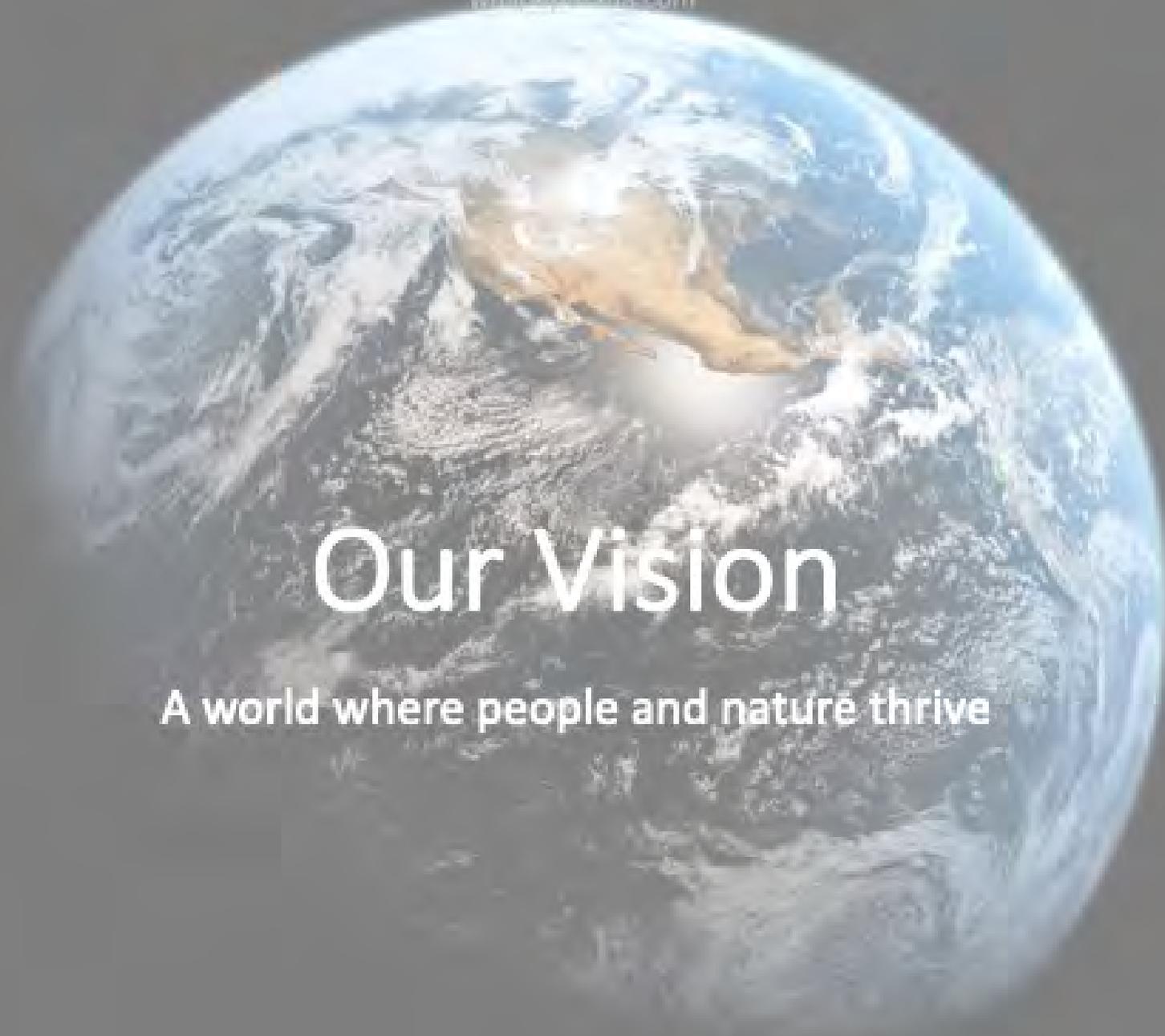




Conserving Nature's Stage

Resilient and Connected Landscape for Terrestrial Conservation

*Prairie State Conservation Coalition
February 28, 2019*



Our Vision

A world where people and nature thrive

The Nature Conservancy is tackling the root causes of some of the toughest problems facing people and nature today. Our strategy is to:



Take action to Protect Lands and Waters at a pace and scale that matters.

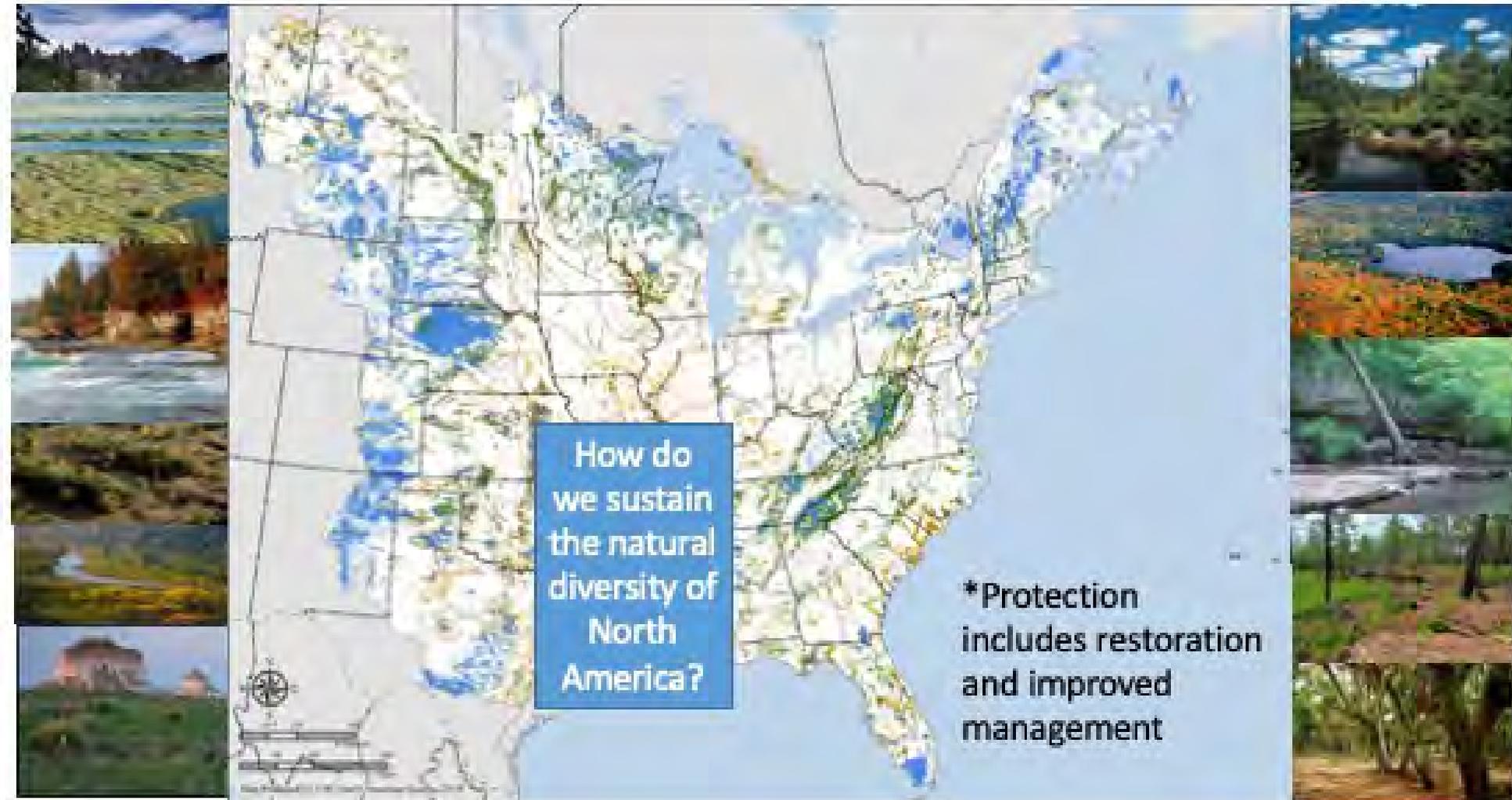
We apply those proven ideas to **change policy and practice** and transform how nature is used.

