

Three Borders Linkage

A transboundary connectivity project

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Two Countries, One Forest

Deux Pays, Une forêt

2C1Forest is a major Canadian-U.S. collaborative of 50 conservation organizations, researchers, and foundations working to conserve and restore the forests and natural heritage of the Northern Appalachian/Acadian ecoregion.

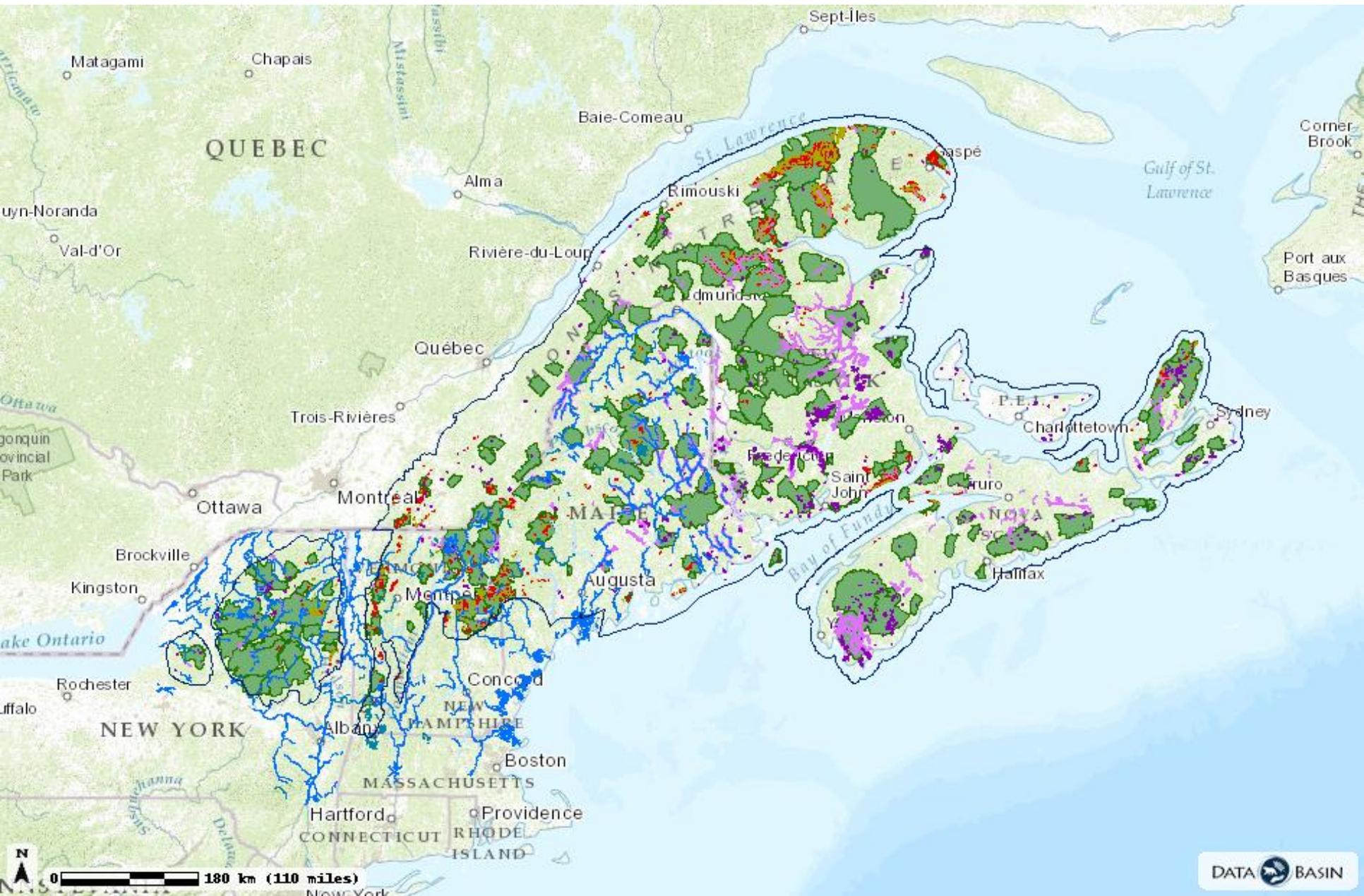
- *We think at an ecoregional level, and within ecological borders versus political boundaries;*
- *We work at defining a clear framework of understanding and developing a network that facilitates and supports a cross-border sharing of vital information;*
- *We use the principles of science-based, landscape-scale conservation to achieve our goals; and*
- *We act as a catalyst for emerging transboundary projects.*



