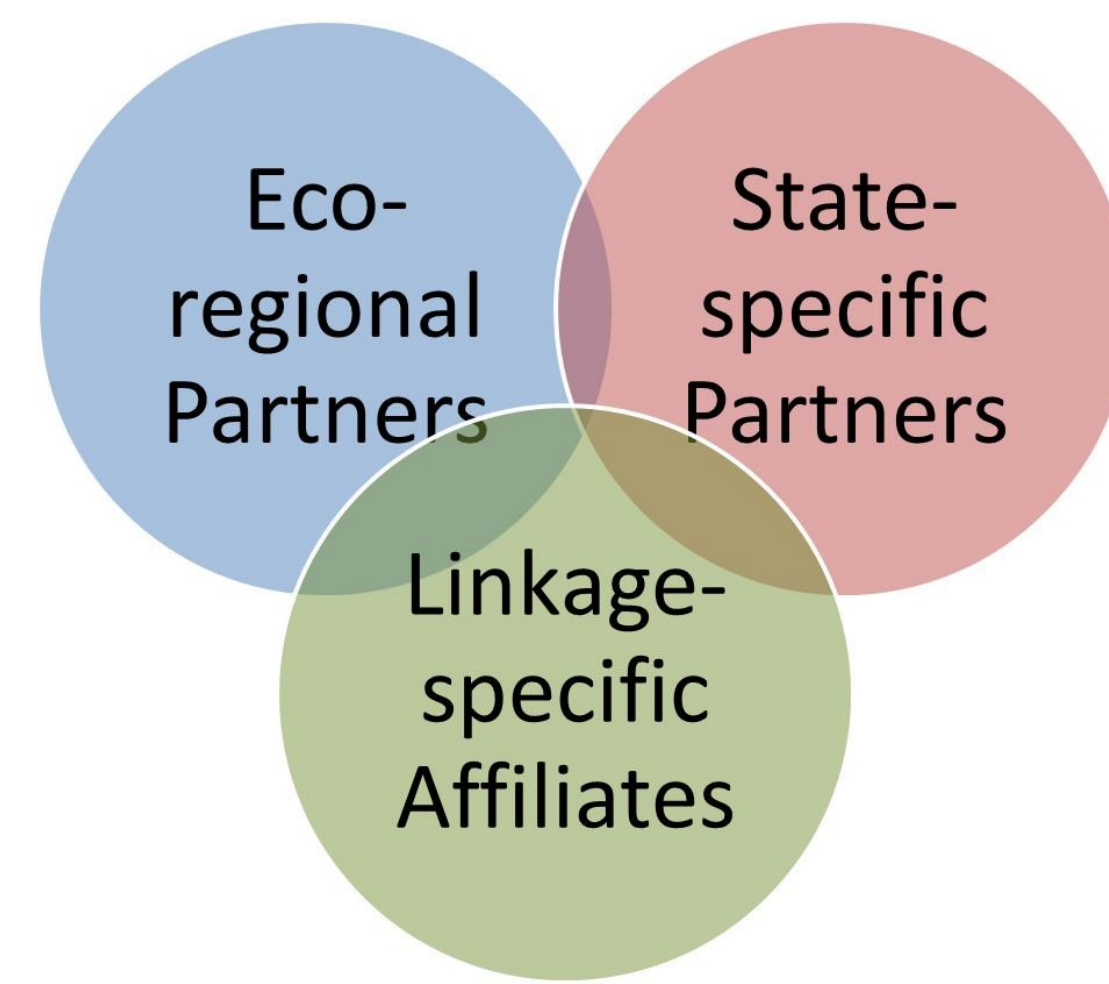
SCI is a bi-national partnership focused on conserving, restoring, and sustaining critical landscape connections across the 80+ million-acre Northern Appalachian-Acadian region for the benefit of nature and people. Sustaining these linkages will help *safeguard native wildlife and plants* from the impacts of habitat fragmentation and climate change, and *support human activities and values* that are tied to the forested landscape. We work across borders and at multiple scales to address these challenges.



