

# Implementing Vermont Conservation Design:

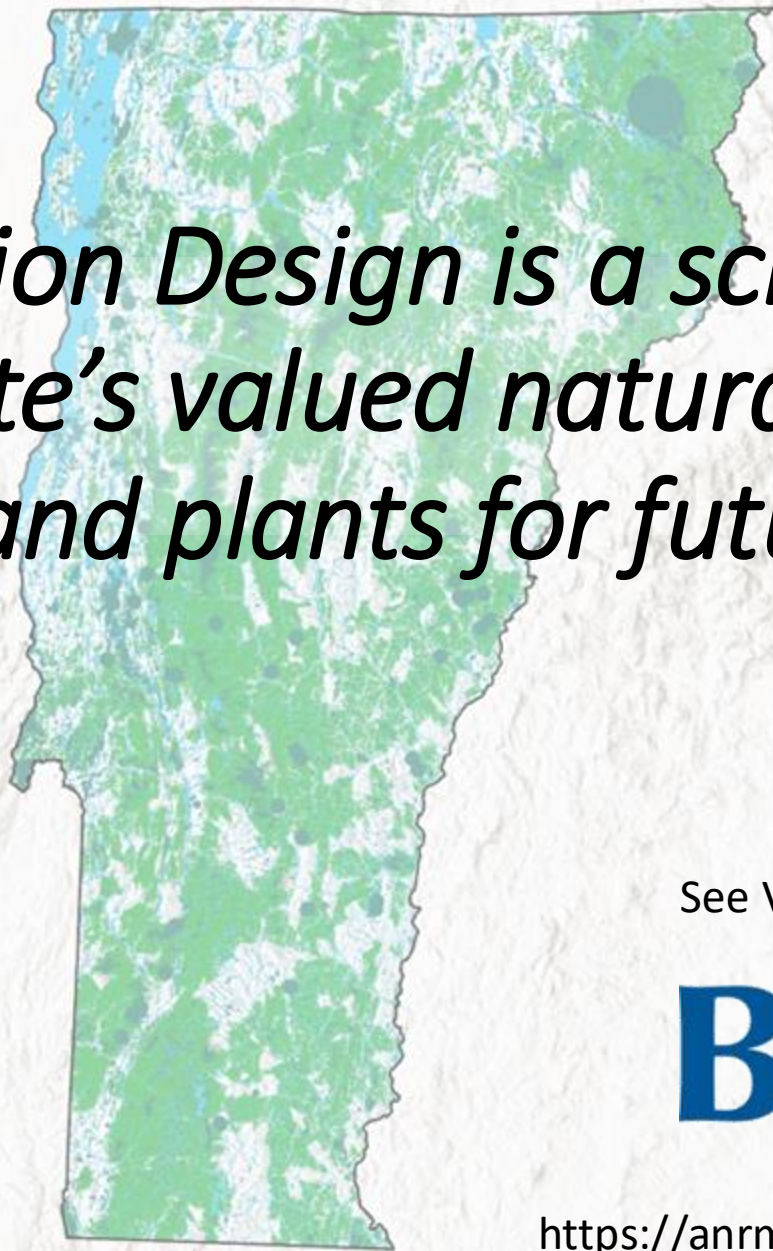
Priorities for Using Permanent Land Protection to Maintain an Ecologically Functional Landscape

Act 59/VCD Implementation  
Working Group



AGENCY OF NATURAL RESOURCES  
 VERMONT

*Vermont Conservation Design is a science-based vision to sustain the state's valued natural areas, forests, waters, wildlife, and plants for future generations*



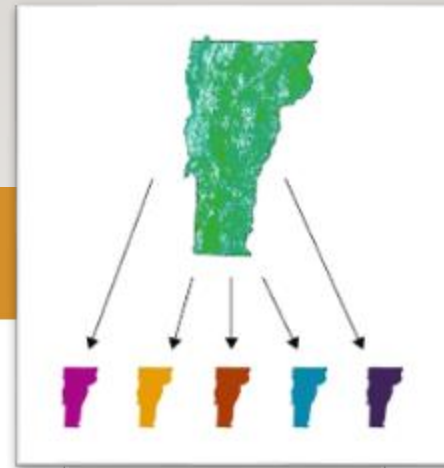
See VCD on



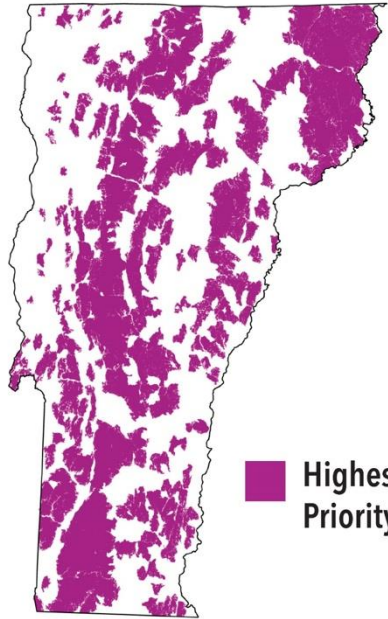
<https://anrmaps.vermont.gov/websites/BioFinder4/>