We share **successes and ideas** to inspire impact beyond our direct influence.

Protect Land and Water Priority for North America: Accelerate protection of land and water by creating networks of resilient connected places that will allow nature to adapt to climate change.

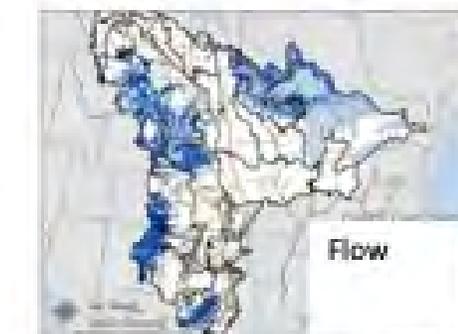
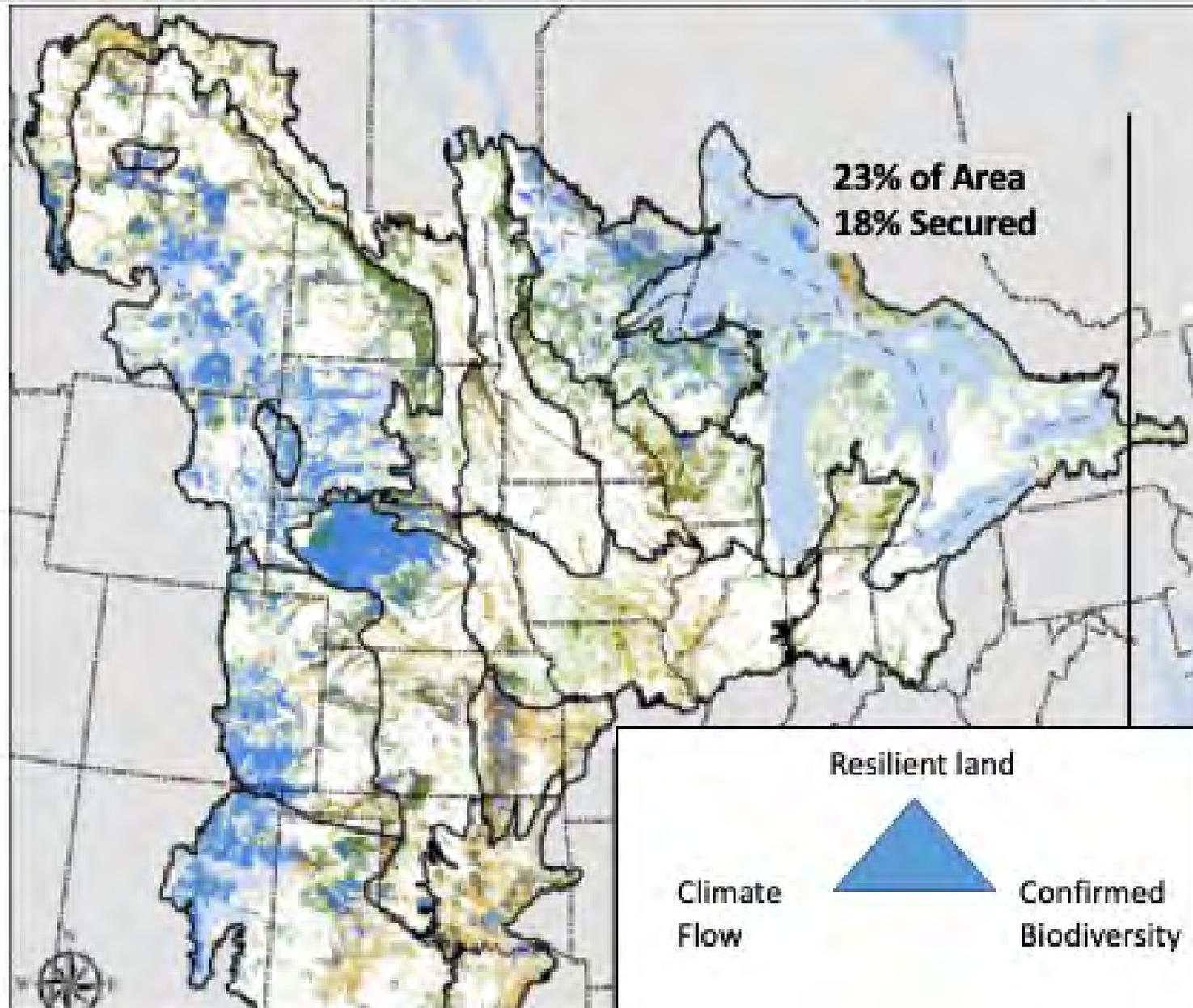
North America | Protect Land and Water Priority

Accelerate protection of land and water by creating networks of resilient connected places that will allow nature to adapt to climate change.



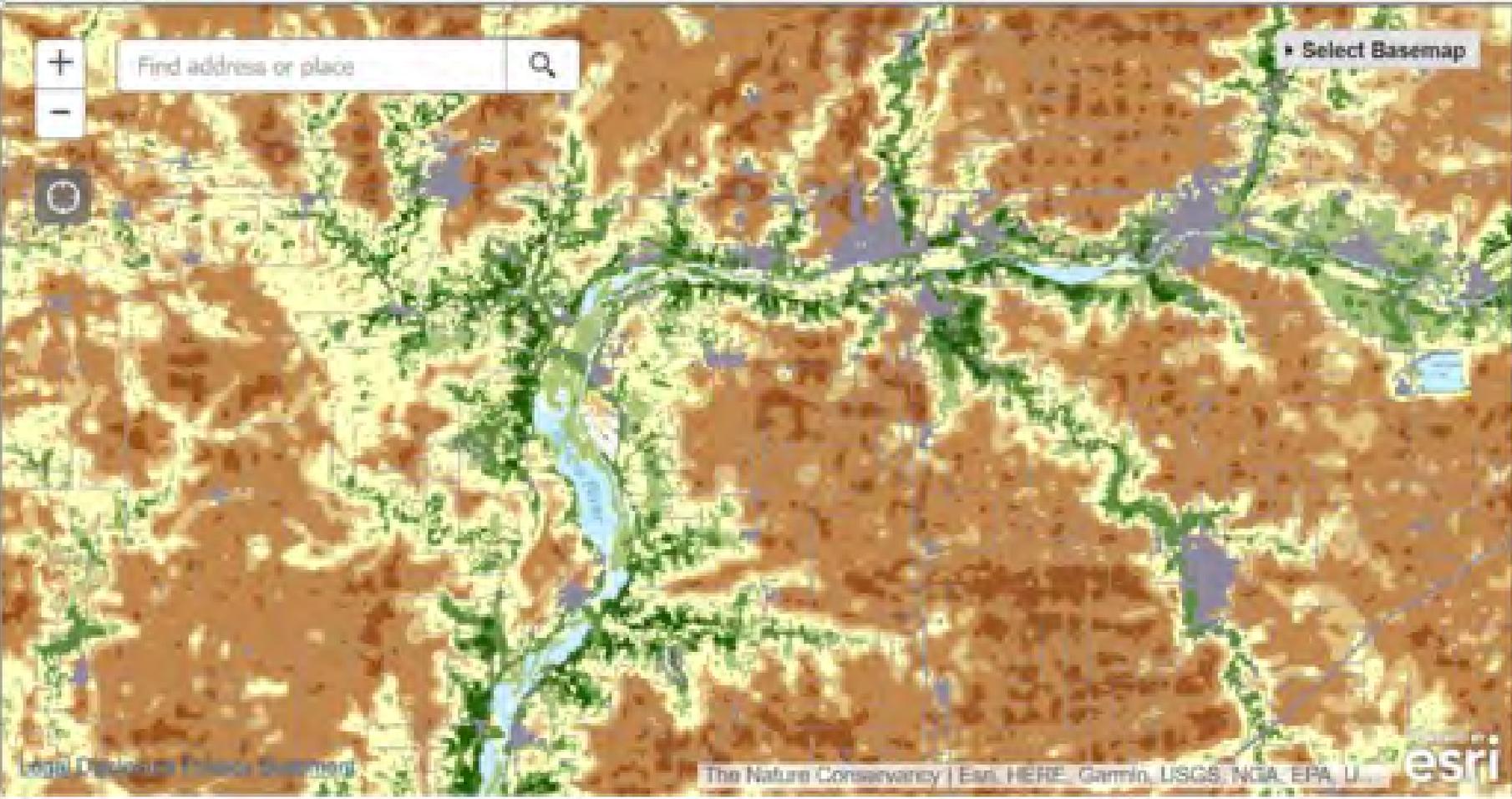
- Double current land protection efforts to 4 million acres of climate resilient lands, 100K miles of lake and river shorelines, and 10 new marine protected areas by 2025.
- By 2050 protect an additional 25% of resilient landscapes (84M acres), freshwater networks, and seascapes.