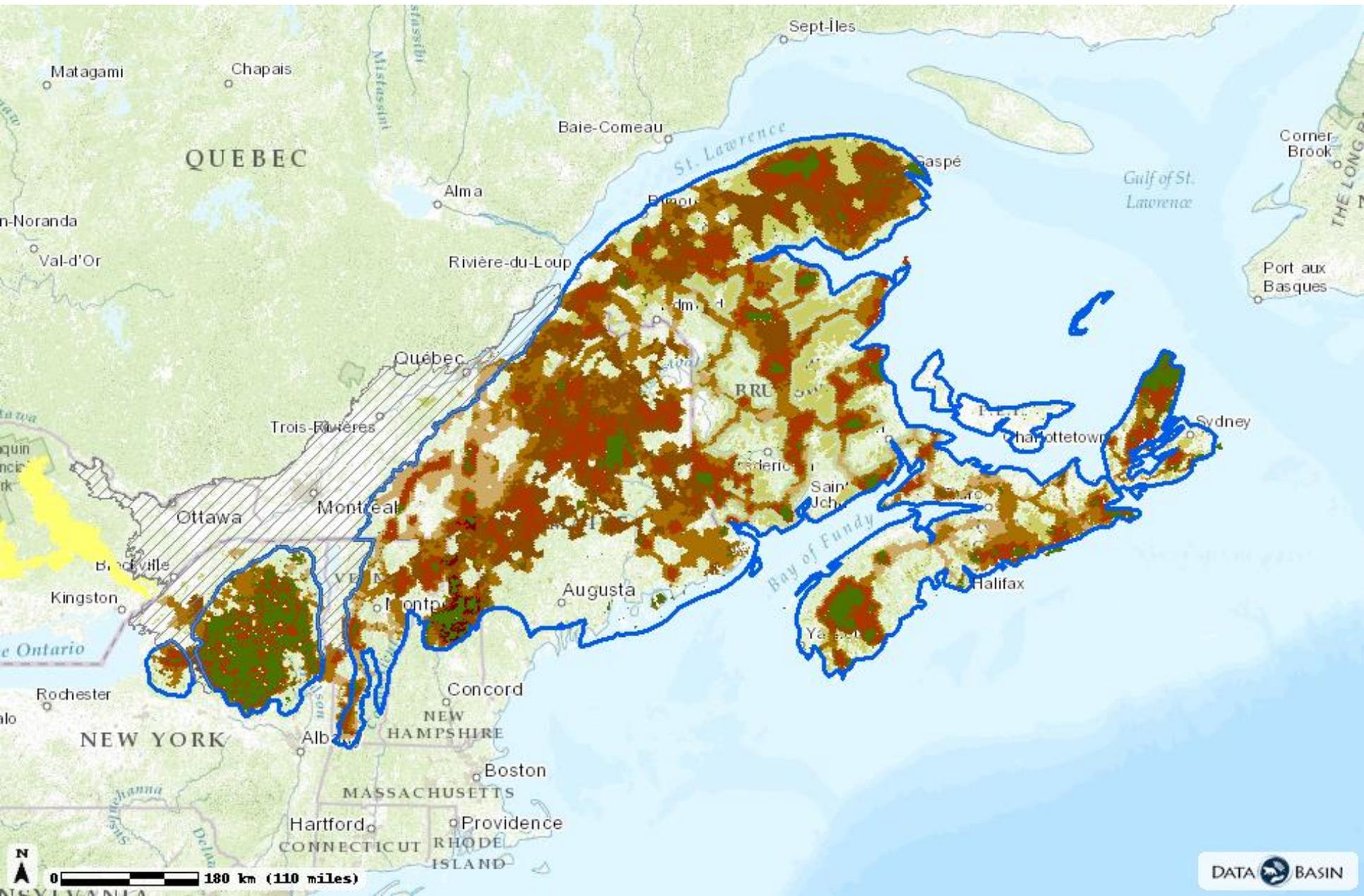
Two
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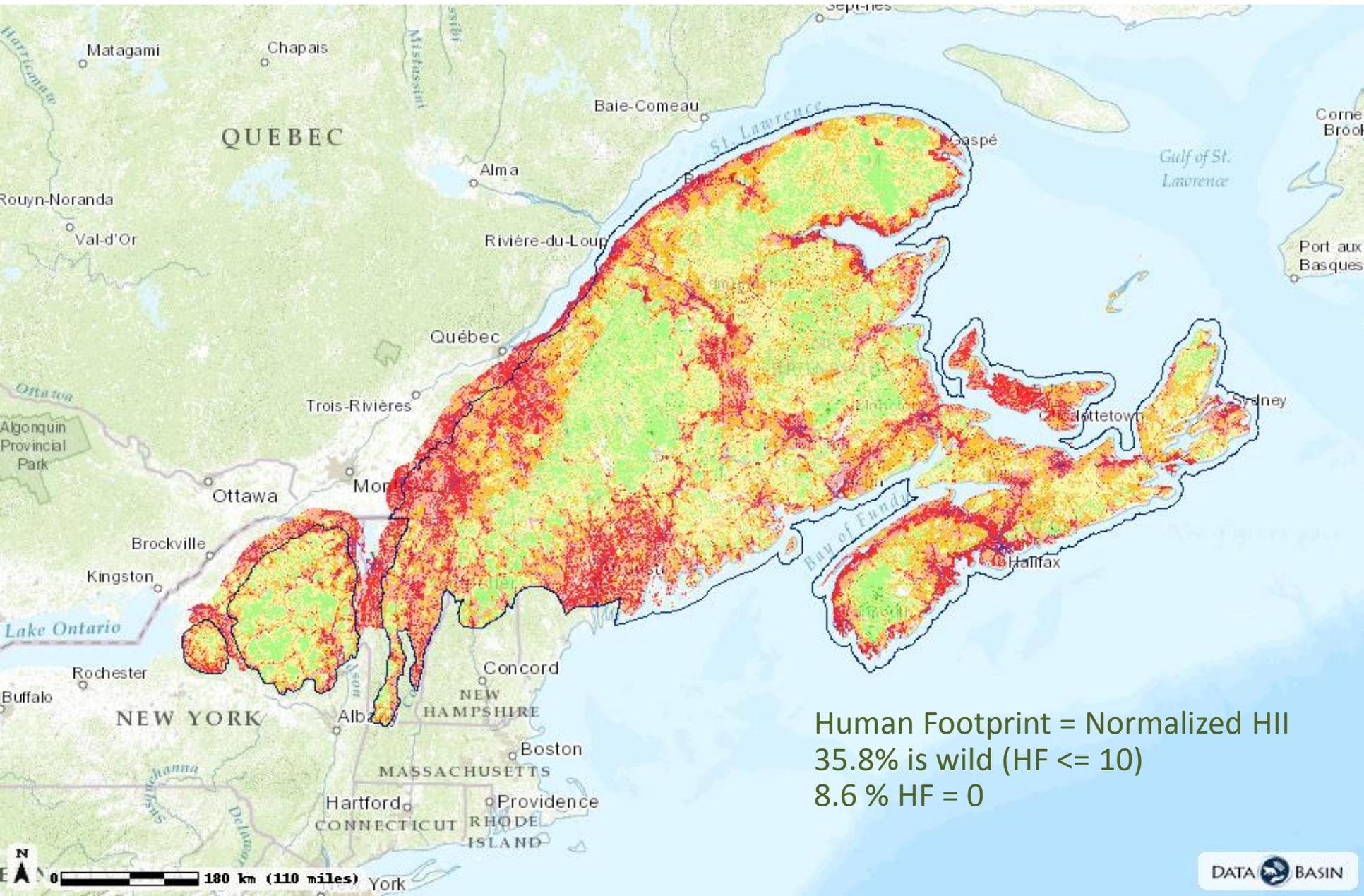
Portfolio of Critical Ecosystems (TNC and NCC 2006)