# LANDSCAPE SCALE

# COMPONENTS

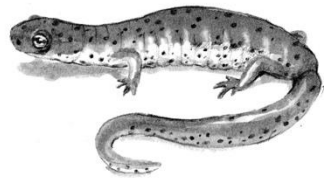


## INTERIOR FOREST

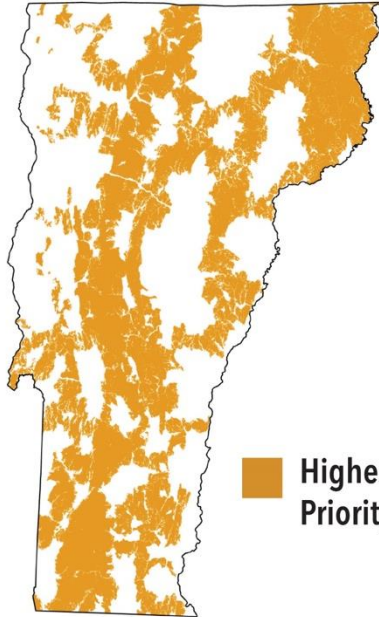


 Highest Priority

The largest forest blocks in each biophysical region. These are areas of contiguous forest and other natural communities and habitats (such as wetlands, ponds, and cliffs) that are unfragmented by roads, development, or agriculture.

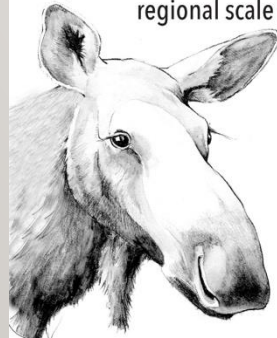


## CONNECTING FOREST

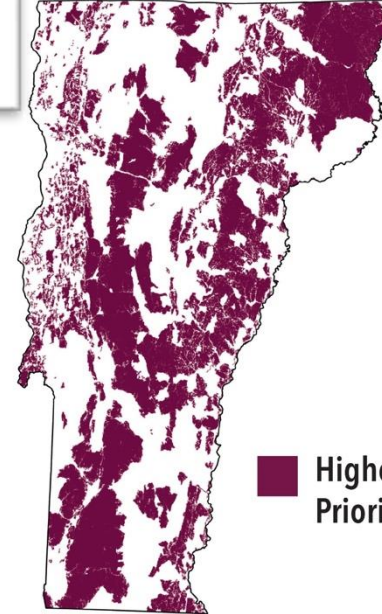


 Highest Priority

The network of forest blocks that together provide terrestrial connectivity at the regional scale (across Vermont and to adjacent states and Québec) and connectivity with surface waters and areas of geological diversity.



## GEOLOGICAL DIVERSITY

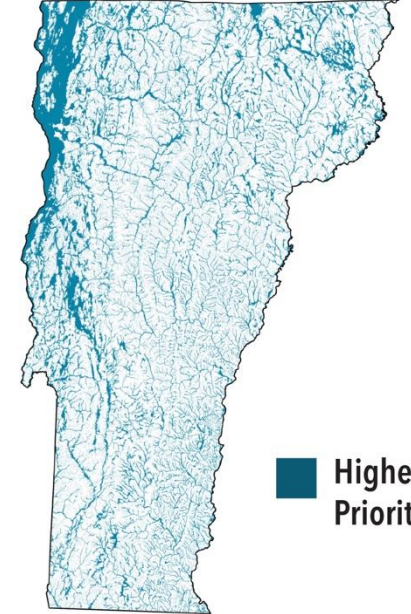


 Highest Priority

A set of forest blocks that reflect the full diversity of Vermont's bedrock, soils, elevations, and landforms (features such as slopes, ridges, flats, and coves). Diversity in the physical landscape is linked to biological diversity, and places that contribute to physical diversity will be important for biological diversity even as the climate changes.



## SURFACE WATERS & RIPARIAN AREAS



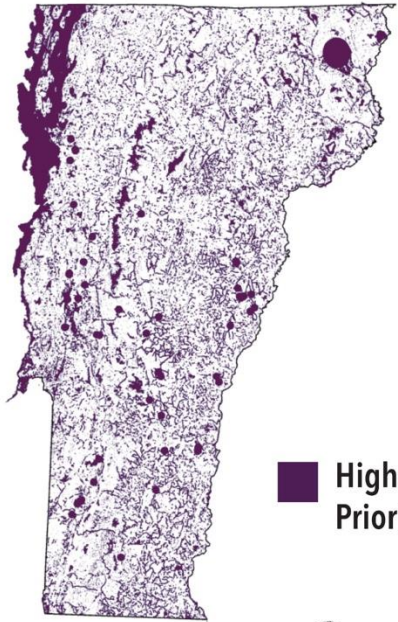
 Highest Priority

The network of all lakes, ponds, rivers, and streams, their associated riparian zones, valley bottoms, and river corridors in which geophysical processes occur.



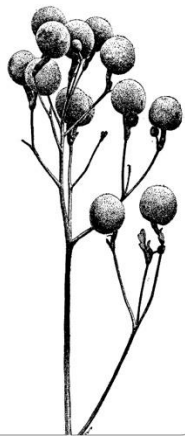
# COMMUNITY & SPECIES SCALE COMPONENTS

## NATURAL COMMUNITIES, HABITATS & SPECIES

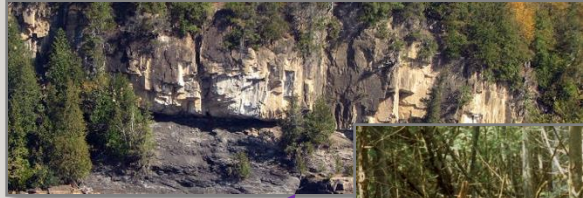


**Highest Priority**

All the mapped community and species scale components: Natural Communities, Aquatic Habitats, Vernal Pools, Wetlands, Wildlife Road Crossings, and Rare, Threatened & Endangered Species.