Conserving Nature's Stage | Resilient and Connected Landscapes



The Nature Conservancy Resilient Land Mapping Tool

Learn more about the TNC resilient land project and download data [here](#)
Get a quick primer on the [Core Concepts](#)

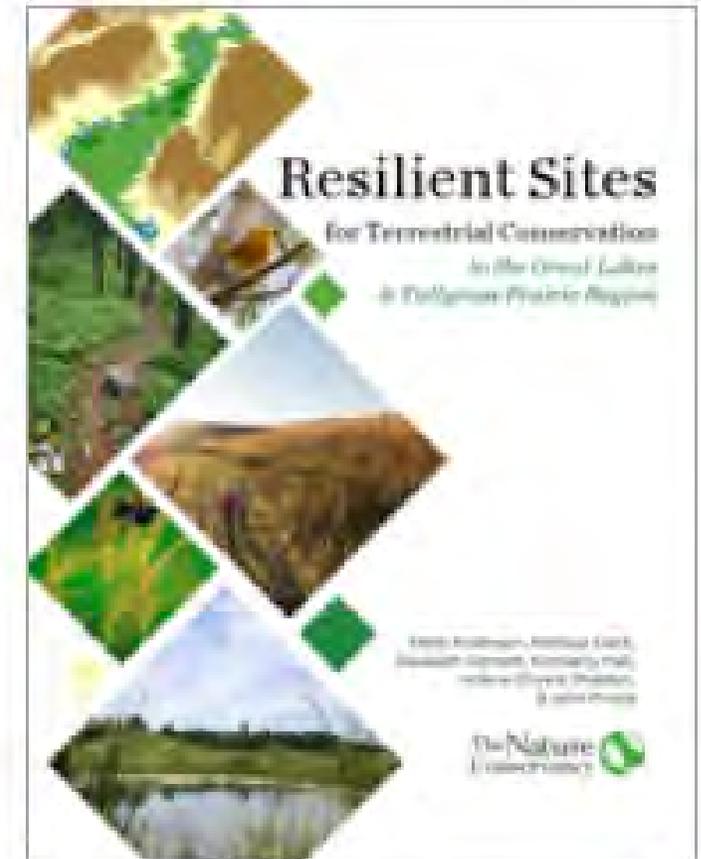
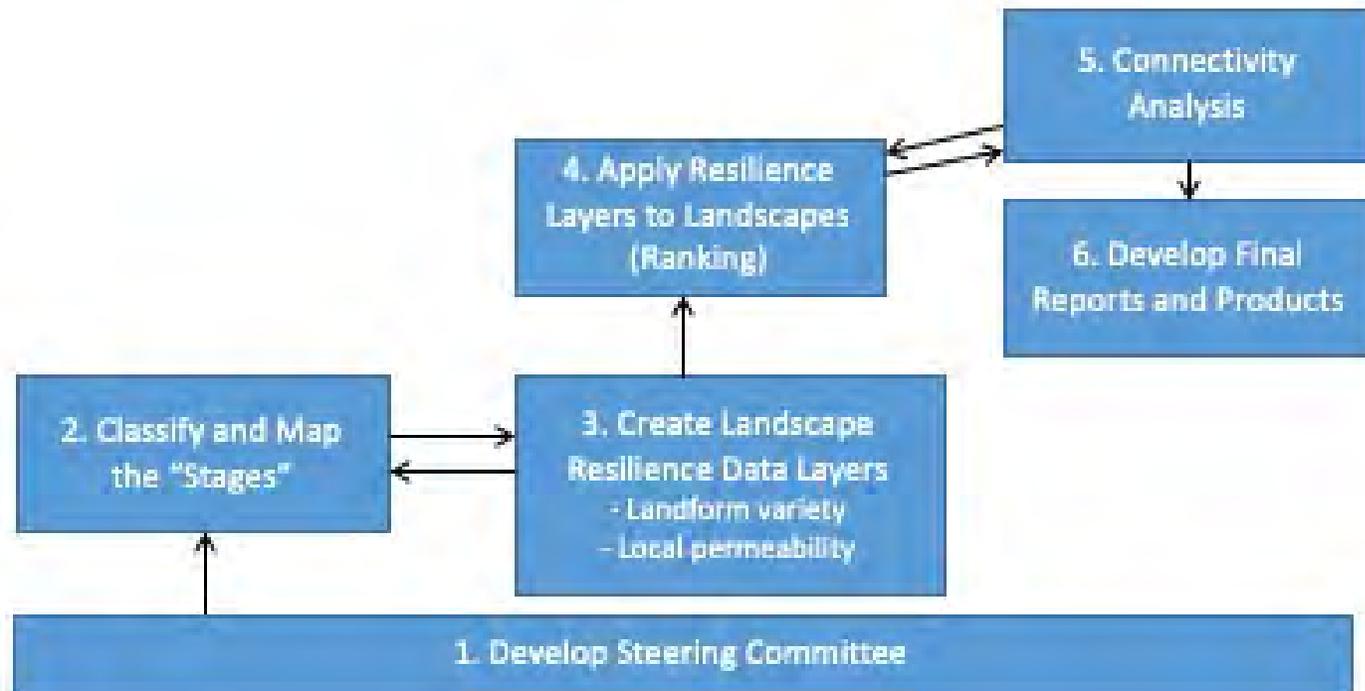