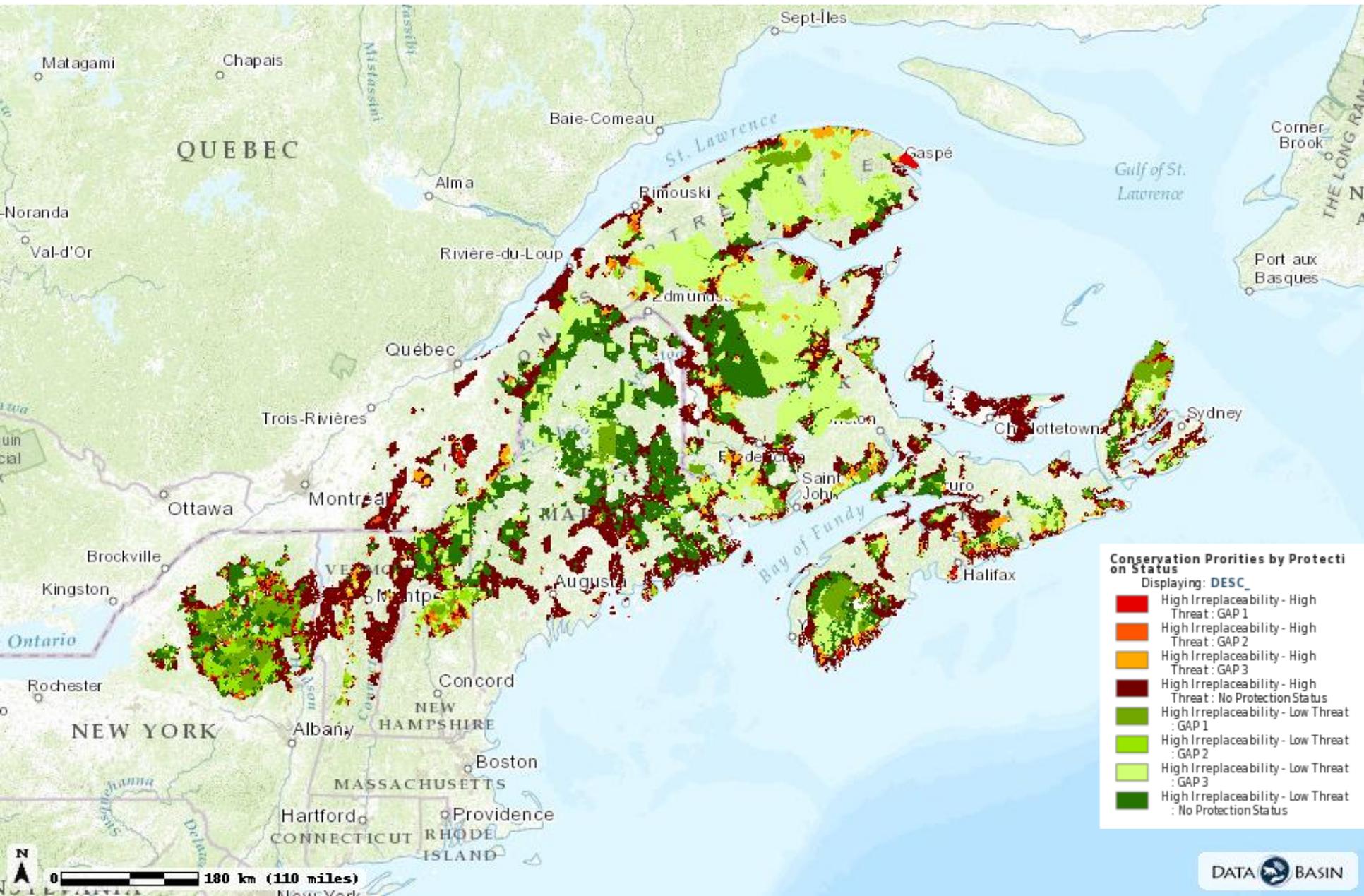
Wildlands Network Design - Core Wildlands and High Biological Significance Lands (TWN 2006)



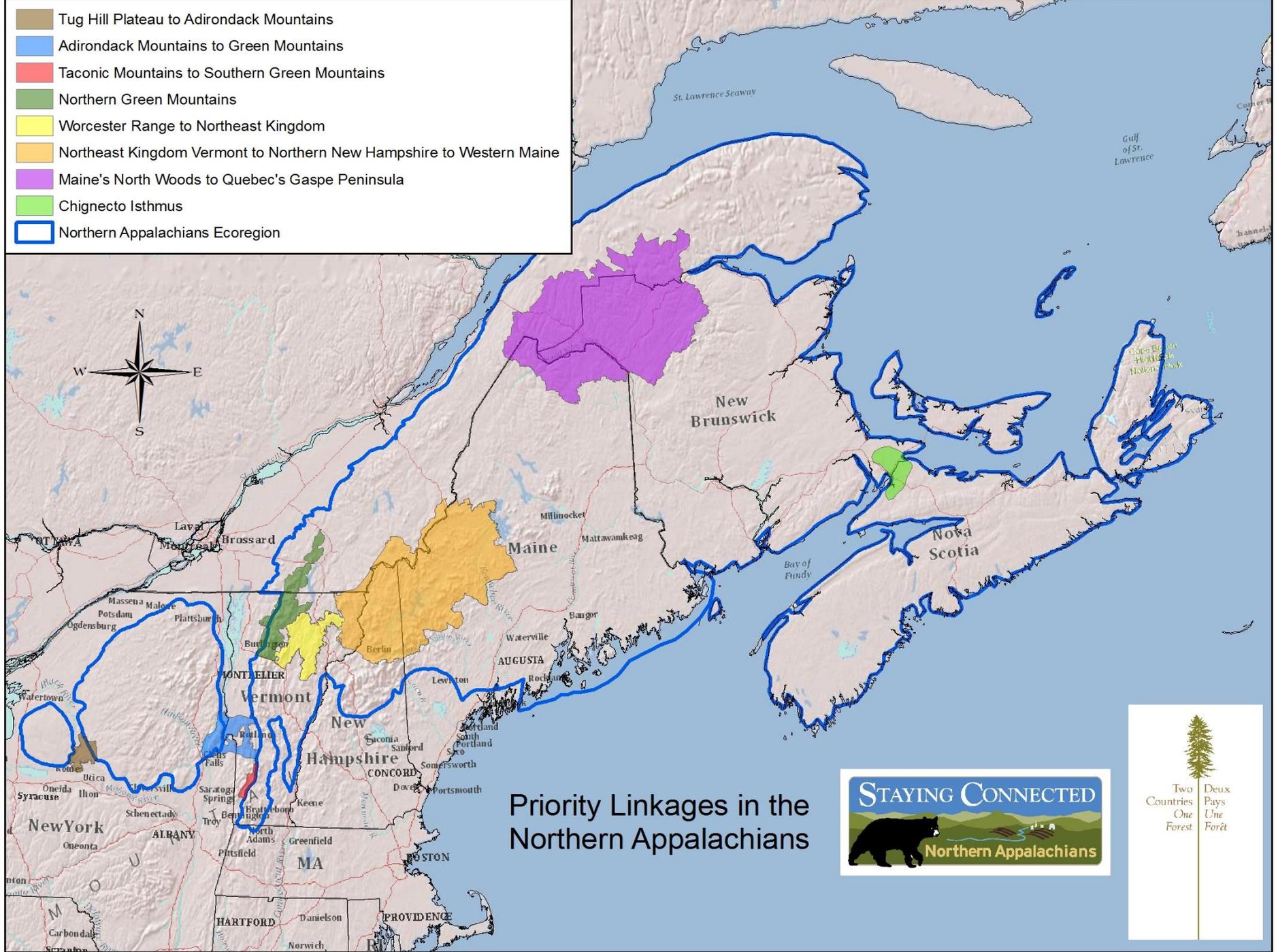
Human Footprint of the Northern Appalachian/ Acadian Ecoregion (2C1F 2008)



