

Staying Connected

in the Northern Appalachians



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Conservation Planner

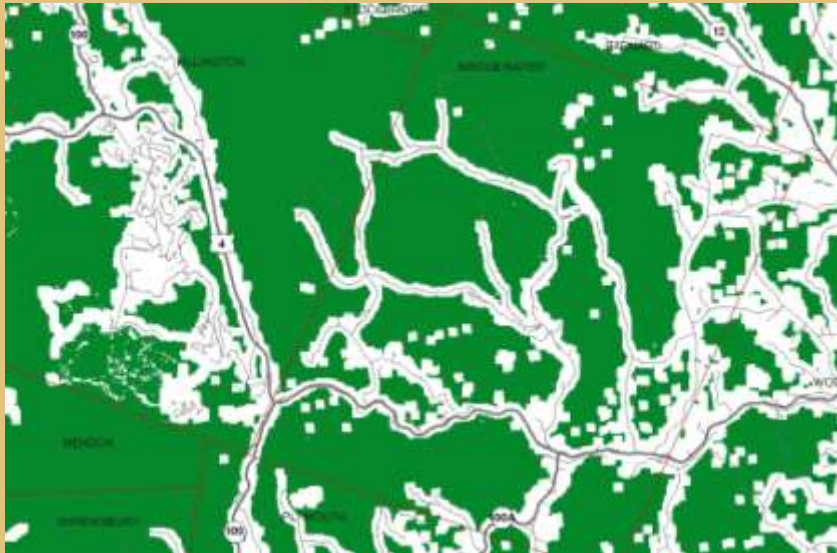




Sustaining landscape connections for wildlife and people in a changing world

Habitat Fragmentation

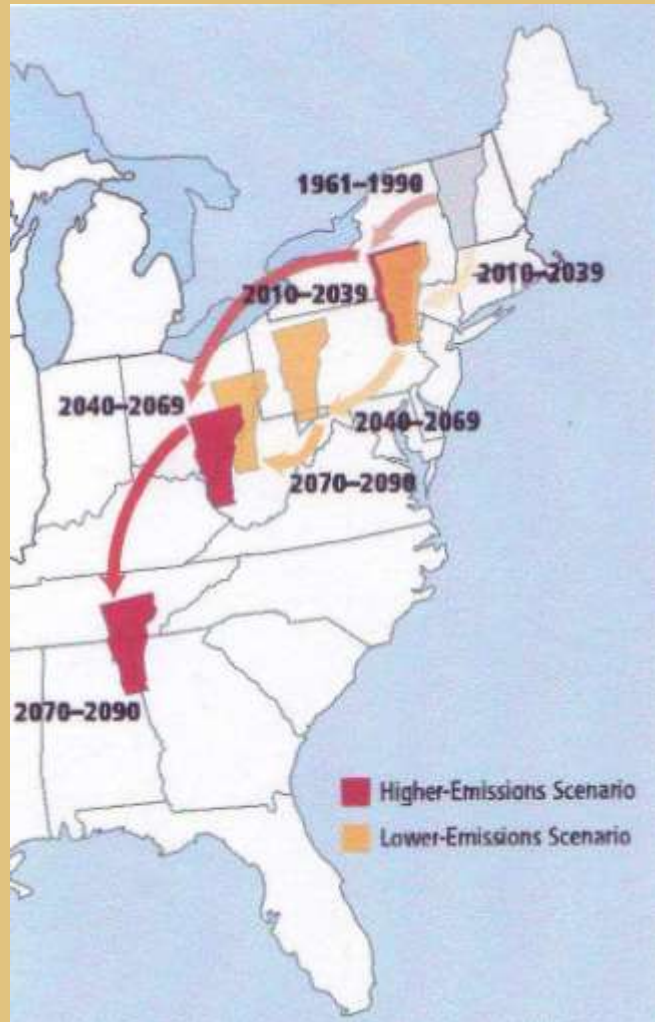
Less fragmented forest in a rural community



Fragmented forest in a rural community



Climate Change Forecasts



- Average temperatures across Vermont are projected to rise 9° F to 13° F above historic levels in winter by late-century
- Increase in winter precipitation on the order of 20 to 30 percent (Less snow - more rain)
- Short-term summer droughts are projected to occur 2x as often
- Dramatic declines in species such as Canada Lynx, snowshoe hare, Bicknell's thrush
- Increase in spread of invasive pests

From Union of Concerned Scientists – *Confronting Climate Change in the Northeast* (NECIA 2007)