### Natural Communities



### Young and Old Forests



### Aquatic Habitats



### Vernal Pools



### Wetlands



### Wildlife Road Crossings



### Grasslands/Shrublands



### Underground Habitats

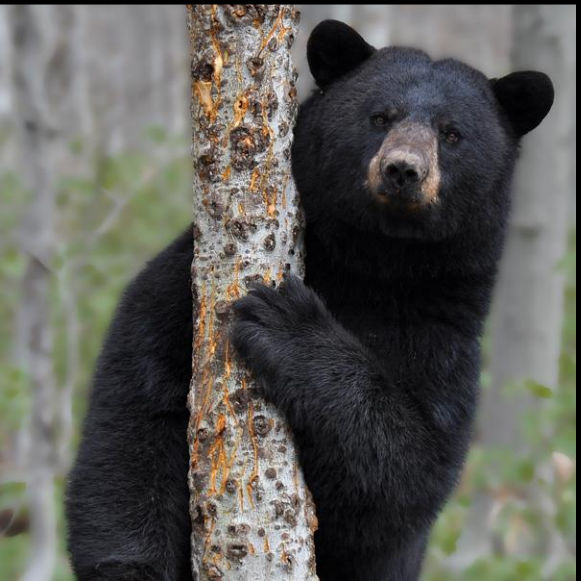


### Rare, Threatened, & Endangered Species






***Ecological Function** is the degree to which an ecosystem can function under natural processes – allowing all its plants and animals to thrive, reproduce, migrate, and move in response to environmental change.*



An aerial photograph of a river valley. The river is wide and filled with brown, turbid floodwater. The surrounding landscape is a mix of lush green forests, open green fields, and some residential or farm buildings. In the background, there are rolling hills and mountains under a blue sky with scattered white clouds. The text is overlaid in white, italicized font on the upper portion of the image.

*VCD envisions an ecologically functional landscape that sustains environmental services like: clean air & water, carbon sequestration, and flood protection*

A photograph of a moose with large, velvet-covered antlers standing in a snowy forest. The moose is the central focus, shown in profile from the chest up. Its fur is dark brown and appears thick. The background is a dense forest of evergreen trees heavily laden with snow. The lighting is soft and diffused, typical of an overcast winter day. A semi-transparent white box is overlaid on the upper left portion of the image, containing text.

*Enacting this vision is a natural climate solution that provides resilience in the face of climate change, allowing plants and animals to shift distributions*

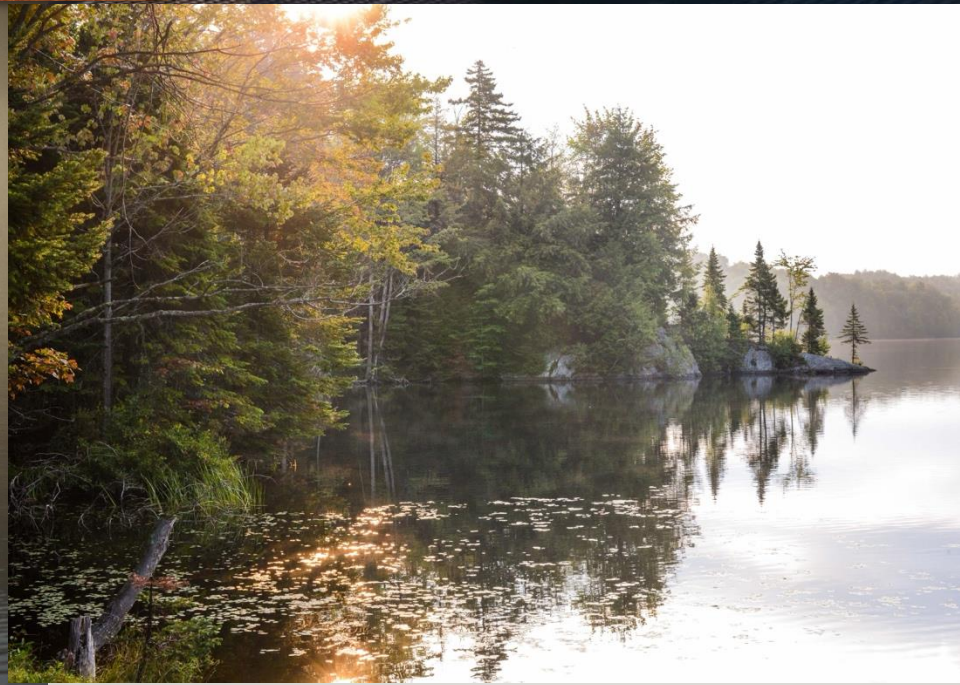
# Supports social and economic values



Rural Character & Natural Beauty



Outdoor Recreation





# Vermont's Initial Conserved Land Inventory

Select from the filter categories below to include in the dashboard elements. All records are shown by default.