**Land Protection:** SCI partners the Trust for Public Land and Nature Conservancy Canada have protected more than 1,000 acres of important connecting lands on both sides of the Vermont-Canada border in the northern Green Mountains.  
*Photo by J Henry Fair, 2008*

### A Big Network of Partners at Multiple Scales

The only way to advance such a diverse agenda across a bi-national region of 5 states, 3 provinces, and countless communities is through a broad public-private partnership, with different partners bringing different capabilities and connections. To this end, SCI encompasses a core group of more than 20 public agencies and NGOs regionwide. In addition, SCI engages a host of other partners on a linkage-by-linkage and even town-by-town basis – municipal boards, citizens groups, local land trusts, rod and gun clubs, etc. This nesting of partners at multiple scales, from regional to linkage to local, is an essential part of SCI's approach and success.



SCI Partners are engaged at various overlapping scales depending on a particular organization's geographic reach and focus areas. Eco-regional and state-specific scale partners focus on several linkages, while linkage-specific affiliates (e.g. a citizen group or town planning commission) would only be involved in one linkage or one portion of one linkage.

#### Eco-Regional Steering Committee Members

Canadian Parks and Wilderness Society  
Maine Audubon  
Maine Department of Inland Fisheries and Wildlife  
National Wildlife Federation  
Nature Conservancy Canada (QC, NB, NS)  
New Hampshire Fish and Game Department  
New York Department of Environmental Conservation  
New York Department of Transportation  
North Atlantic Landscape Conservation Cooperative  
Nova Scotia Department of the Environment  
The Nature Conservancy (NY, VT, NH, ME, MA)  
Trust for Public Land  
Tug Hill Commission  
Two Countries, One Forest  
Vermont Agency of Transportation  
Vermont Department of Fish and Wildlife  
Wildlife Conservation Society – Adirondack Program  
Wildlife Conservation Society – Canada

#### Example: Vermont State-Specific Partners

The Conservation Fund  
Green Mountain National Forest  
National Wildlife Federation  
The Nature Conservancy (VT)  
Northeast Wilderness Trust  
Trust for Public Land  
Vermont Agency of Transportation  
Vermont Fish & Wildlife Department  
Vermont Natural Resources Council  
Vermont Land Trust

#### Example: Greens To Adirondacks Linkage-Specific Affiliates

Agricultural Stewardship Association  
Brandon Planning Commission  
Champlain Watershed Improvement Coalition of New York  
The Conservation Fund  
Empire State Future  
Friends of Hawk Hill  
Hubbarton Battlefield Association  
Lake Champlain Basin Program  
Lake George Land Conservancy  
Middletown Springs Conservation Commission  
The Nature Conservancy (NY, VT)  
New York Department of Environmental Conservation  
New York Department of Transportation  
Poultney Conservation Commission  
Rutland Regional Planning Commission  
Vermont Agency of Transportation  
Vermont Fish & Wildlife Department  
Vermont Land Trust  
Vermont Natural Resources Council  
Wildlife Conservation Society – Adirondack Program

### A Multi-Faceted Approach

Because of the scale and nature of landscape connectivity in this region and other factors like land ownership patterns, no one tool or approach can possibly get the job done. As a result, *Staying Connected* partners deploy a multi-pronged approach to sustain landscape connectivity. Key components include:

- cutting-edge *conservation science* to inform where to apply scarce resources;
- targeted *land protection* to secure important parcels;
- technical assistance to municipalities to improve *land use planning* for connectivity;
- collaboration with transportation departments to *make key roads more wildlife-friendly*;
- policy initiatives* designed to institutionalize connectivity conservation in government agencies and programs;
- community outreach and engagement* to increase awareness, appreciation, and action.

### Staying Connected = Climate Resilience

A mosaic of connected landscapes is fundamental to increasing the resilience of wildlife and plants to climate-driven impacts. With climate change already impacting habitat structure, ecosystem function, biodiversity, and species richness - the conservation and sustainable management of an adequate quantity and variety of habitats to sustain diverse and viable populations is of critical importance as landscapes and species assemblages continue to shift. SCI provides a multi-faceted regional model to building climate resilience by holistically facilitating habitat connectivity across scales.