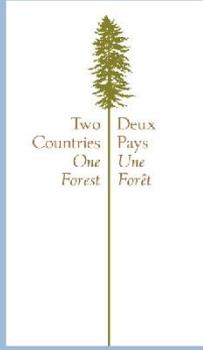
Priority Locations for Conservation Action by Protection Status (2C1F 2008)



- Tug Hill Plateau to Adirondack Mountains
- Adirondack Mountains to Green Mountains
- Taconic Mountains to Southern Green Mountains
- Northern Green Mountains
- Worcester Range to Northeast Kingdom
- Northeast Kingdom Vermont to Northern New Hampshire to Western Maine
- Maine's North Woods to Quebec's Gaspé Peninsula
- Chignecto Isthmus
- Northern Appalachians Ecoregion



Priority Linkages in the Northern Appalachians



Connectivity - Local Connectedness (TNC 2012)



Staying Connected Tools

- Five major tools in the linkages:
 - *Conservation Science*
 - *Land Protection*
 - *Road Barrier Mitigation*
 - *Land-use Planning*
 - *Outreach and Education*
- Different partners take leadership for one or more of the tools.
- Tools are applied in different ways in each linkage



Lessons learned from the Northern Green Mountains



Northern Green Mountain Linkage

Since 2002

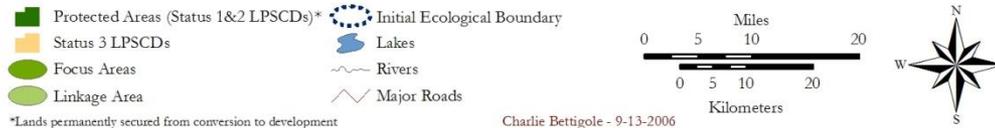
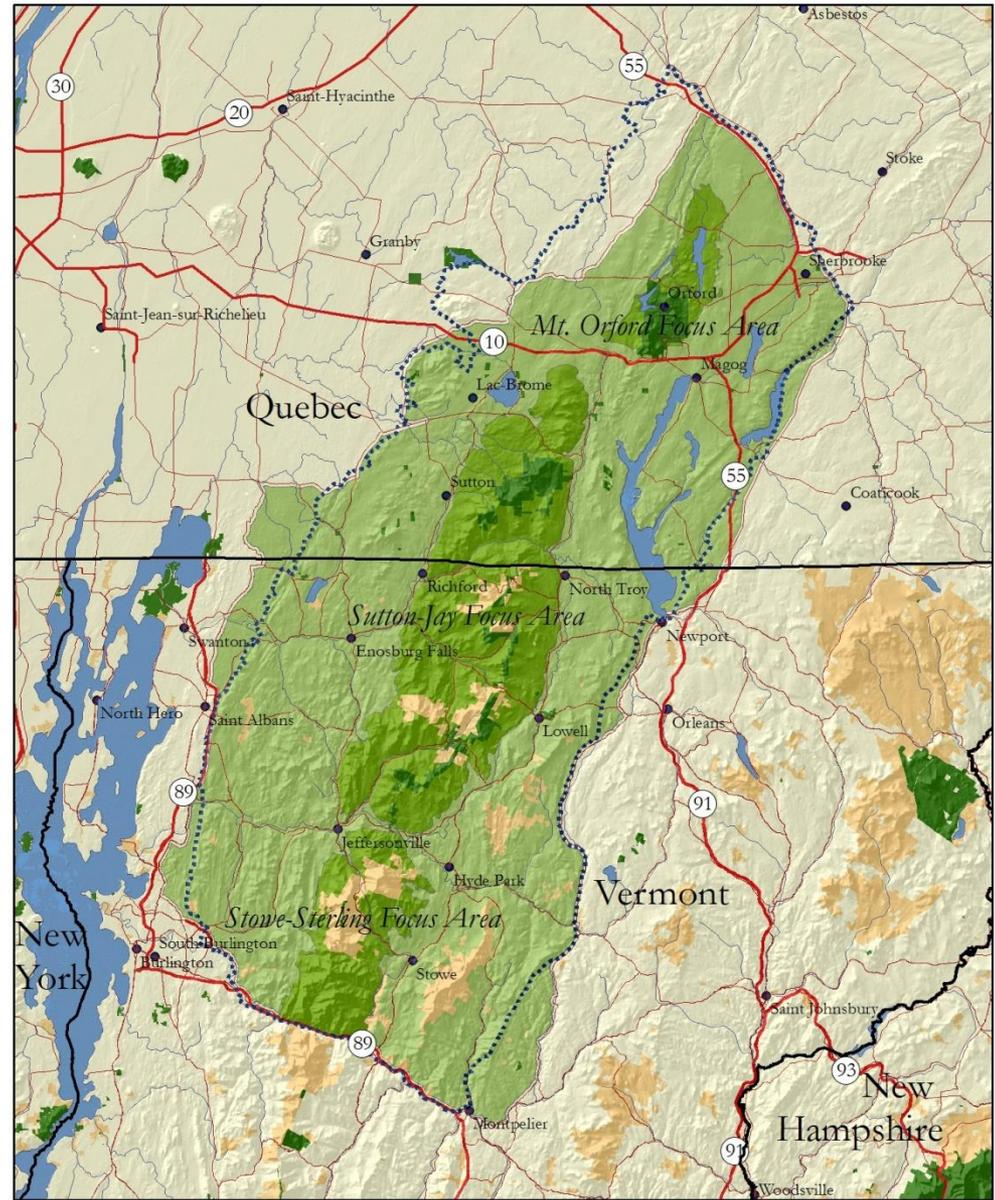
- Several partners involved
 - *Appalachian Corridor, Québec*
 - *Nature Conservancy of Canada*
 - *Cold Hollow to Canada, Vermont*
 - *Environmental groups*
 - *Local and regional land trusts*