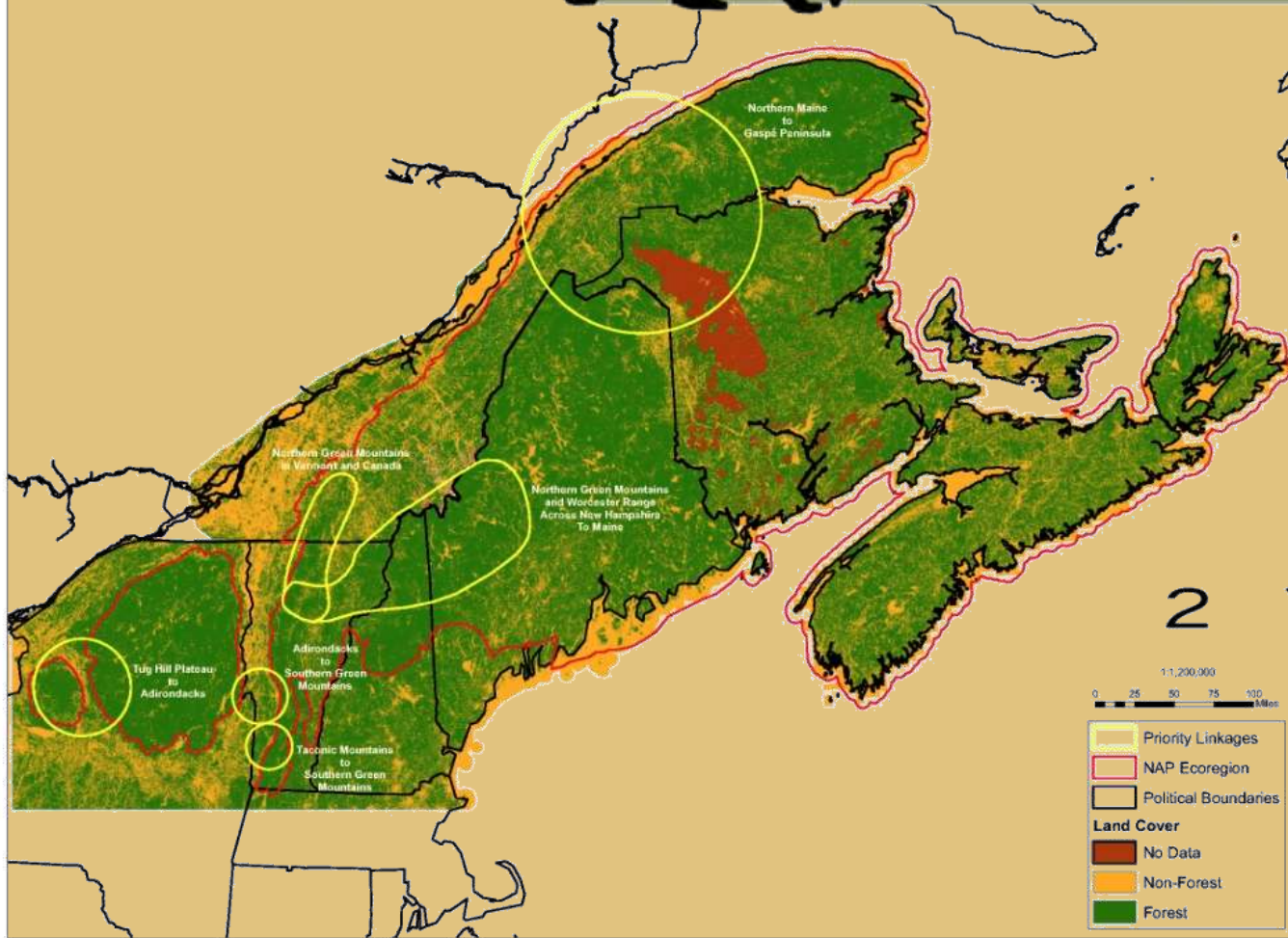
Regional Connectivity

STAYING CONNECTED



Northern Appalachians

Northern Appalachian Priority Linkages





Connectivity through Multiple Strategies

Science

Road Barrier
Mitigation

Land Use
Planning

Land
Protection



Outreach & Education

Primary Strategies

- **Conservation Science**
 - Structural Connectivity Modeling
 - Functional Connectivity Analysis
 - Roadside Tracking
- **Land-Use Planning**
 - Tech. assistance on town plans & bylaws
 - Work with Regional Planning Commissions
 - Outreach and Education
- **Road Barrier Mitigation**
 - Providing science to Transportation Agencies
 - Project Review (FWD)
 - Identification of problem infrastructure
 - Retrofits
- **Land Protection**
 - New targets – roadsides & connecting land
 - Adding on to core habitats
 - Landscape Scale