**Field science:** SCI partners across the region are using game cameras and tracking to collect field data on wildlife presence and movement around priority road segments, bridges and culverts. In New York, The Nature Conservancy Adirondack Chapter is partnering with NYSDOT and County and Town highway departments on camera monitoring at four different culvert sites.  
*Photo: The Nature Conservancy 2013*



### Accomplishments

Since 2009, SCI partners have:

- Completed GIS modeling and conservation planning using a variety of cutting edge approaches for each of the linkages.
- Permanently protected more than 300,000 acres that contribute to connectivity values.
- Provided technical assistance on land use planning and policies that address connectivity to more than 40 municipalities and seven regional planning agencies.
- Identified priority road segments, and engaged with state and local transportation agencies to develop and implement best practices for mitigating road impacts on wildlife.
- Deployed professional trackers, citizen scientists, and game cameras to identify wildlife hotspots in the field.
- Provided assistance and outreach to local groups across the region to build community engagement around wildlife and connectivity conservation.
- Developed model language for addressing habitat connectivity in conservation easements
- Prepared technical documents that present strategies for protecting wildlife connectivity using local land use planning tools.
- Established a framework and baseline for measuring the status of connectivity over time.
- Woven together a broad network of partners and created a bi-national structure for advancing connectivity conservation across the region.

### Building & Sustaining Partnership

From the experience of SCI's first five years, there are a number of *key ingredients* that are essential for the partnership's success:

- A shared, compelling challenge and vision that motivates action
- Substantial funding to inspire and enable a coordinated, multi-faceted approach at a landscape scale
- Dedicated coordination capacity to "weave the network" and maximize its collective impact
- A diverse mix of partners representing a range of geographic, thematic and institutional breadth
- Partners who are willing to lean in and work to build and sustain the partnership
- A capable fiscal agent
- A flexible approach that can be tailored to the unique contexts of different places within the region
- True collaborative spirit and action – looking out for the well-being of the partnership and other partners, not just one's own organization
- The "cosmic zoom" – the power to inspire local action by nesting it in a broader regional context
- The three C's – the key roles of *catalyst*, *convener*, and *conduit* – to help spark the three A's – *awareness*, *appreciation*, and *action*
- Patience and perseverance even in the face of daunting obstacles