- Mt Orford Focus Area
 - *Campaign to prevent land transfer from protected to development*
 - *Expansion of provincial park*

- Sutton-Jay Focus Area
 - *Private land protection by fee simple acquisitions or easements*
 - *Community values mapping*
 - *Land-use planning*
 - *Road Mitigation*

- Stowe-Sterling Focus Area

Sutton-Green Mountain Linkage



*Lands permanently secured from conversion to development

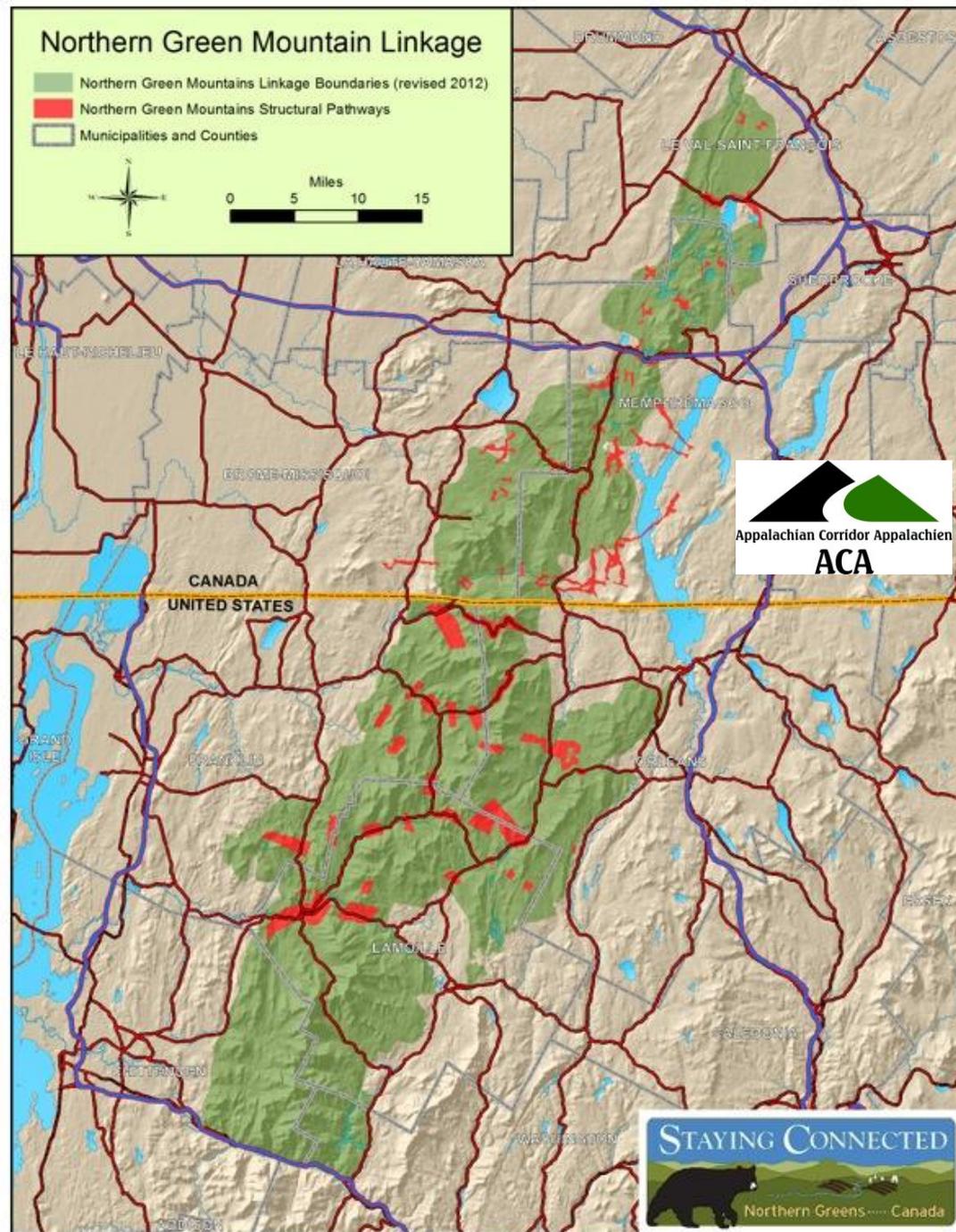
Defining Priority Pathways2011

■ VERMONT

- *Science and overall coordination, outreach and education (TWN)*
- *Land use planning support (VNRC, VFWD)*
- *Land protection (VLT, TPL, NWT)*
- *Road barrier mitigation*