Collaborative Partnership

- VT Fish & Wildlife Department
- The Nature Conservancy
(ME, NH, NY & VT chapters)
- NY Dept of Environmental
Conservation
- NY Dept of Transportation
- Tug Hill Commission
- Tug Hill Tomorrow
- Wildlife Conservation Society
- Maine Dept of Inland Fish &
Wildlife
- Maine Audubon
-
- Maine Dept of Transportation
- NH Audubon
- NH Department of Transportation
- New Hampshire Fish & Game
Department
- National Wildlife Federation
- Trust for Public Land
- Wildlands Network
- Two Countries-One Forest
- VT Agency of Transportation
- VT Land Trust
- Vermont Natural Resources
Council



Connectivity at Multiple Scales

Regional



Local



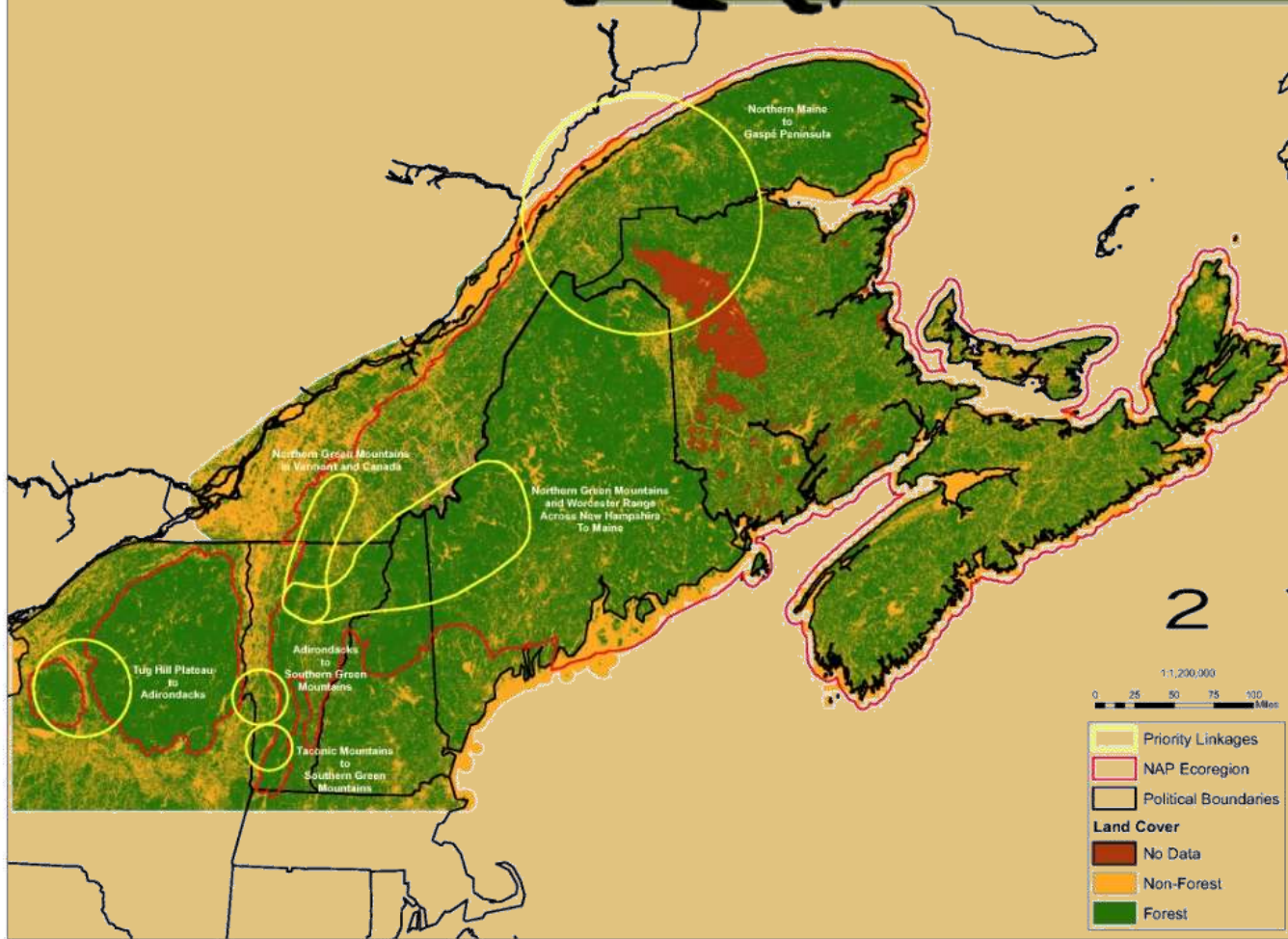
Regional Connectivity

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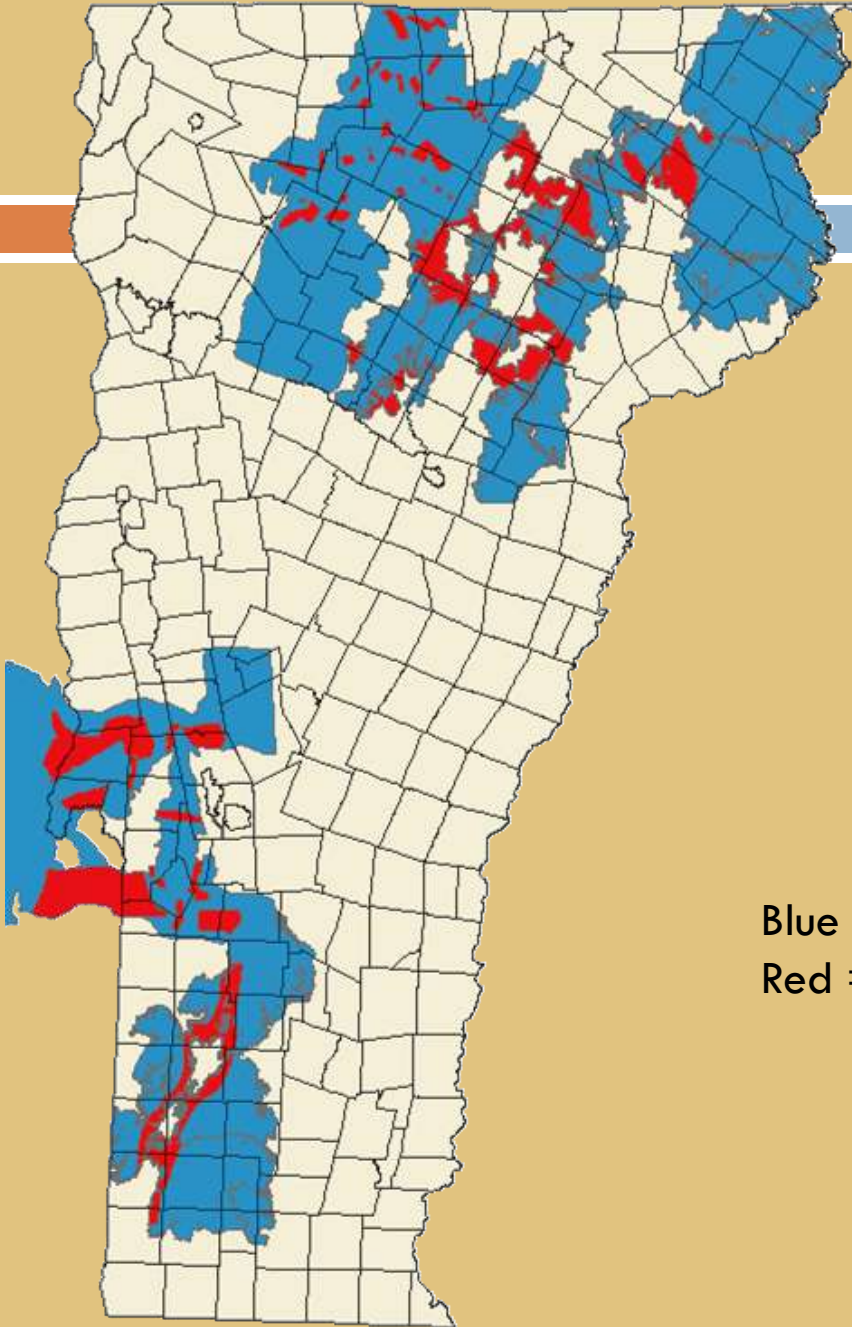