States
 Secured Areas

Set Transparency

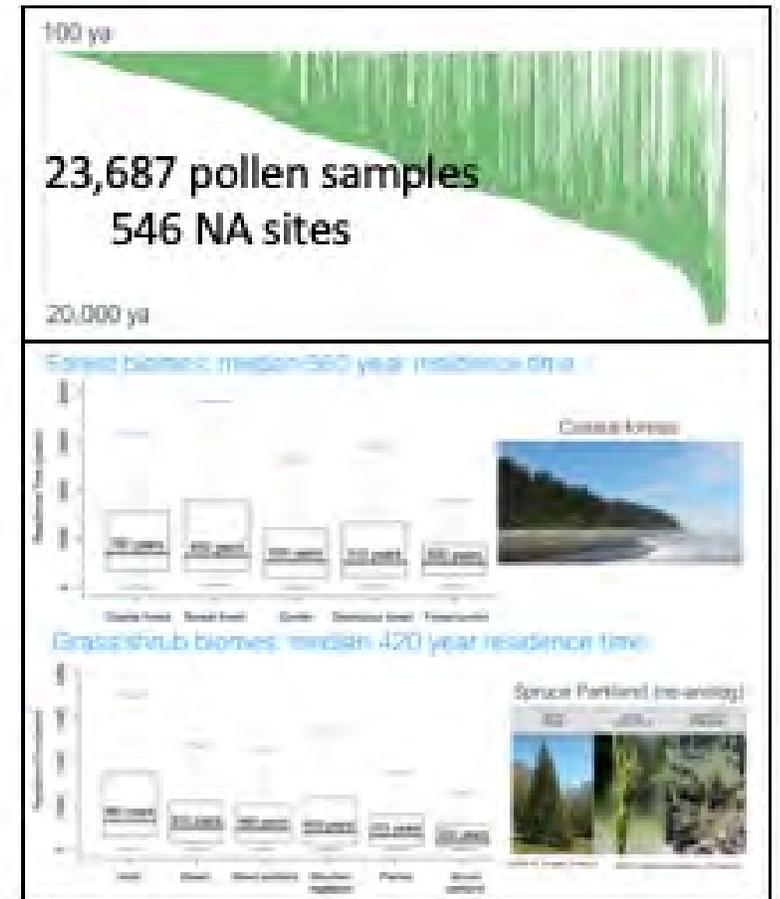
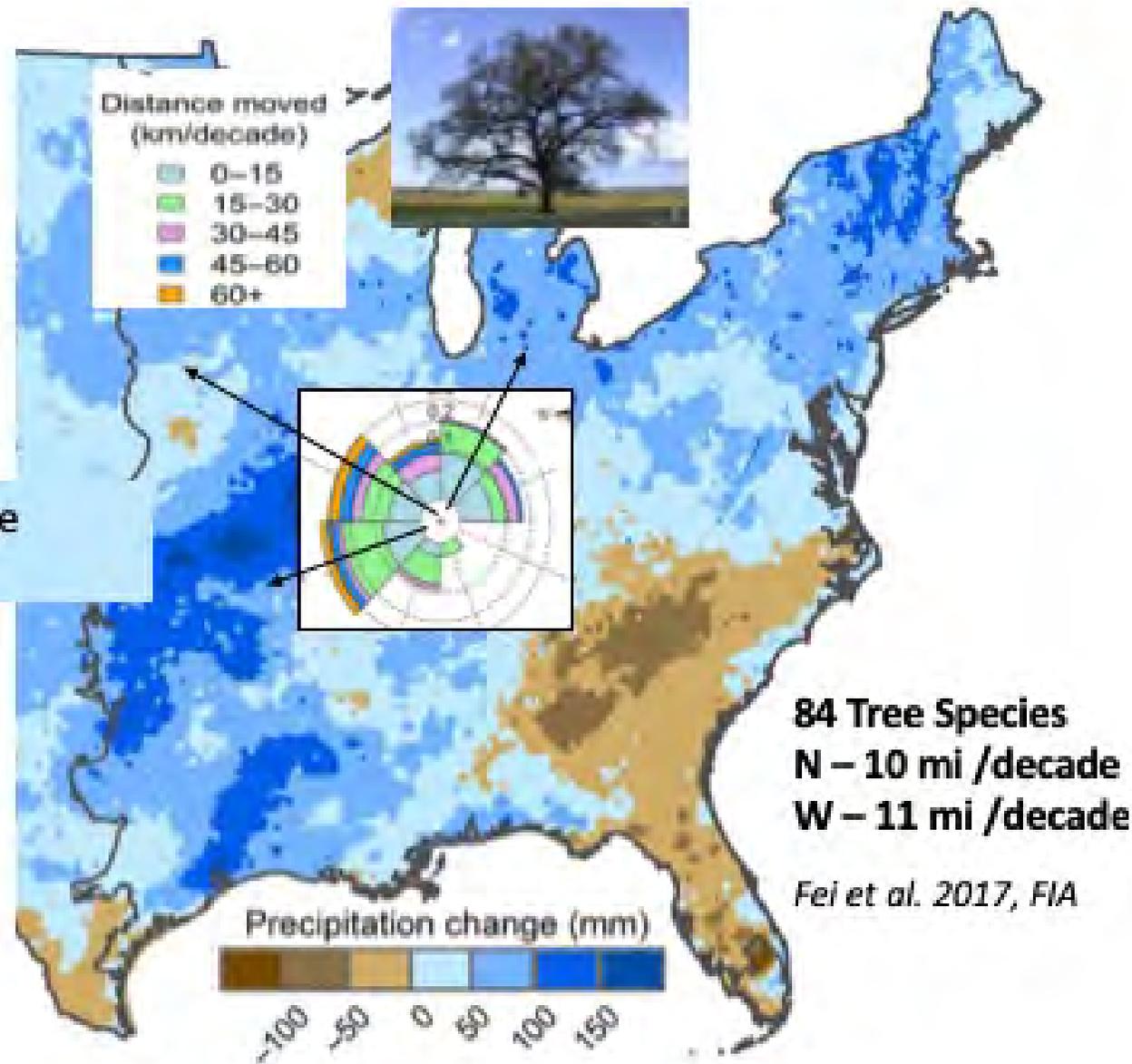
- Ecoregion Boundaries**
- Ecoregion Boundaries
- Resilience Sites (Terrestrial and Coastal)**
- Far above average terrestrial resilience
 - Above average terrestrial resilience
 - Slightly above average terrestrial resilience
 - Far above average coastal migration space
 - Above average coastal migration space
 - Slightly above average coastal migration space
 - Average resilience (terrestrial or coastal)
 - Slightly below average resilience (terrestrial or coastal)



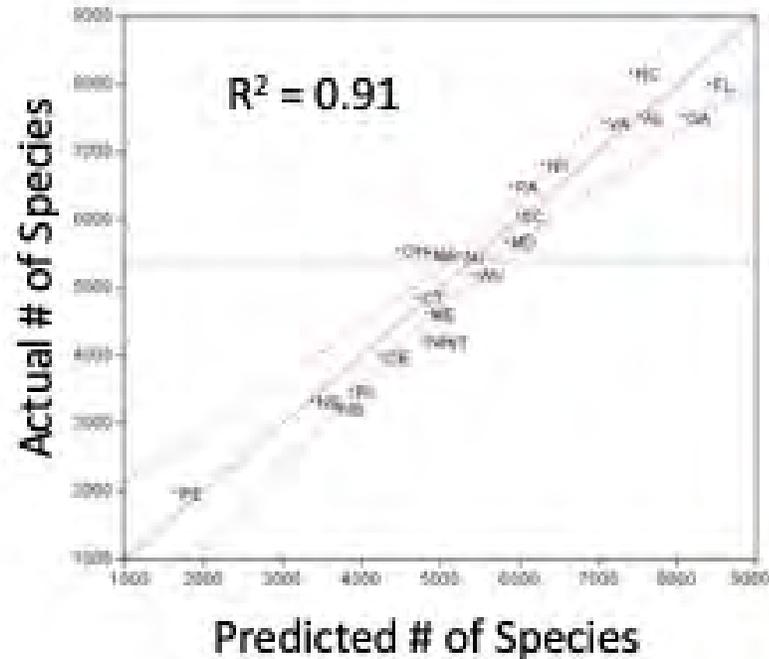


<http://maps.tnc.org/resilientland/>

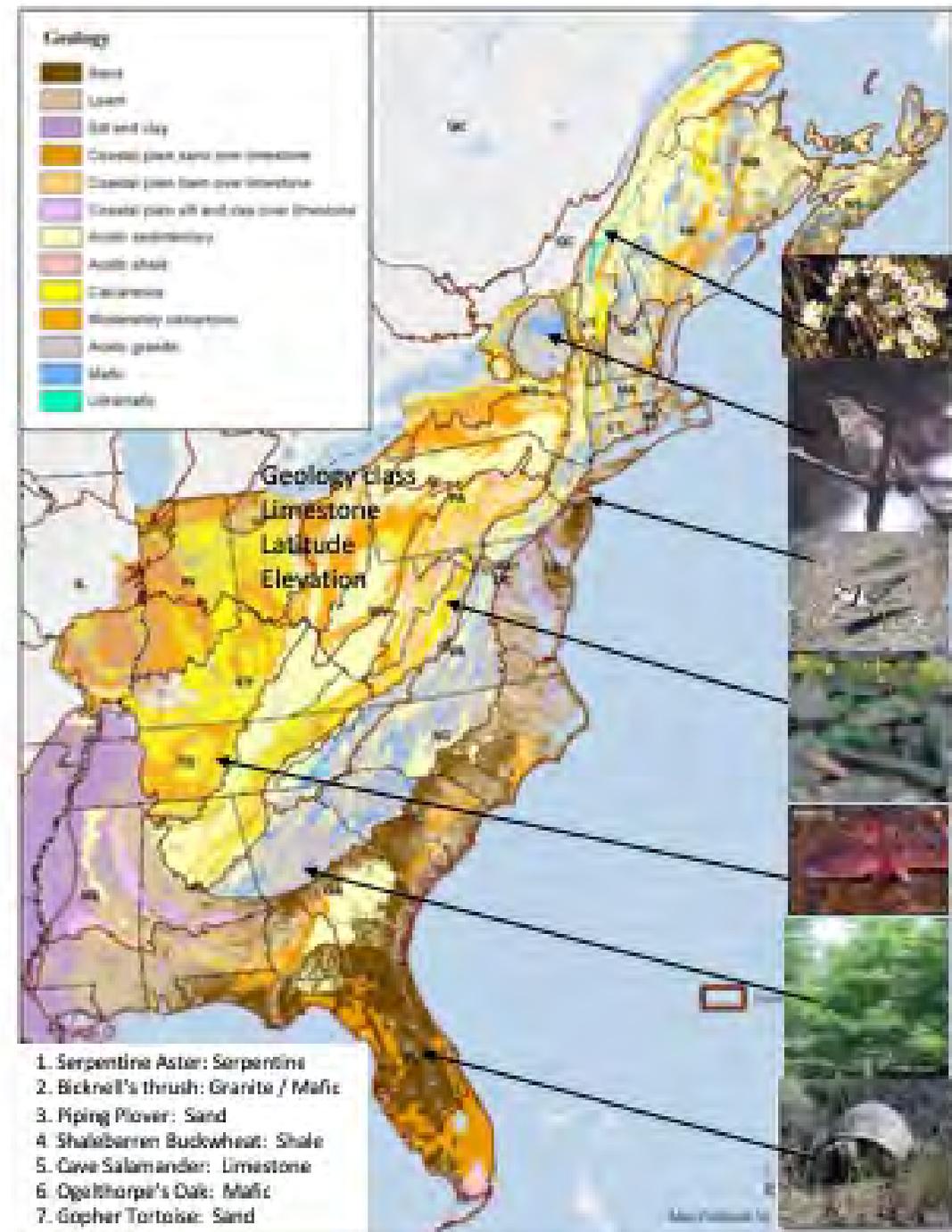
Conserving Nature's Stage | Nature is Dynamic