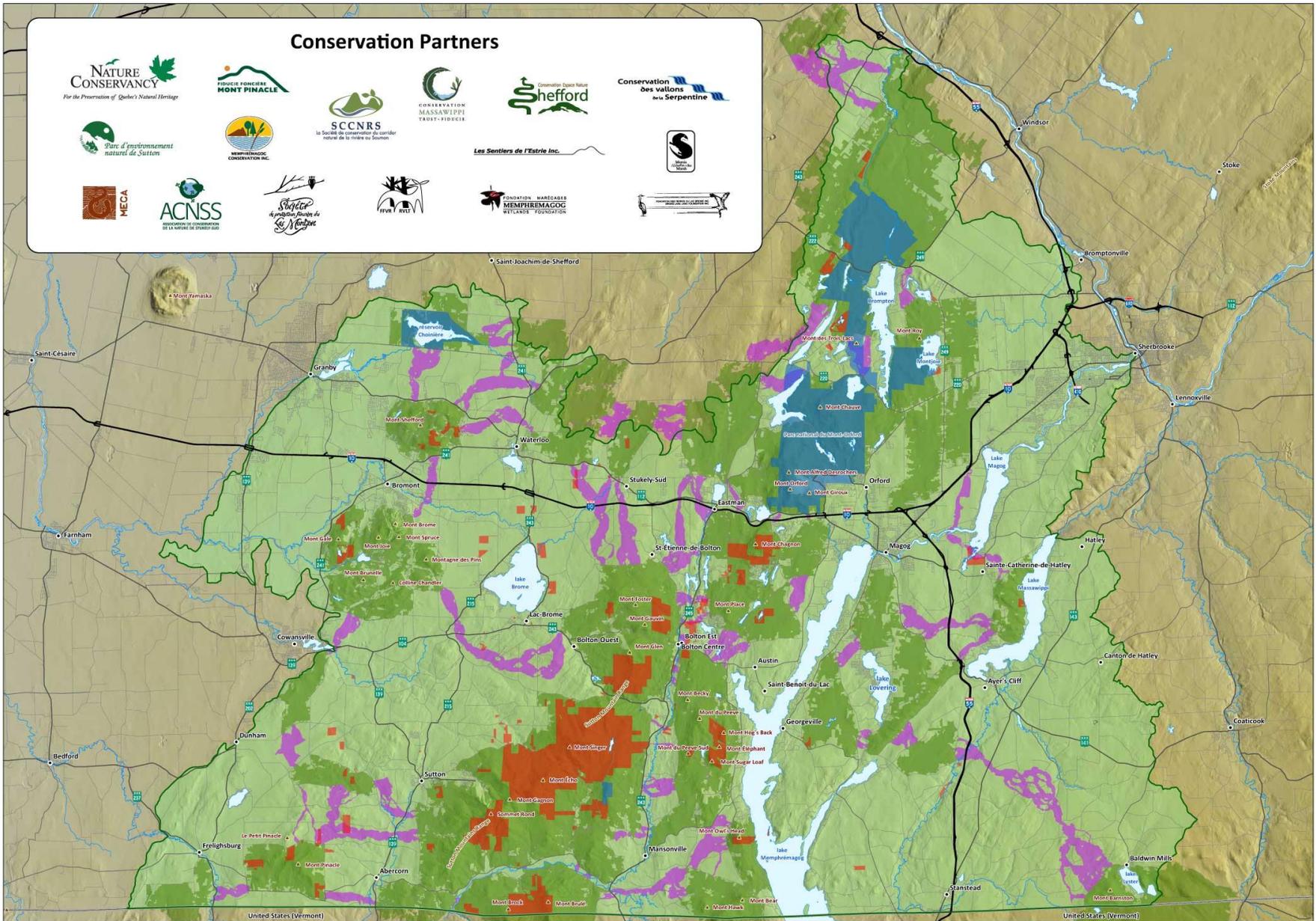
■ QUEBEC

- *Science and overall coordination, outreach and education (AC)*
- *Land use planning support (AC)*
- *Land protection (NCC and 13 local land trusts)*
- *Highway 10 Mitigation (AC, government Transportation and Wildlife agencies)*



Ecological Network and Protected Areas on the Appalachian Corridor's Territory of Action

Conservation Partners



Map ACA-0005, © Août 2014. Ce document comporte de l'information géographique de référence provenant du gouvernement du Québec, de GeoBC et de l'État du territoire. Tous droits réservés.

- Protected Private Property
- Protected Public Property
- Forest Core (v.7.2)
- Natural Corridor (v0.19.5.11)
- Appalachian Corridor's Territory of Action



Getting started in the Three Borders Linkage



Specifics of the Three Borders Linkage

- Maine, Quebec, New-Brunswick;
- Lead by state or provincial organizations;
- Targets species are different in composition and abundance;
- Collision with vehicles more deadly;
- Major Highway (QC-185, 2-NB) being upgraded from one-lane to two-lane;
- Livelihood based on agriculture and forestry;
- Hunting and fishing is an important part of the local economy;
- Large tracks of public land.

Lessons learned

- Community values mapping and involvement of key stakeholders will be a core mover in this linkage;
- Land planning approach as in Vermont would be better suited to this linkage;
- Still remains an opportunity to plan for functional pathways and crossings in Quebec;
- Great opportunity to evaluate connectivity issues and to monitor actual and future road mitigation scenarios;
- Chance to influence protected area planning on public land by governments (QC, NB);
- Conservation and working forest easement language to include connectivity measures for private landowners.

Northern Maine to the Gaspé Linkage Area

Measure: A2a - Habitat Patterns and Distribution within Linkage Area

Indicators: Average Resistant Kernel Score and % Area RK \geq 50

Resistant Kernel Stats within the Linkage

Average RK Score = 64 (scores range 0-99)

Percentage of Linkage Area with
RK Score \geq 50 = 76% (4.4 M of 5.8M acres)