Northern Appalachians

Northern Appalachian Priority Linkages



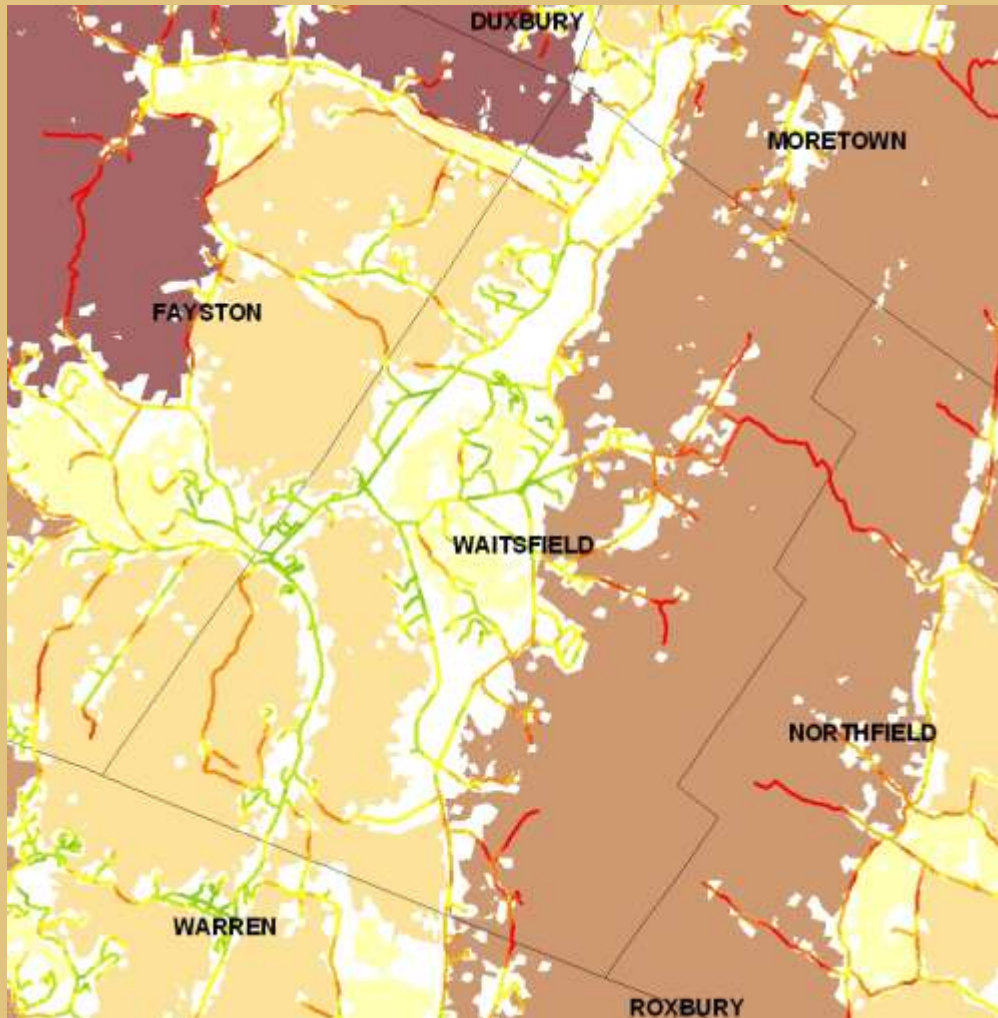
Linkage Areas



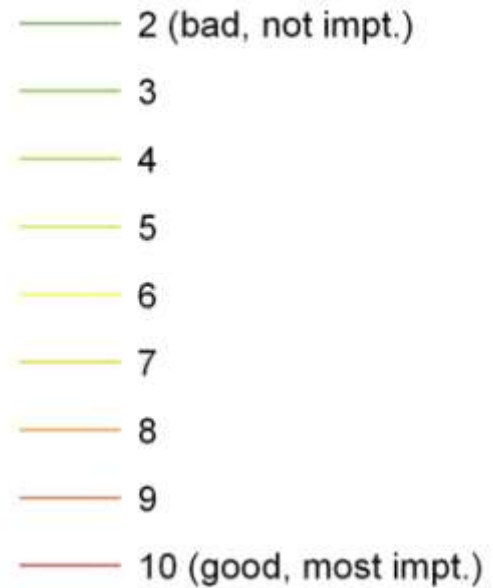
- Greens to Adirondacks
- Greens to Taconics
- North Greens
- Worcesters to Kingdom

Blue = SCI Linkage Area Boundaries
Red = Structural Pathways

Road Crossings



Linkage Ratings



Structural Connectivity
Model 2011

Road Barrier Mitigation

- Linkage Ratings (Road Crossings) are local scale of habitat connectivity
- Deliver best science to transportation agencies
- Retrofit infrastructure



Land Use Planning

- **Technical Assistance to more than 50 towns**
- **100s of towns reached through technical assistance to Regional Planning Commissions**
- **New Town Plan Language (more than 10 towns)**
- **New Land Use Regulations (More than 5 Towns)**

Outreach & Education



- **Citizen Science Tracking**
- **Hundreds of Presentations**
- **Multiple Local Affiliates**
(Rod & Gun Clubs, Conservation Commissions, Historical Societies, Watershed Groups, Recreational Clubs)

How do your interests and priorities overlap with connectivity?



Thank You