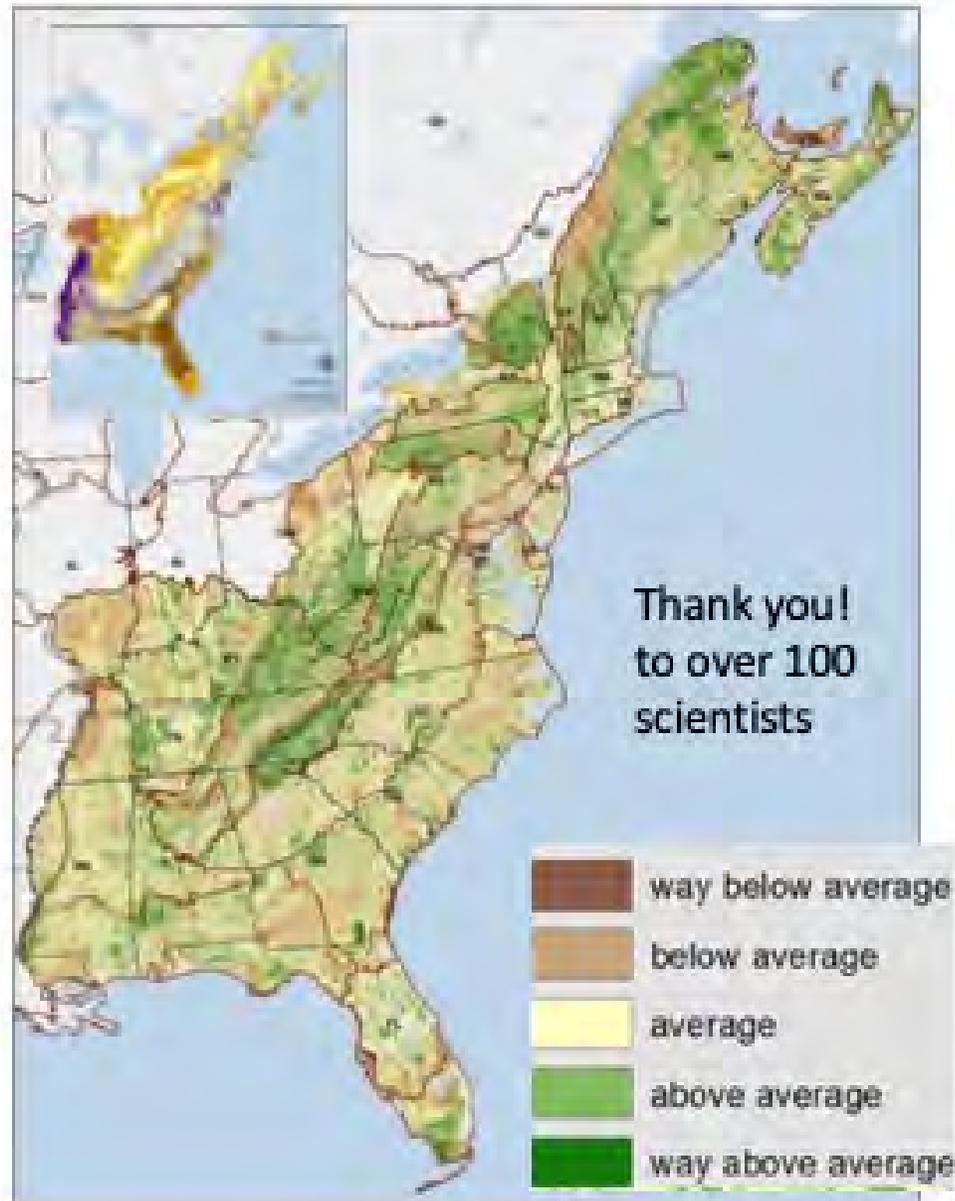


Conserving Nature's Stage | Representation



Biological diversity is highly correlated with **Ecoregions and Land Properties (Geology, Soil, Topography)**





Resilient sites = sites that continue to support biological diversity, productivity and ecological function even as they change in response to climate change.

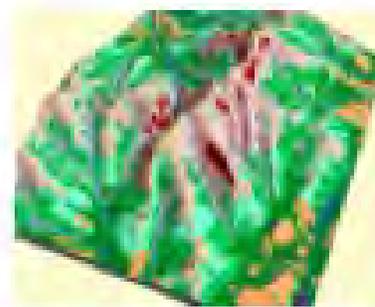
Choose among options based on:

**Many
Microclimates**

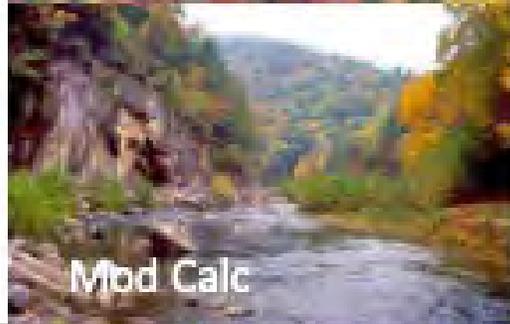
Create climate options

**Locally
Connected**

Allows species to move



Conserving Nature's Stage | Representation and Resilience



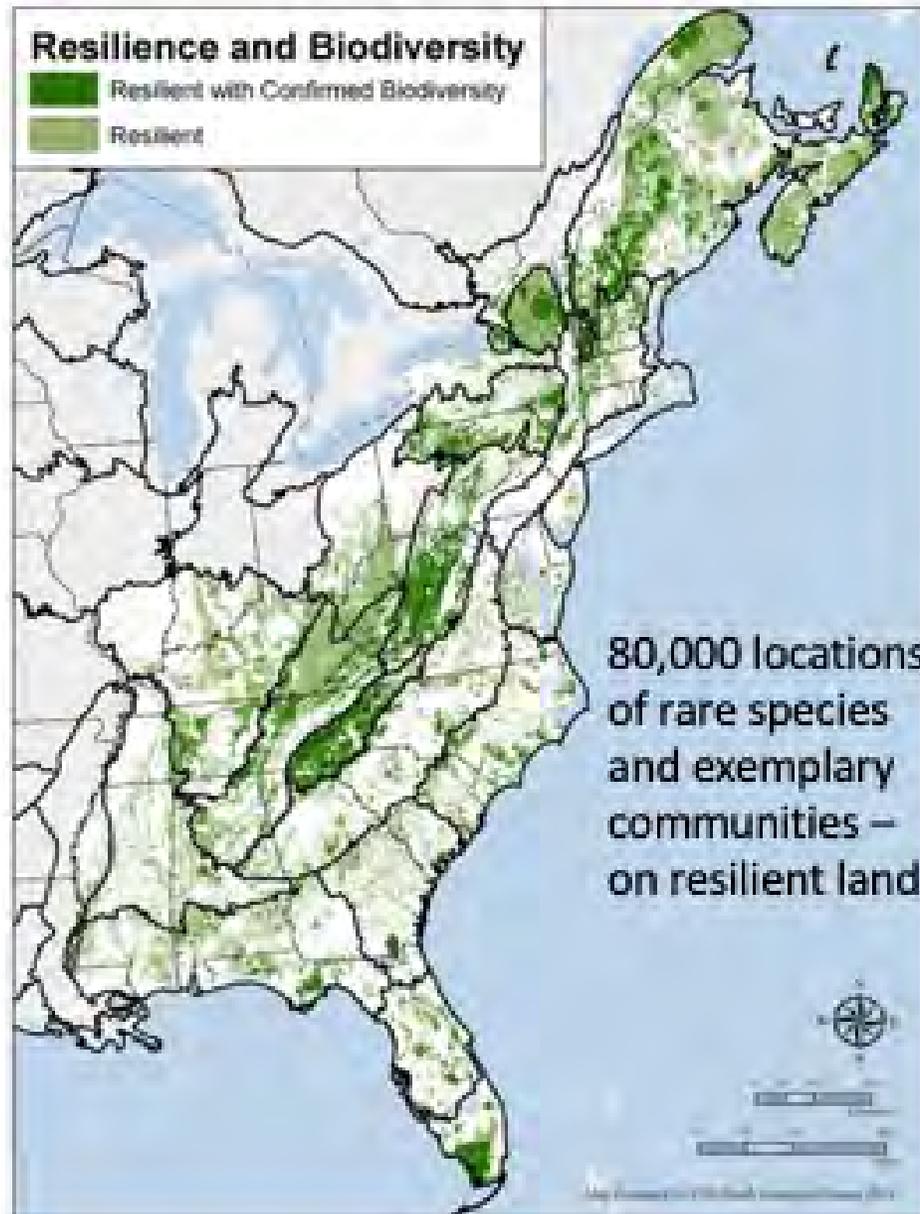
Most Resilient
portion of
each
Geophysical
Setting



Conserving Nature's Stage | Representation and Resilience







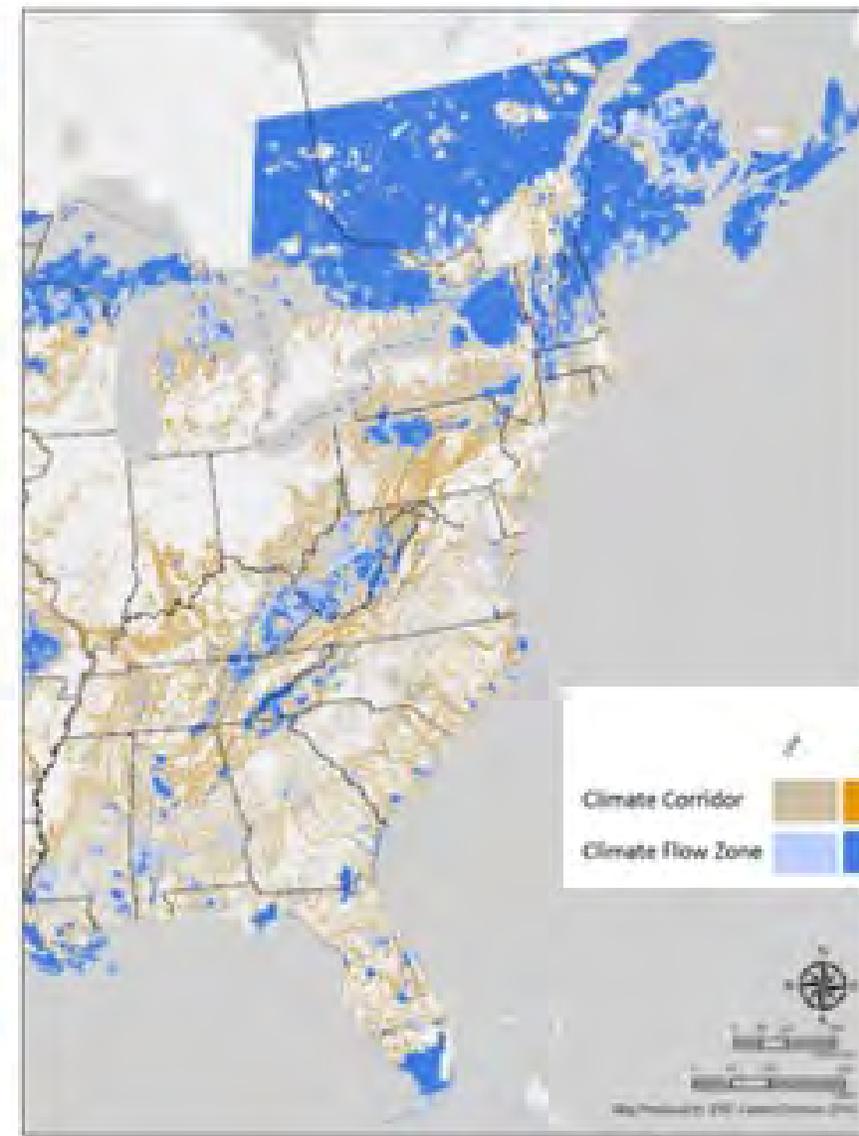
Rare species and exemplary example of unique communities ensure that the network is seeded with robust populations providing the raw material for change and adaptation.



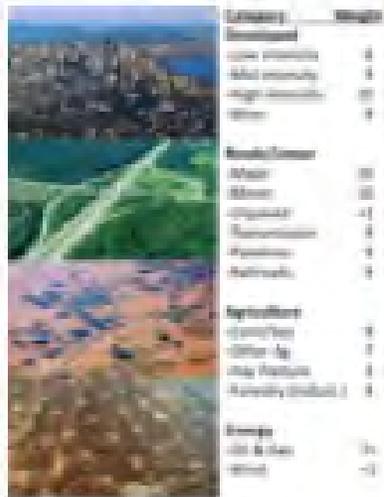
Conserving Nature's Stage | Confirmed Biodiversity