December 13, 2012

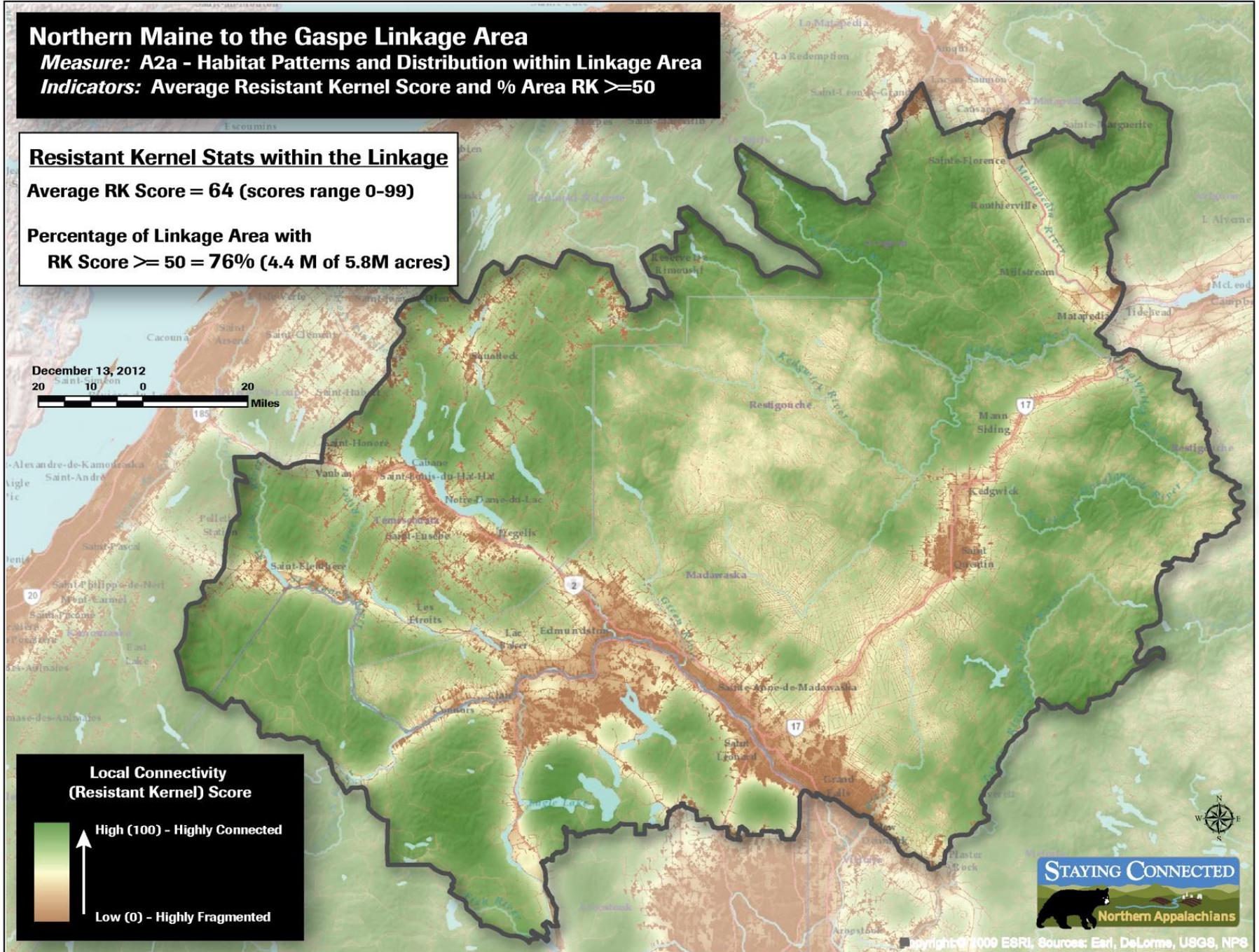


Local Connectivity (Resistant Kernel) Score



High (100) - Highly Connected

Low (0) - Highly Fragmented

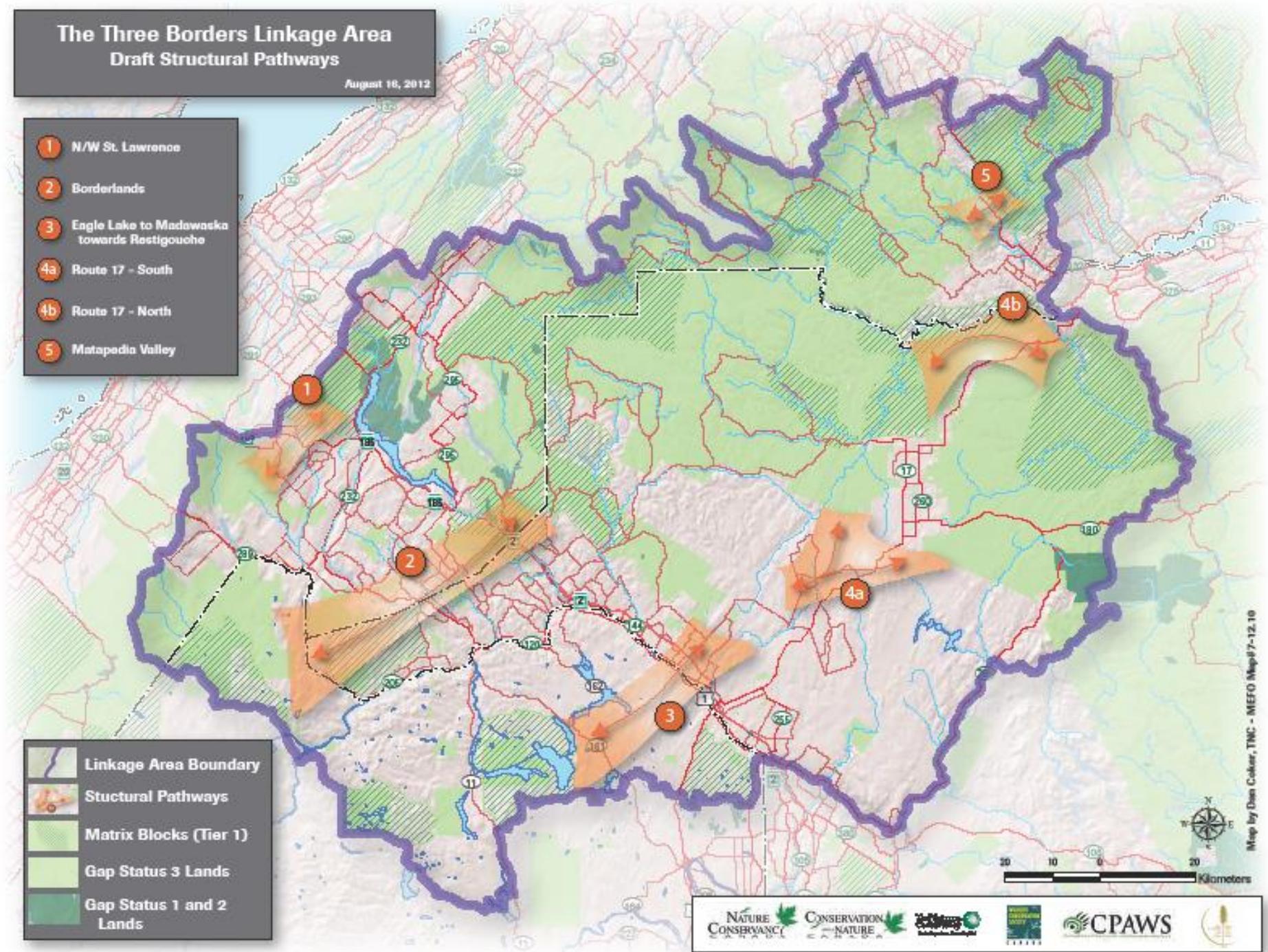


The Three Borders Linkage Area Draft Structural Pathways

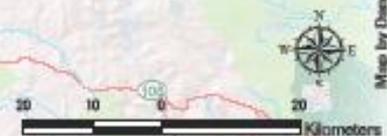
August 16, 2012

- 1 N/W St. Lawrence
- 2 Borderlands
- 3 Eagle Lake to Madawaska towards Restigouche
- 4a Route 17 - South
- 4b Route 17 - North
- 5 Matapedia Valley

- Linkage Area Boundary
- Structural Pathways
- Matrix Blocks (Tier 1)
- Gap Status 3 Lands
- Gap Status 1 and 2 Lands



Map by Dan Collier, TMC - MEFO Map# 7-12.10



Achievements 2013/2014

■ Outreach

- *Organized several meetings and presented project to more than 20 organizations and agencies to seek their support;*