## Fee Organization Type(s)

- Federal
- Local Government
- Non-Governmental Organization
- Private
- State

Reset

Select all

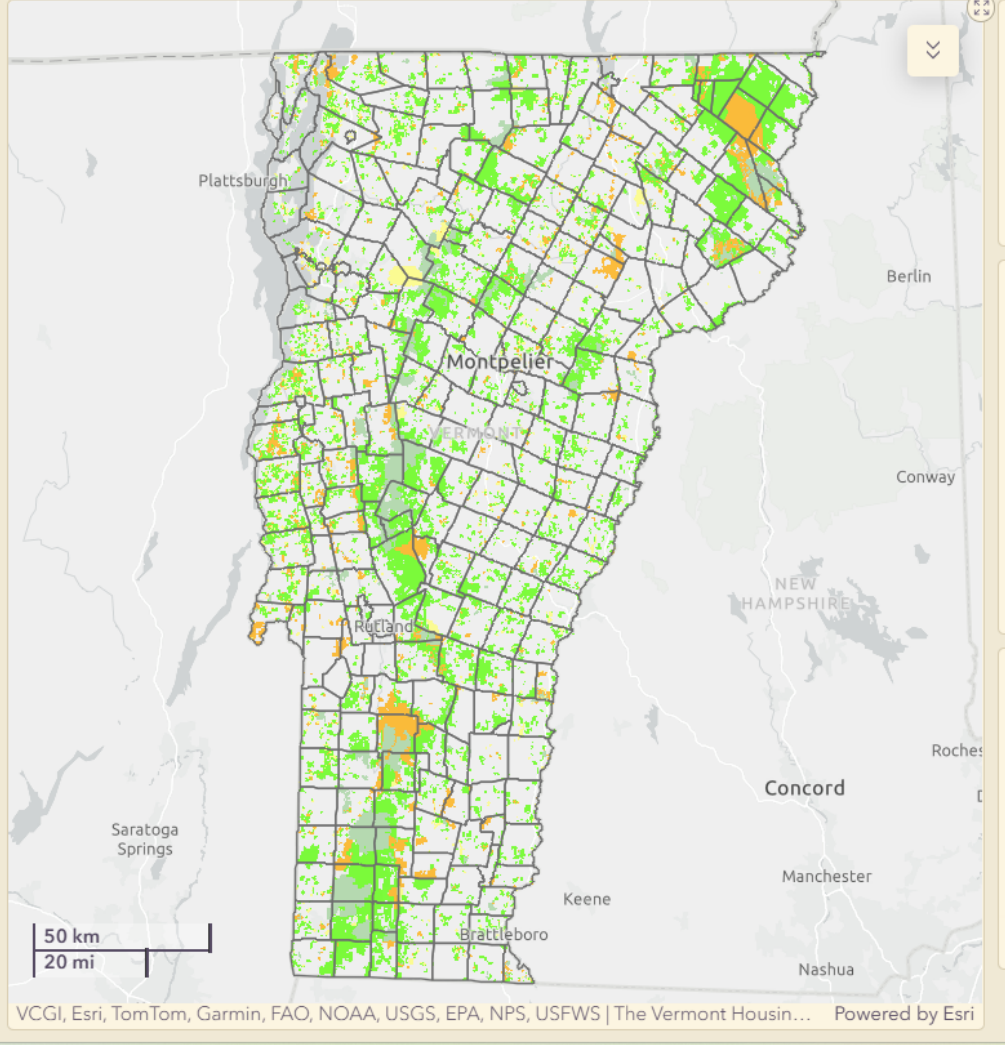


## Conservation Category

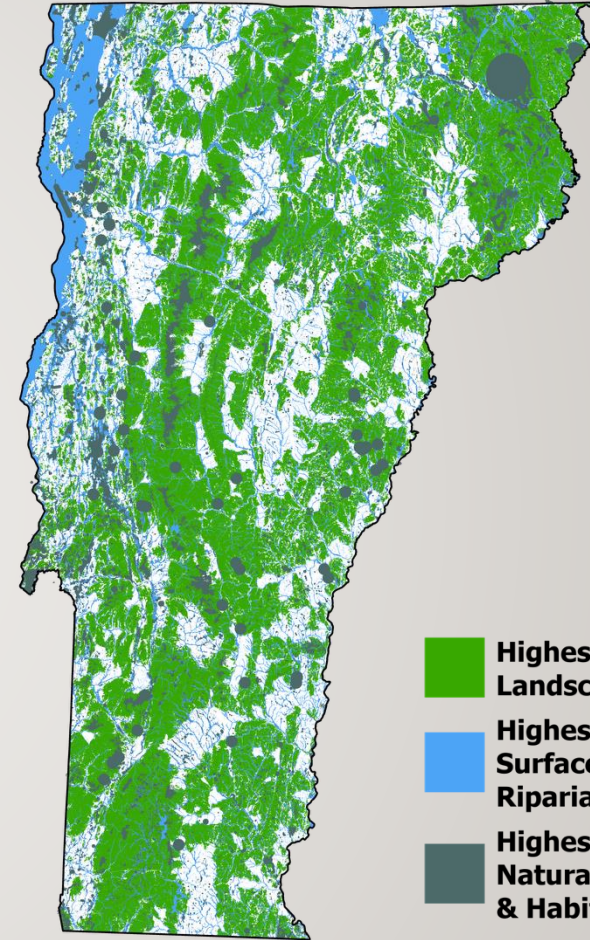
- Ecological reserve area
- Biodiversity conservation area
- Natural resource management area
- Uncategorized conserved area