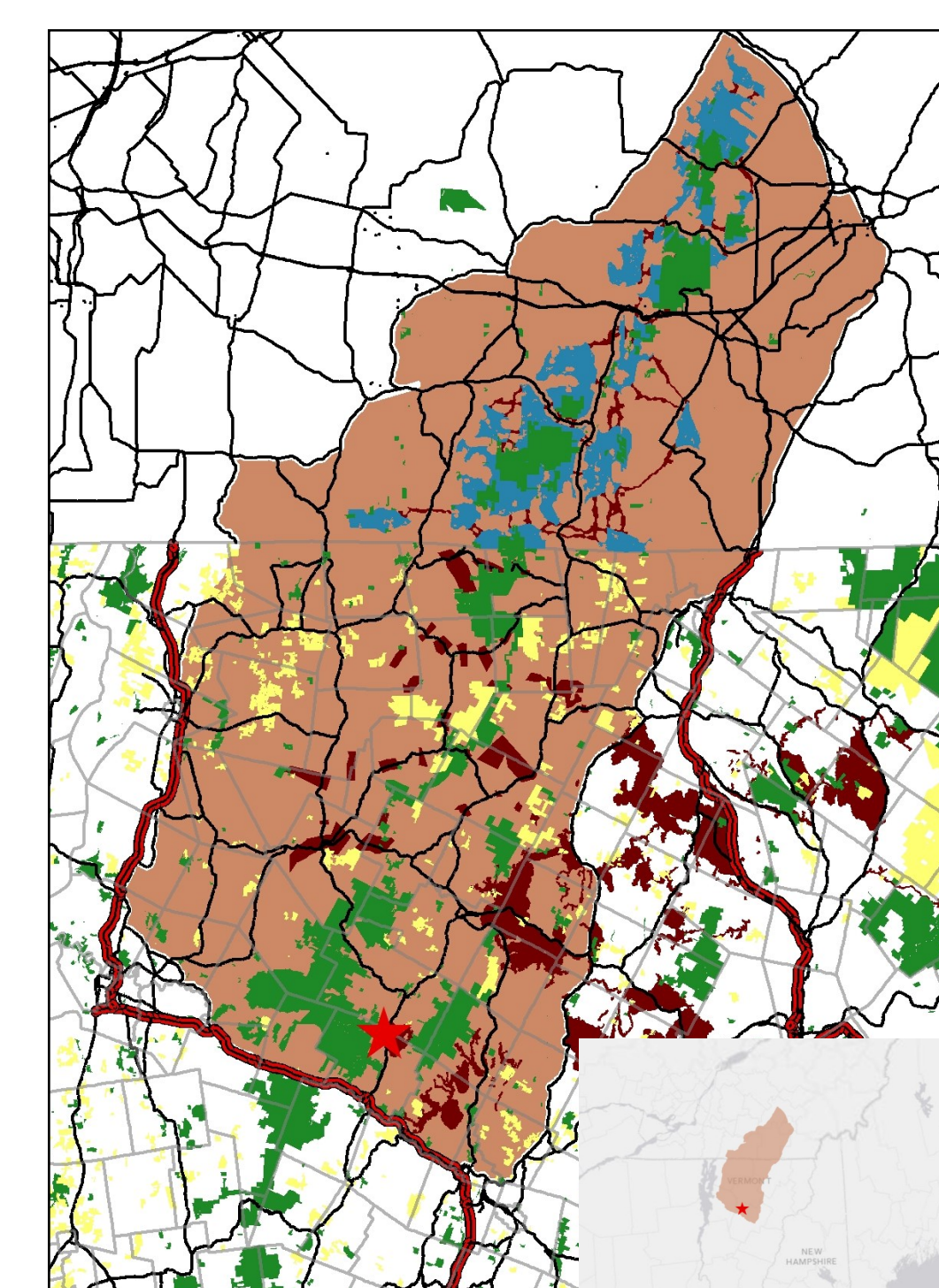
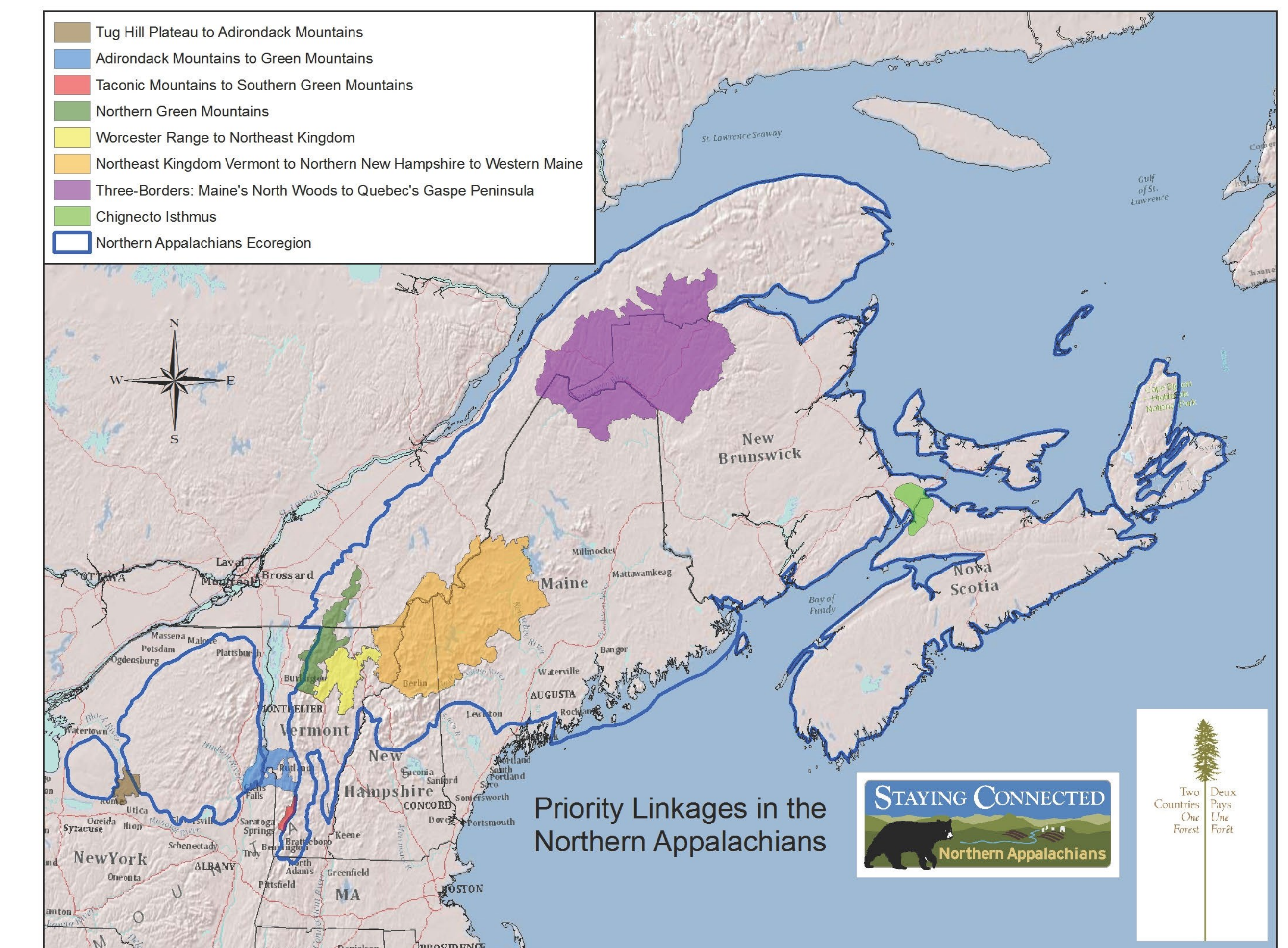
**Land Use Planning Technical Assistance:** SCI partners provide local land-use planning decision makers with a better understanding of connectivity science and specific planning and regulatory tools to better protect connecting land in their community. Town plans, overlay districts and subdivision ordinances can be effective tools in addressing habitat connectivity.  
*Photo by Jens Hilke, 2010*