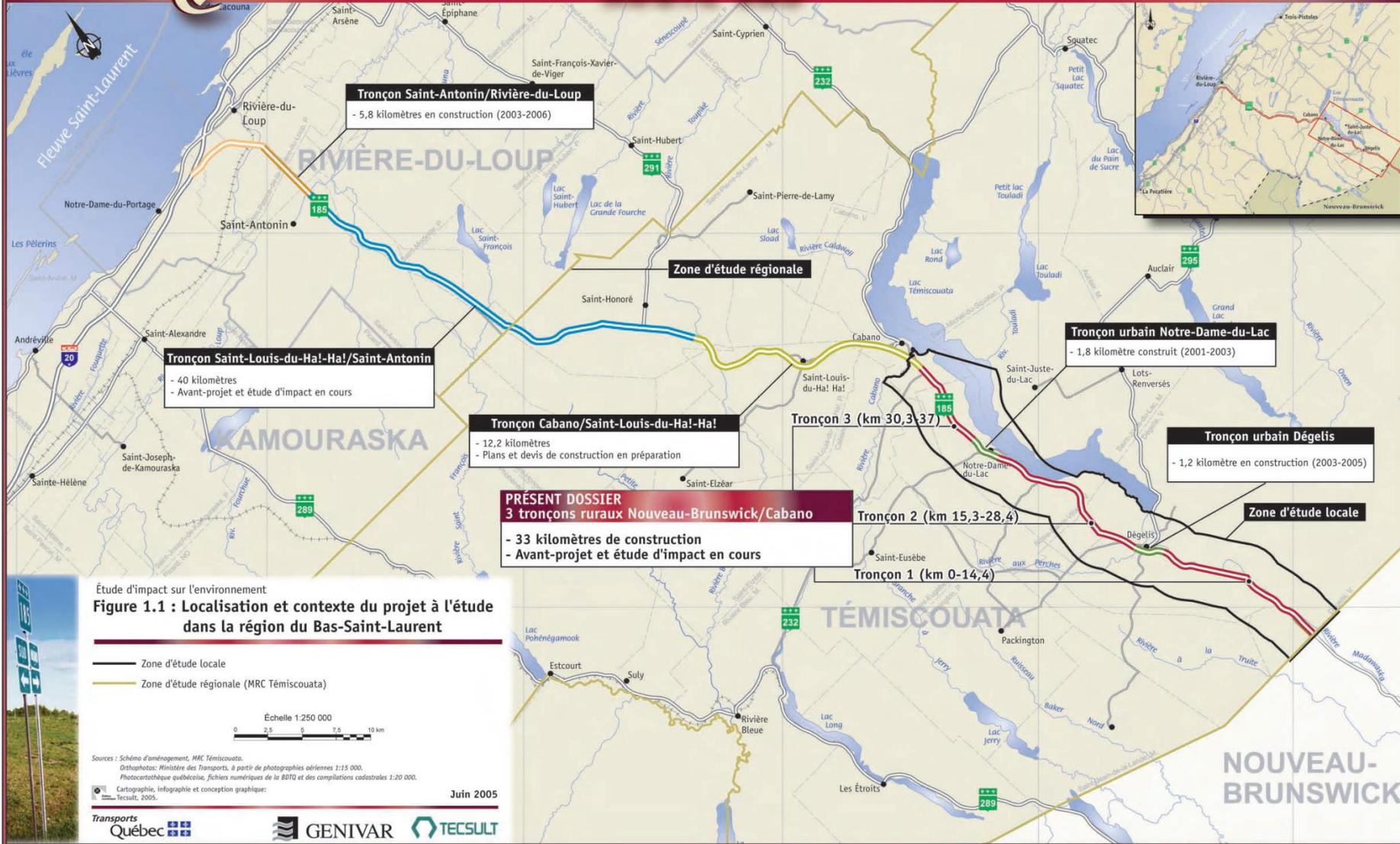
■ Conservation Science

- *Acquired data on specific pathways or the broader area from many stakeholders;*
- *Organized workshops (Forestry BMP for connectivity; Road mitigation strategies and knowledge gaps for this linkage);*
- *NCC-QC has drafted a 5-year conservation plan for this area with specific actions addressing connectivity (2013-2017);*
- *In its 2013-2017 business plan for the NAP Whole System, TNC is committed to sustain a coordinated partnership network that includes Canadian entities to work on key linkages.*

■ Land Protection

- *NCC-QC and 2C1Forest drafted recommendations to the Quebec government on protected area planning in this area and the importance of considering connectivity*

Construction d'une autoroute dans l'axe de la **ROUTE 185** entre la frontière du Nouveau-Brunswick et Cabano



Achievements 2013/2014

■ Road Barrier Mitigation

Upgrade the TransCanada Highway, includes fencing and moose/deer passages in road sections of high wildlife-vehicle collision risks. How these help maintain connectivity for ungulate populations and other mid to large mammals was not part of their mitigation plans.

- *Meetings with Department of Transportation on how they can support a project to address landscape scale connectivity issues for a broader spectrum of species;*
- *Planning a cross border workshop to discuss best practices to facilitate and monitor wildlife crossings and landscape-scale connectivity;*
- *On-going discussion with other organizations and researchers to contribute to data acquisition and analysis including: least-cost path analysis; aerial and field surveys; camera monitoring of existing wildlife crossing; GPS or radio tracking to study Canada lynx movement.*

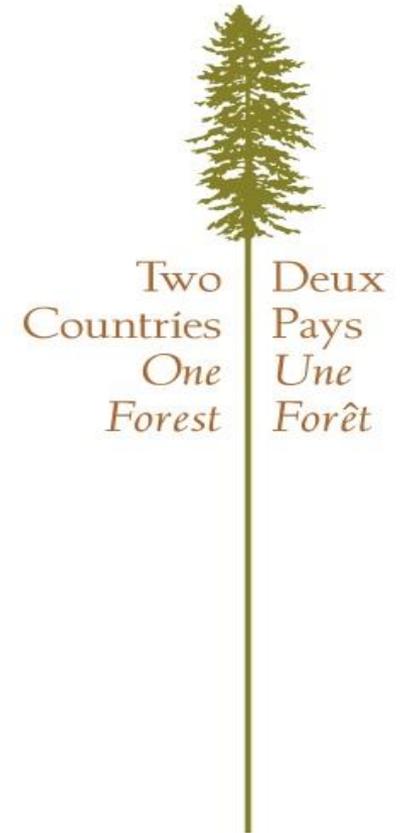
Challenges

- Getting other stakeholders to share data and expertise across borders;
- Having communities include conservation of pathways in their land use plans;
- Securing resources for long term monitoring of wildlife crossings and pathways;
- Building a public awareness program;
- Getting connectivity measures to be part of forest certification on public land.

Cross Border Partnerships Work:

- As long as goals are clear and organizations stay focus;
- Communicate often;
- Share issues, data, knowledge and expertise;
- When possible, make joint grant applications with reasonable deliverables;
- If they respect each others working context.

Thank You
Merci



<http://www.2c1forest.org/>

<http://2c1forest.databasin.org/>