Reset

Select all



# VERMONT CONSERVATION DESIGN



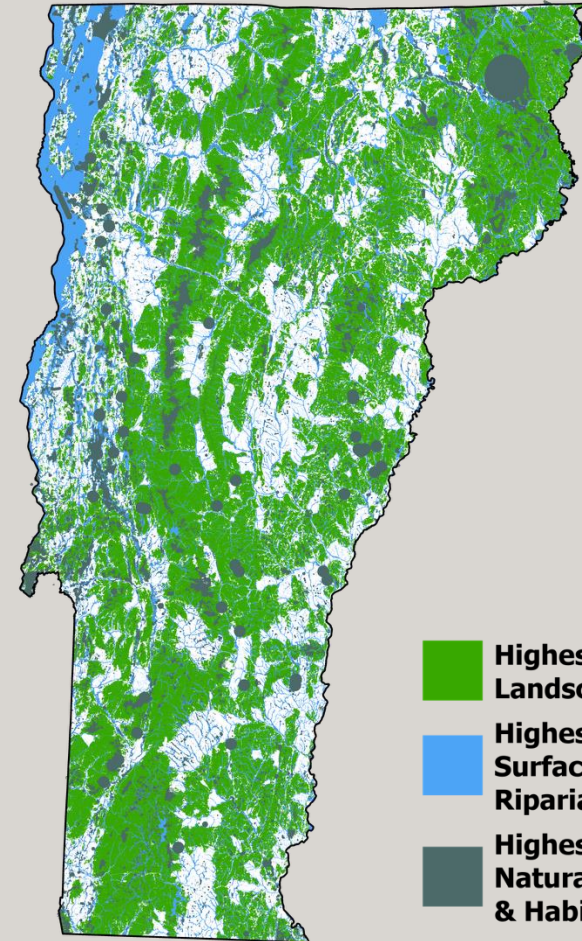
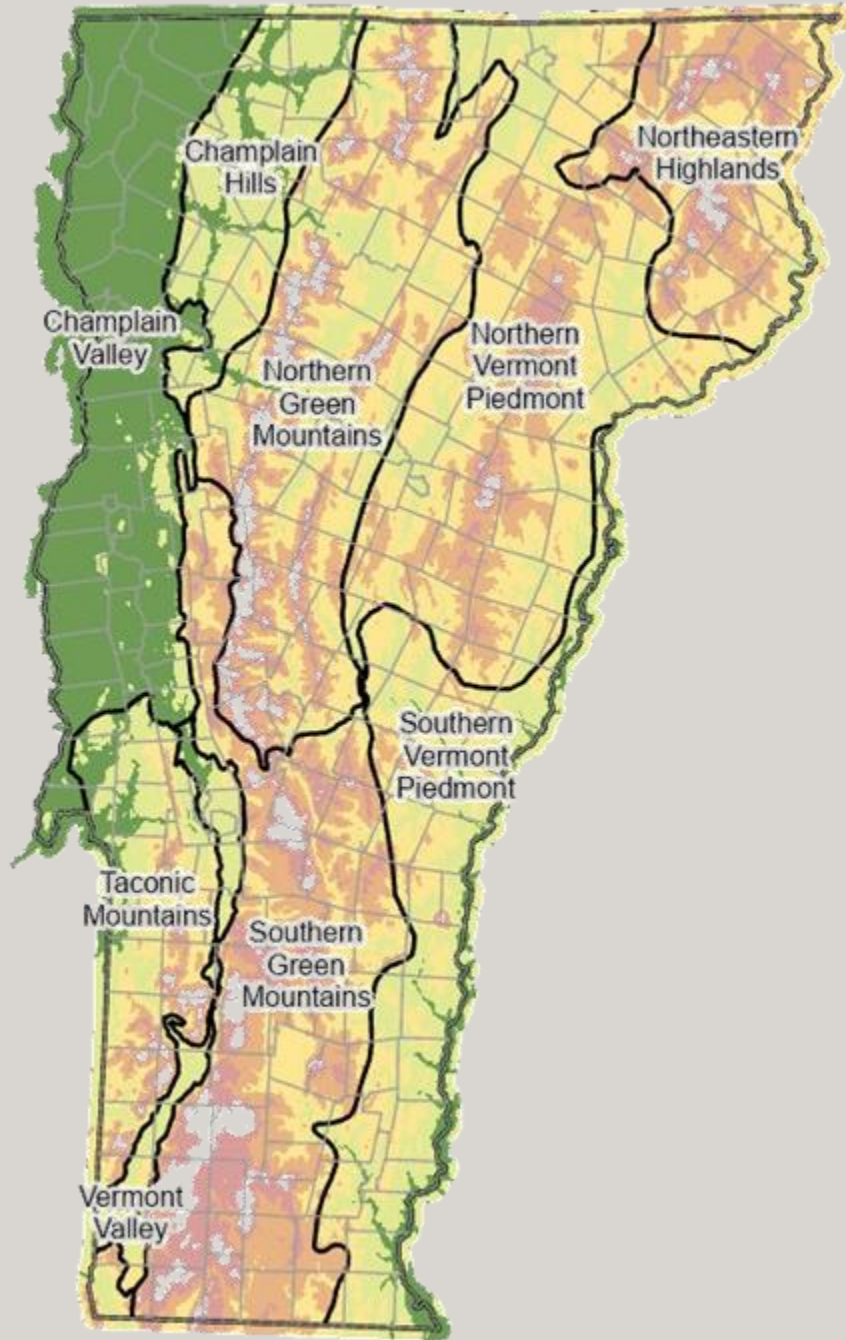
- Highest Priority Landscape Blocks**
- Highest Priority Surface Waters & Riparian Areas**
- Highest Priority Natural Community & Habitat Features**

*(Remember permanent land conservation is just one of many tools for achieving VCD.)*