### Funding – What's Made SCI Possible

*Staying Connected* was launched in 2009 with funding from the first round of the U.S. Fish & Wildlife Service's State Wildlife Grants Competitive Program – one of only 12 projects selected nationwide in that inaugural year. Other significant grants have been secured from the Wildlife Conservation Society's Wildlife Action Opportunities Fund (supported by the Doris Duke Charitable Foundation) and the Jessie B. Cox Charitable Trust. SCI partners also have made considerable investments and leveraged substantial additional funding from other sources.

### Where does SCI work?

SCI grew out of the visionary regional scale science of the Two Countries, One Forest consortium ([www.2c1forest.org](http://www.2c1forest.org)), which identified a set of "no regrets" habitat linkages that are essential for keeping the Northern Appalachian-Acadian region functionally connected. SCI partners added a few other key areas and are currently focused on eight priority linkages across the region. (See map.) Within these landscapes, SCI partners have completed finer-scale modeling to identify likely pathways for wildlife movement and priority areas for conservation action – habitat "stepping stones" and pinch-points, critical road segments, communities with key forested areas, etc.

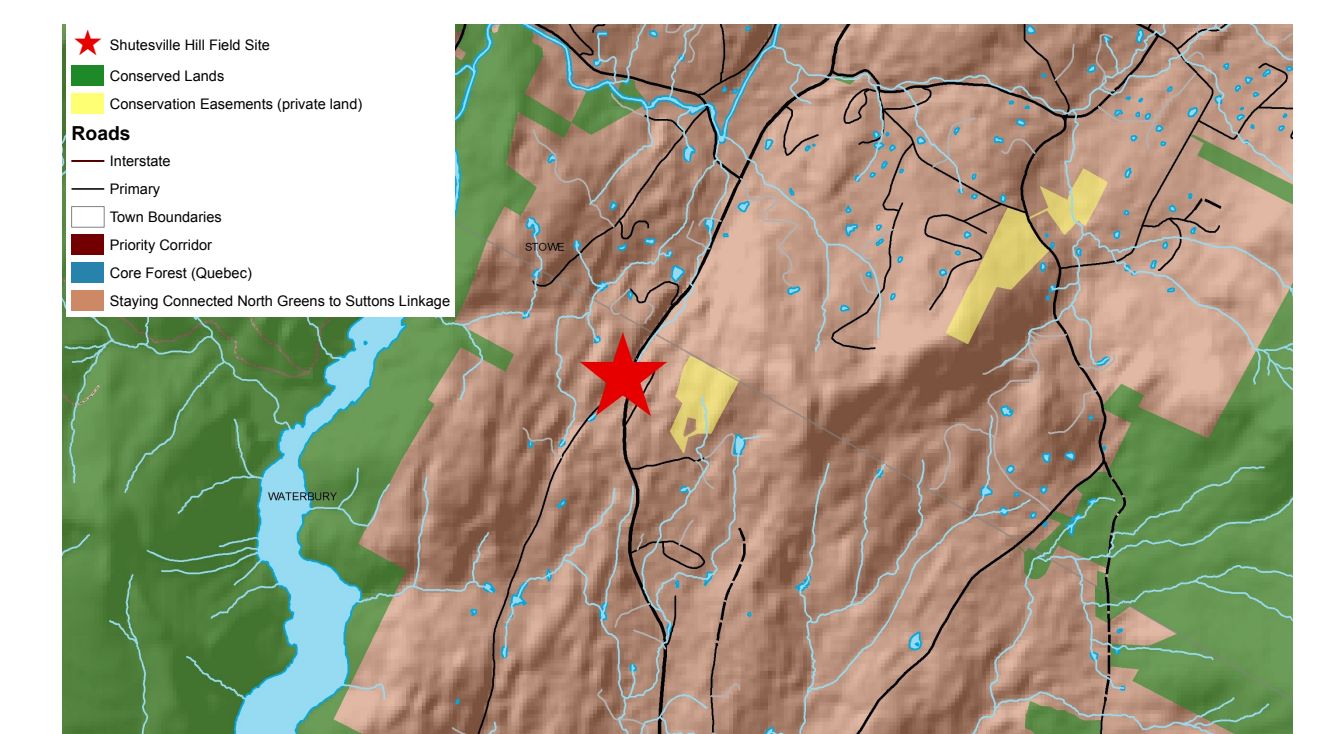


### Conservation Science Across Scales

*Above:* Landscape linkages identified at eco-regional scale

*Below left:* The North Greens to Sutton Mountain Linkage was further refined with GIS cost-weighted distance analysis

*Below right:* "Structural Pathways" identified along road segments



**Road Barrier Mitigation:** SCI partners, VT Agency of Transportation and VT Fish & Wildlife Department collaborated to retro-fit a series of interstate and state bridges beside the Little River in Waterbury, VT to create a wildlife shelf (*right side of picture*).  
*Photo by Jens Hilke 2014*

### For more information:

Phil Huffman, The Nature Conservancy (VT Chapter), [phuffman@tnc.org](mailto:phuffman@tnc.org)  
Chris Hilke, National Wildlife Federation, [hilkec@nwf.org](mailto:hilkec@nwf.org)  
Jens Hilke, Vermont Fish & Wildlife Department, [jens.hilke@state.vt.us](mailto:jens.hilke@state.vt.us)  
Zoe Smith, SCI Coordinator, Wildlife Conservation Society – Adirondack Program, [zsmith@wcs.org](mailto:zsmith@wcs.org)

[www.stayingconnectedinitiative.org](http://www.stayingconnectedinitiative.org)