Vermont Conservation Design 2023 Update

Vermont Conservation Design is the data and the vision that identifies features at the landscape and natural community scales that are necessary for maintaining an ecologically functional landscape – a landscape that conserves current biological diversity and allows species to move and shift in response to climate and land-use changes. At the landscape scale, users can see patterns in Vermont's forests, waterways, and the places that connect both into functional networks. At the community scale appear significant natural communities, lakes representing high quality examples of different lake types, and similar important features that are vital to assemblages of plants and animals. Finally, a user can see components that support individual species—the habitats and locations on which rare and uncommon species rely, for example. On the map, community and species scale components are combined.

At all scales, Vermont Conservation Design identifies locations of ecological priority. These are divided into "priority" or "highest priority" areas, to allow users to make informed decisions about the locations most suitable for development and those on which to focus conservation efforts.

What makes Vermont Conservation Design unique is that instead of looking at one ecological component at a time—wetlands, rare species, large forest blocks, etc.—Vermont Conservation Design takes a holistic approach, identifying how these components work together to create a functional network of habitat that can be used by most Vermont species. In other words, all components are combined at each scale to identify overall priorities.

BioFinder is the interactive webmap that host the Vermont Conservation Design data.

Year	Product	Map Service	Туре	Meta-data	Version	Notes
2023	Habitat Blocks		Vector	Habitat Blocks 2023 Summary	Replaces 2014 Habitat Blocks	This dataset includes all Habitat Blocks in VT Habitat Blocks are the basic unit for terrestrial landscape scale layers in Vermont Conservation Design but are not a prioritization in and of themselves. Compared to the previous version, the edges of the habitat blocks are more accurate, but because of differing methodologies using newer hi-resolution land cover inputs, comparisons between the two products should be done cautiously. <u>Changes in the amount of forest</u> <u>in 2014 vs 2023 are mostly attributable to</u> <u>different methodology rather than actual change</u> on the ground.
2023	Interior Forest Blocks	VCD Landscape Scale	Vector	Interior Forest Summary Interior Forest Technical Abstract	Replaces 2018 Interior Forest Blocks	This update simplifies the thresholds of highest priority and priority using acreage and core forest thresholds.
2023	Connectivity Blocks	VCD Landscape Scale	Vector	<u>Connectivity Blocks Summary</u> Connectivity Blocks Technical <u>Abstract</u>	Replaces 2018 Connectivity Blocks	This update adds a few smaller "stepping stone" blocks in the Highest Priority class
2023	Geological Diversity Blocks	VCD Landscape Scale	Vector	<u>Geological Diversity Blocks</u> <u>Summary</u> <u>Geological Diversity Blocks</u> <u>Technical Abstract</u>	Replaces 2018 "Physical Landscape Diversity"	This update creates a Priority class that includes geologic settings that are representative of common landscape types (previously included in Highest Priority)
2016	Surface Waters & Riparian Areas	VCD Landscape Scale	Vector	Surface Waters Summary Surface Waters Technical Abstract	Same as previous version in Vermont Conservation Design	This dataset is unchanged since the last version.
2023	Riparian Connectivity	VCD Landscape Scale	Vector	<u>Riparian Connectivity Summary</u> <u>Riparian Connectivity Technical</u> <u>Abstract</u>	Replaces 2018 "Riparian Wildlife Connectivity"	This update uses the LIDAR-derived 0.5m land cover data to identify vegetation in the riparian zone and is much more accurate than the previous version that relied on a 30m land cover pixel.

2023	Natural Communities	VCD Community and Species Scale	Vector	Natural Communities Summary Natural Communities Technical Abstract	Replaces 2018 Natural Communities	This adds natural communities that meet the selection criteria that were entered into the Heritage Database since 2018
2018	Important Aquatic Habitats	VCD Community and Species Scale	Vector	Important Aquatic Habitats Summary Important Aquatic Habitats Technical Abstract	Same as previous version of Vermont Conservation Design	This dataset is unchanged since the last version.
2018	Wetlands	VCD Community and Species Scale	Vector	Wetlands Summary Wetlands Technical Abstract	Same as previous version in Vermont Conservation Design	This dataset is unchanged since the last version. This is NOT the current VSWI. Use the current VSWI for significant wetlands.
2023	Vernal Pools	VCD Community and Species Scale	Vector	<u>Vernal Pools Summary</u> Vernal Pools Technical Abstract	Replaces 2018 Vernal Pools.	This is a subset of the Vernal Pool Mapping project prioritizing confirmed pools. Use the full VCE Vernal Pool mapping project for a complete listing
2023	Wildlife Road Crossings	VCD Community and Species Scale	Vector	Wildlife Road Crossings Summary Wildlife Road Crossings Technical <u>Abstract</u>	Replaces 2018 Wildlife Road Crossings	This dataset has been fundamentally reworked and is a big improvement over the last version, as it focuses on crossing areas where there are forests and wetlands on BOTH sides of the road.
2023	Rare and Uncommon Species	VCD Community and Species Scale	Vector	Rare and uncommon species Summary Rare and uncommon species Technical Abstract	Replaces 2018 Rare and Uncommon Species.	This adds Rare and Uncommon Species that meet the selection criteria that were entered into the Heritage Database since 2018

Services

- Vermont Conservation Design Overall Priorities Map Service: <u>https://anrmaps.vermont.gov/arcgis/rest/services/EGC_Services/MAP_ANR_BIOFINDER4_WM_NOCACHE/MapServer</u>
- Vermont Conservation Design Landscape Components Service: <u>https://anrmaps.vermont.gov/arcgis/rest/services/EGC_Services/MAP_ANR_VCDLANDSCAPECOMPONENTS_WM_NOCACHE/MapServer</u>
- Vermont Conservation Design Species and Community Scale Components: <u>https://anrmaps.vermont.gov/arcgis/rest/services/EGC_Services/MAP_ANR_VCDSPECIESCOMMUNITYSCALE_WM_NOCACHE/MapServe</u> <u>r</u>

 Conservation Targets Map Service: <u>https://anrmaps.vermont.gov/arcgis/rest/services/EGC_Services/MAP_ANR_VCDTARGETS_WM_NOCACHE/MapServer</u>

Applications

- <u>BioFinder</u>
- <u>Agency of Natural Resources Atlas</u>

Documentation

<u>Creating Biofinder & Vermont Conservation Design</u>

Tags List

- Act 171
- Forest Integrity
- Act 174
- Renewable Energy
- Vermont Conservation Design
- Wildlife Habitat
- Conservation Planning
- Biodiversity
- Connectivity
- Climate Change