Past land conservation overwhelming has supported Vermont Conservation Design

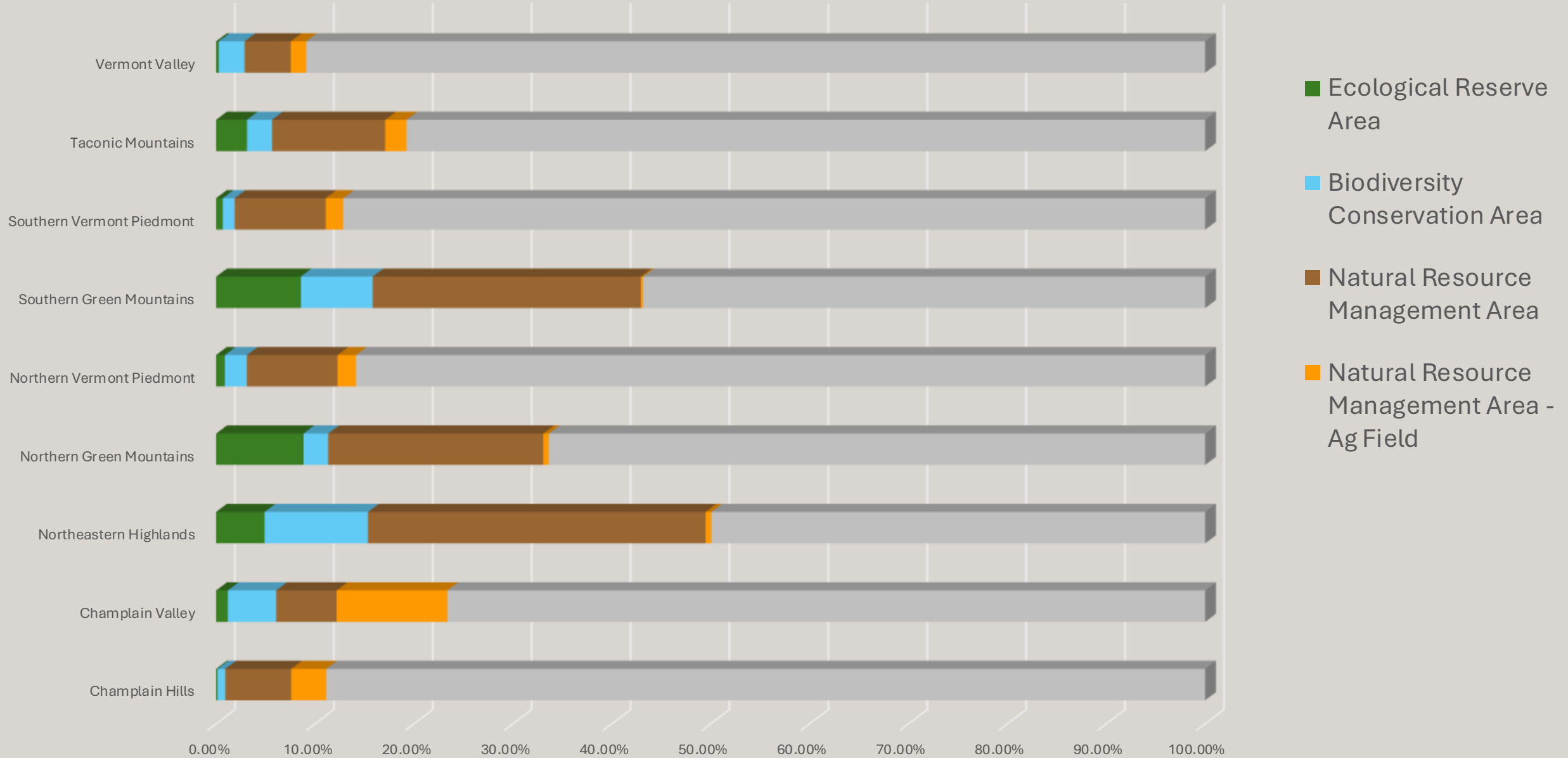
	<b>Overlaps VCD Highest Priority Forest Blocks</b>
<b><i>Ecological Reserve Area</i></b>	<b>98.58%</b>
<b><i>Biodiversity Conservation Area</i></b>	<b>91.16%</b>
<b><i>Natural Resource Management Area (not including ag fields)</i></b>	<b>86.87%</b>
<b><i>Natural Resource Management Area (incl. both forest and ag)</i></b>	<b>75.68%</b>