Conserving Nature's Stage | Climate Flow Modeling via Circuitscape

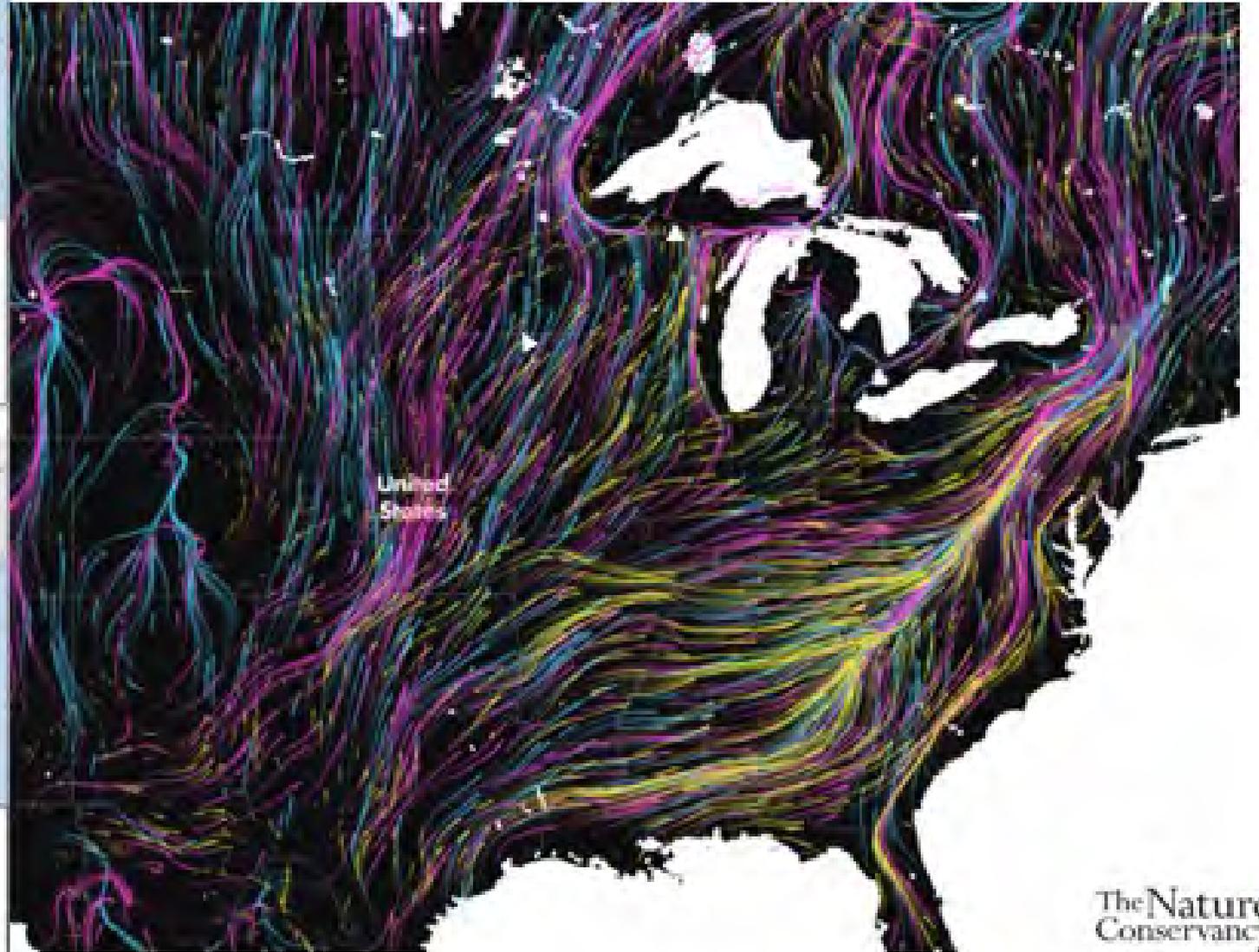
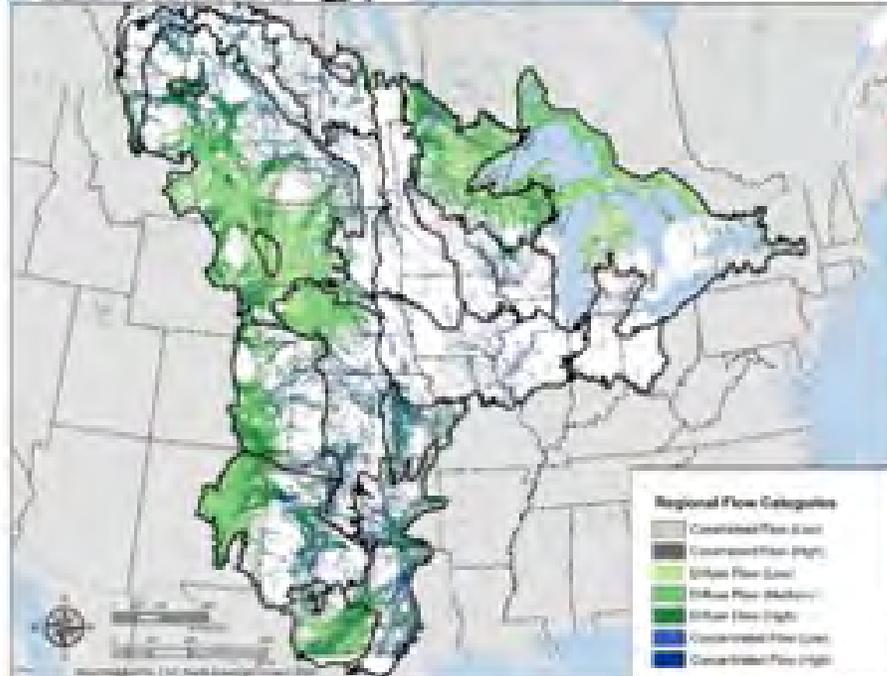
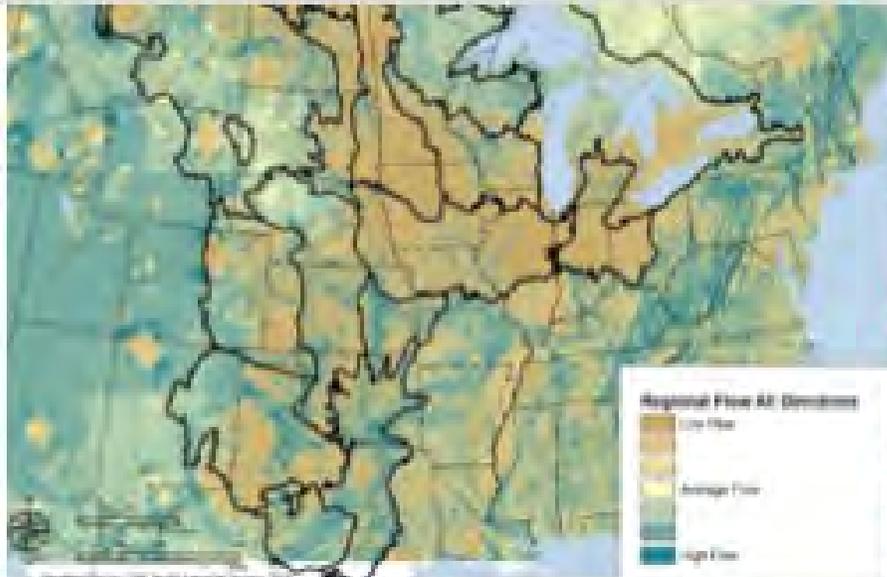


Resistance
Grid

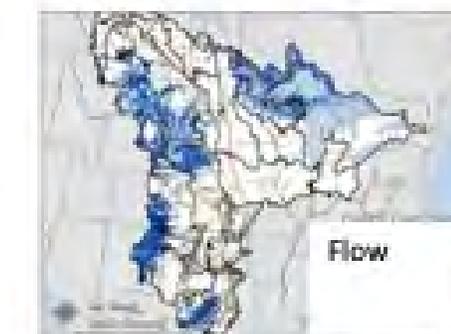
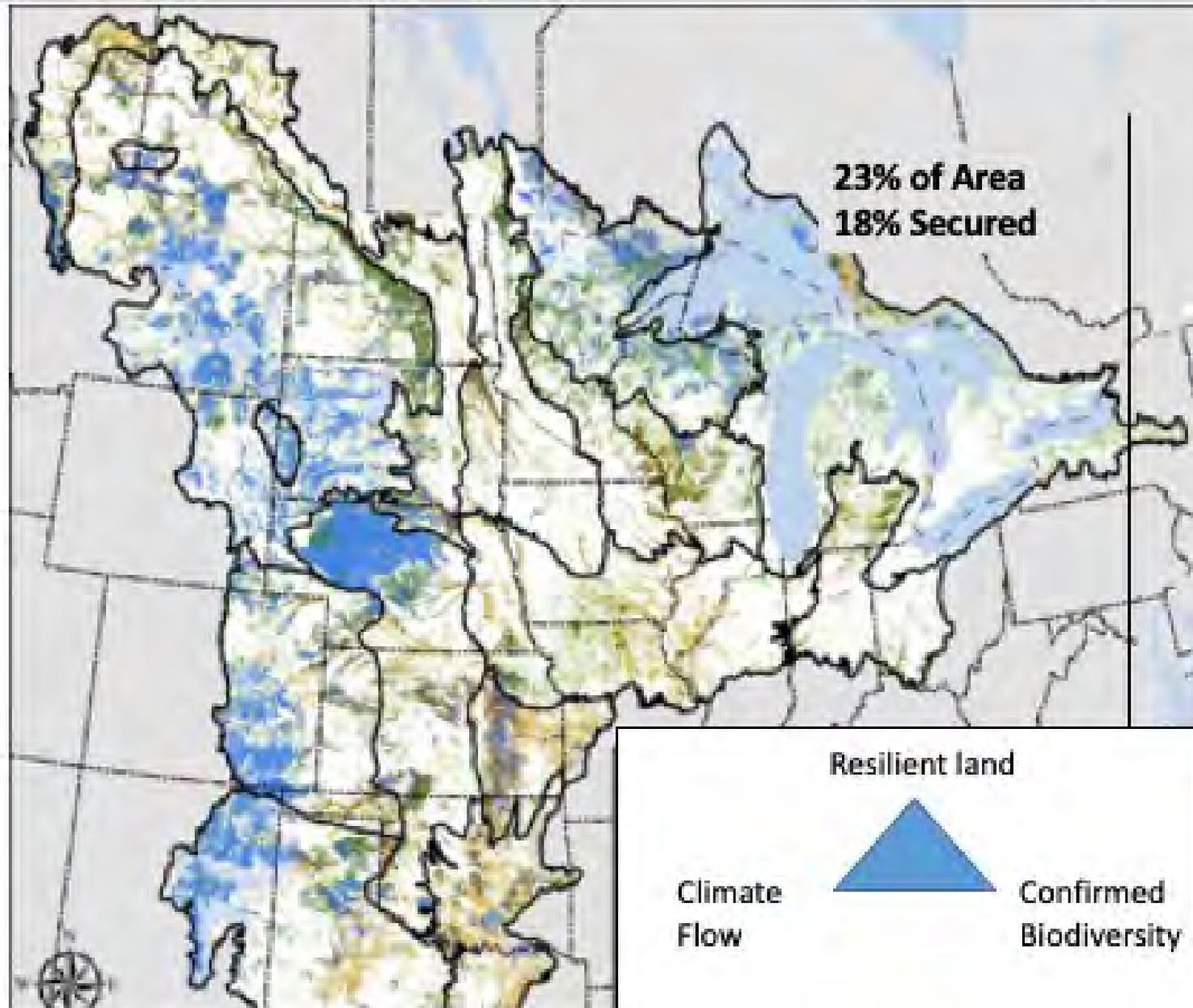