# VERMONT CONSERVATION DESIGN

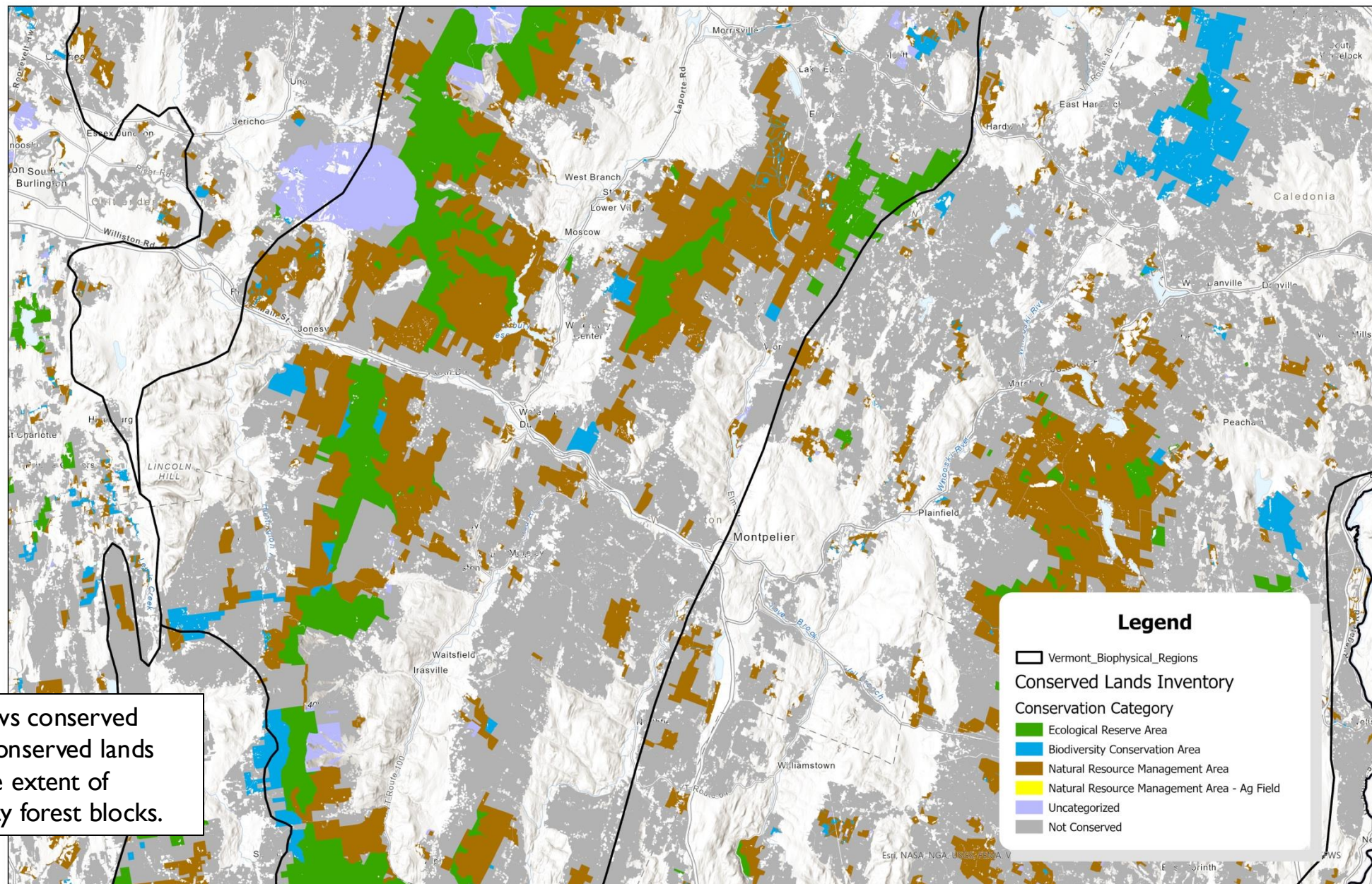


-  **Highest Priority Landscape Blocks**
-  **Highest Priority Surface Waters & Riparian Areas**
-  **Highest Priority Natural Community & Habitat Features**

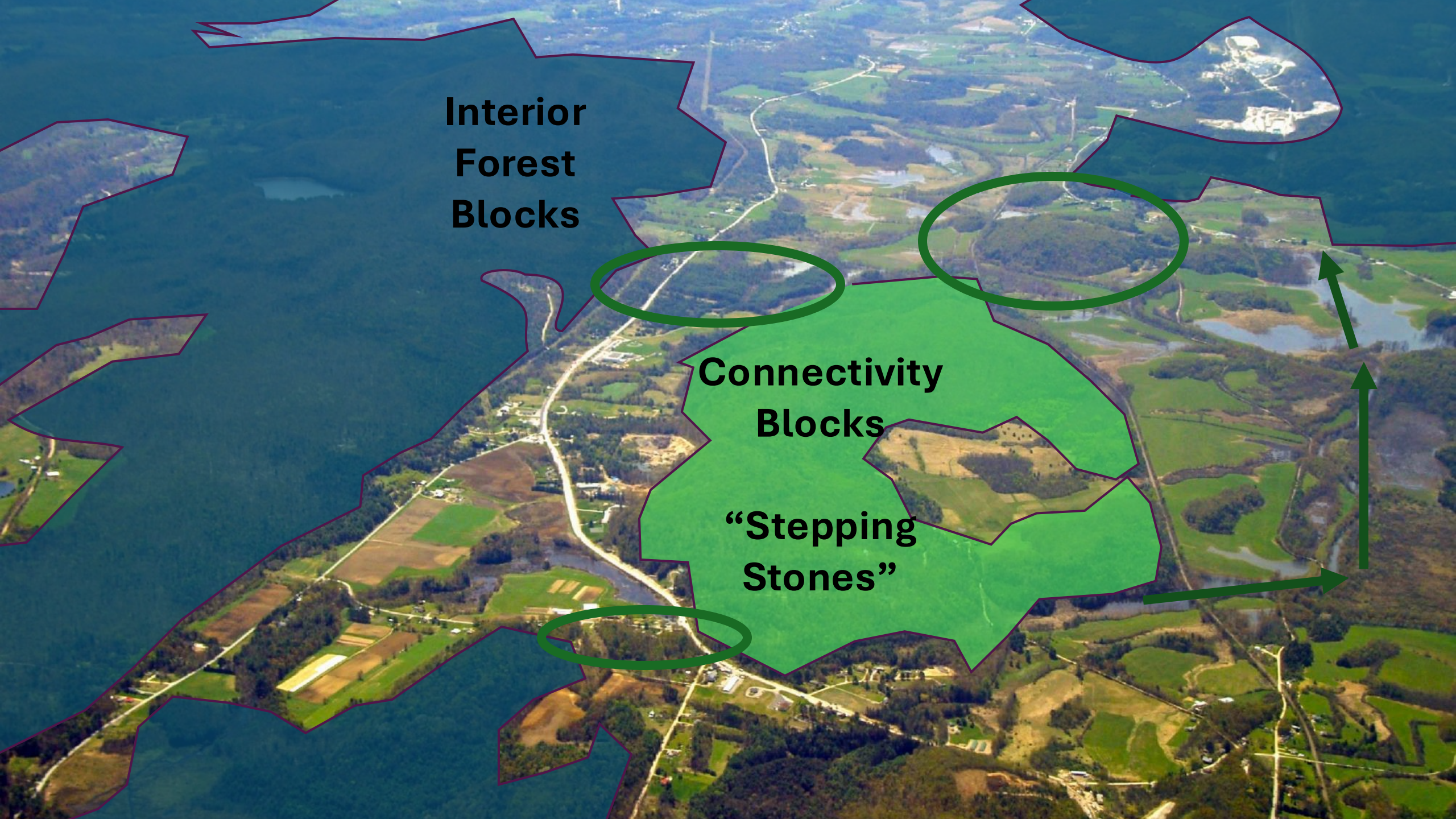
# Percent of each Biophysical Region that is conserved, by Conservation Category