Based on same
Resistance Grid as
Local Connectedness

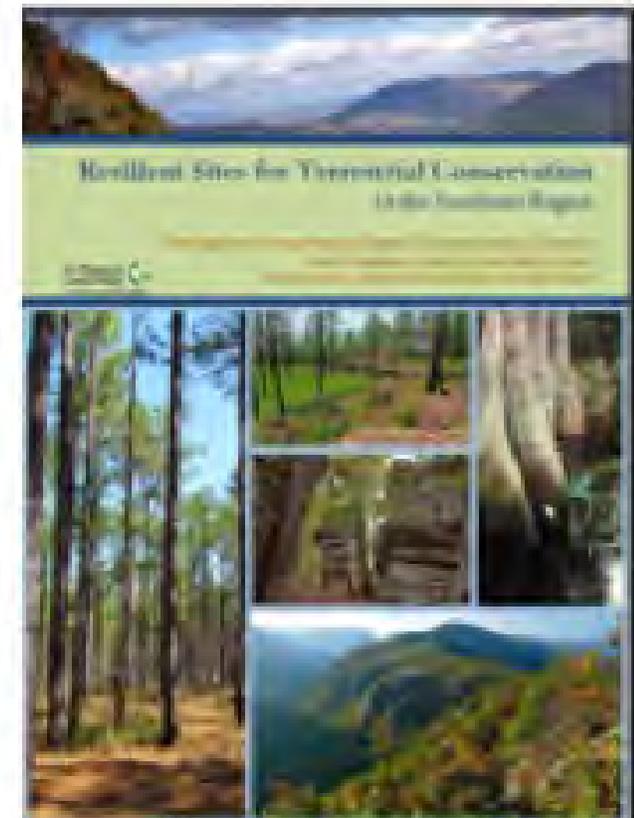
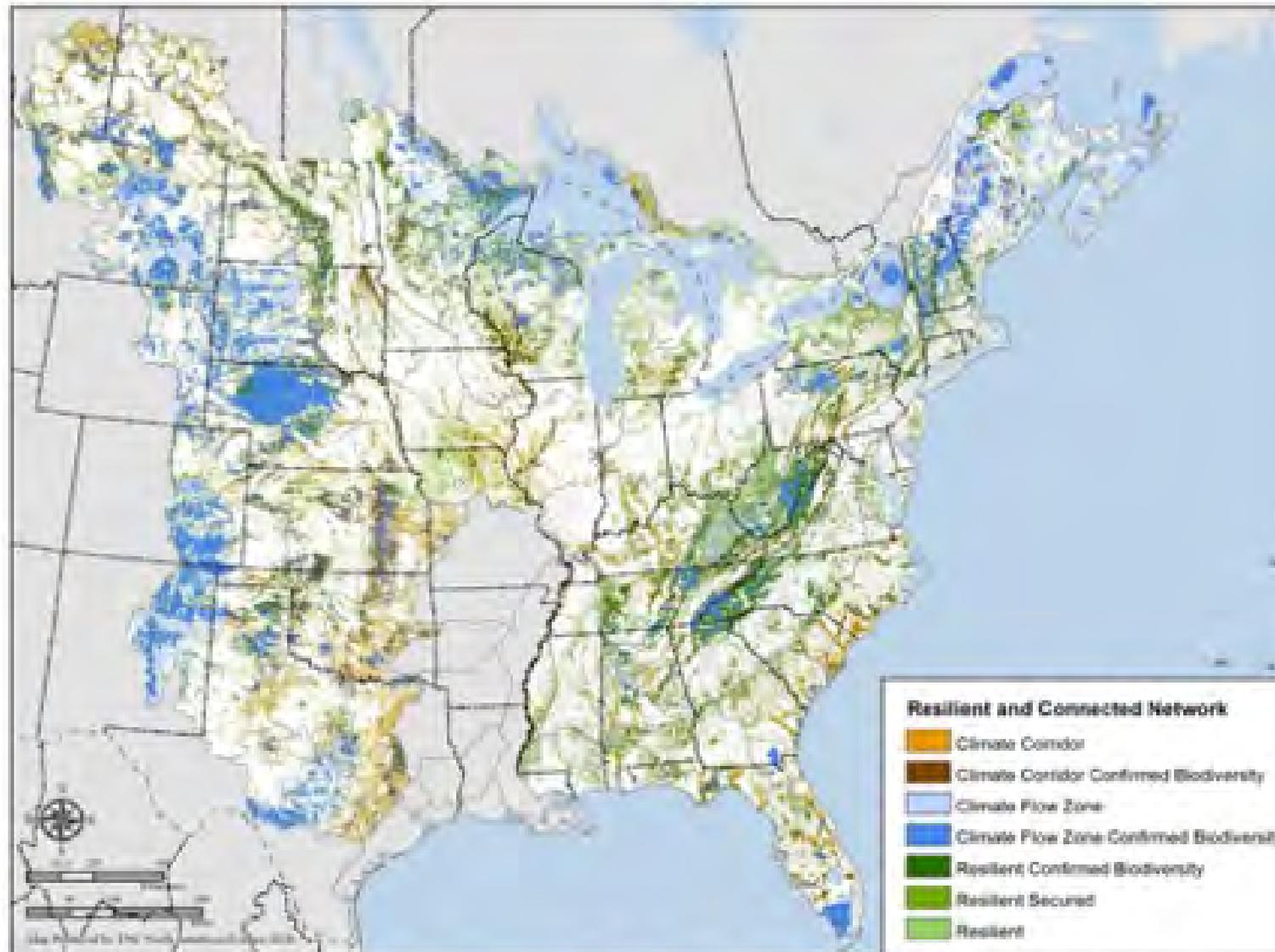
Conserving Nature's Stage | Climate Flow Modeling via Circuitscape



Conserving Nature's Stage | Resilient and Connected Landscapes



Conserving Nature's Stage | Resilient and Connected Landscapes



<http://maps.tnc.org/resilientland/>

Goal: Conserve a network of resilient sites and connecting corridors that will sustain North America's natural diversity by allowing species to adapt to climate impacts and thrive. *Protect 4 M additional acres by 2025*