# Example Map of all VCD Highest Priority Forest Blocks, by Conservation Category, in central Vermont







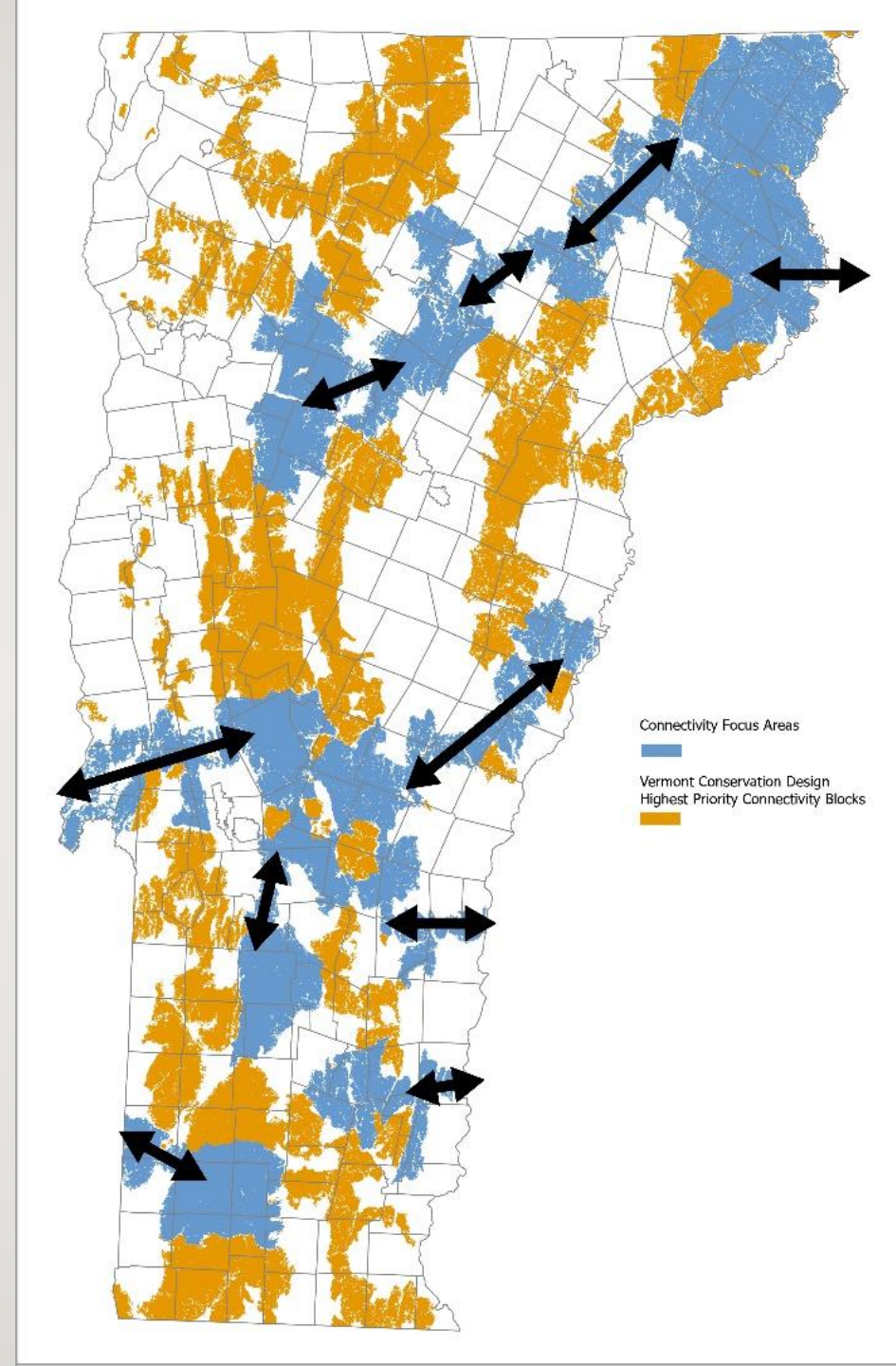
**Interior  
Forest  
Blocks**

**Connectivity  
Blocks**

**“Stepping  
Stones”**

*Figure 5: Connectivity Focus Areas for land protection to support landscape-scale ecological connectivity.*

- Low percentage of permanently conserved lands
- Reflect regional importance
- A small loss of natural habitat in the stepping-stones can have a large impact on statewide and region-wide connectivity



A serene sunset scene over a large body of water. The sun is low on the horizon, creating a bright, golden glow that reflects on the water's surface. In the foreground, several dark, silhouetted rocks are scattered across the water. The background features a dark, silhouetted mountain range under a hazy, orange sky. A single bird is visible in flight near the sun. The overall mood is peaceful and contemplative.

Thank You