

Physical Landscapes

Physical landscapes (often referred to as enduring features) are the parts of the landscape that resist change. They are the hills and valleys, the underlying bedrock, and the deposits left behind by glaciers. They remain largely unchanged when changes in land cover and wildlife occur, as plants and animals move, and even as the climate changes.

Ecological Functions

If nature is likened to a dramatic play, it's possible to think of the physical features as the stage and the individual species as the actors. The play is the natural communities, habitats and species that occur in a given place at a given time, but regardless of the action, the stage does not change. The importance of “conserving nature’s stage” is that we can be much more confident in our ability to conserve biological diversity and maintain a functional landscape into the future, with the capacity to adapt and be resilient to climate change, if all elements of physical landscape diversity are represented in the conservation design (Anderson & Ferree 2010; Beier and Brost 2010; Beier et al. 2015).

Highest Priority Features and Guidelines for Maintaining Ecological Function

Vermont Conservation Design identifies conservation of a representative selection of all physical landscapes as highest priority for maintaining ecological function. To do this, the entire landscape design includes all of Vermont’s physical settings roughly proportional to their occurrence in the state. To do so, additional blocks—Physical Landscape Blocks—were added to the highest priority Surface Waters and Riparian Area network and the highest priority Interior

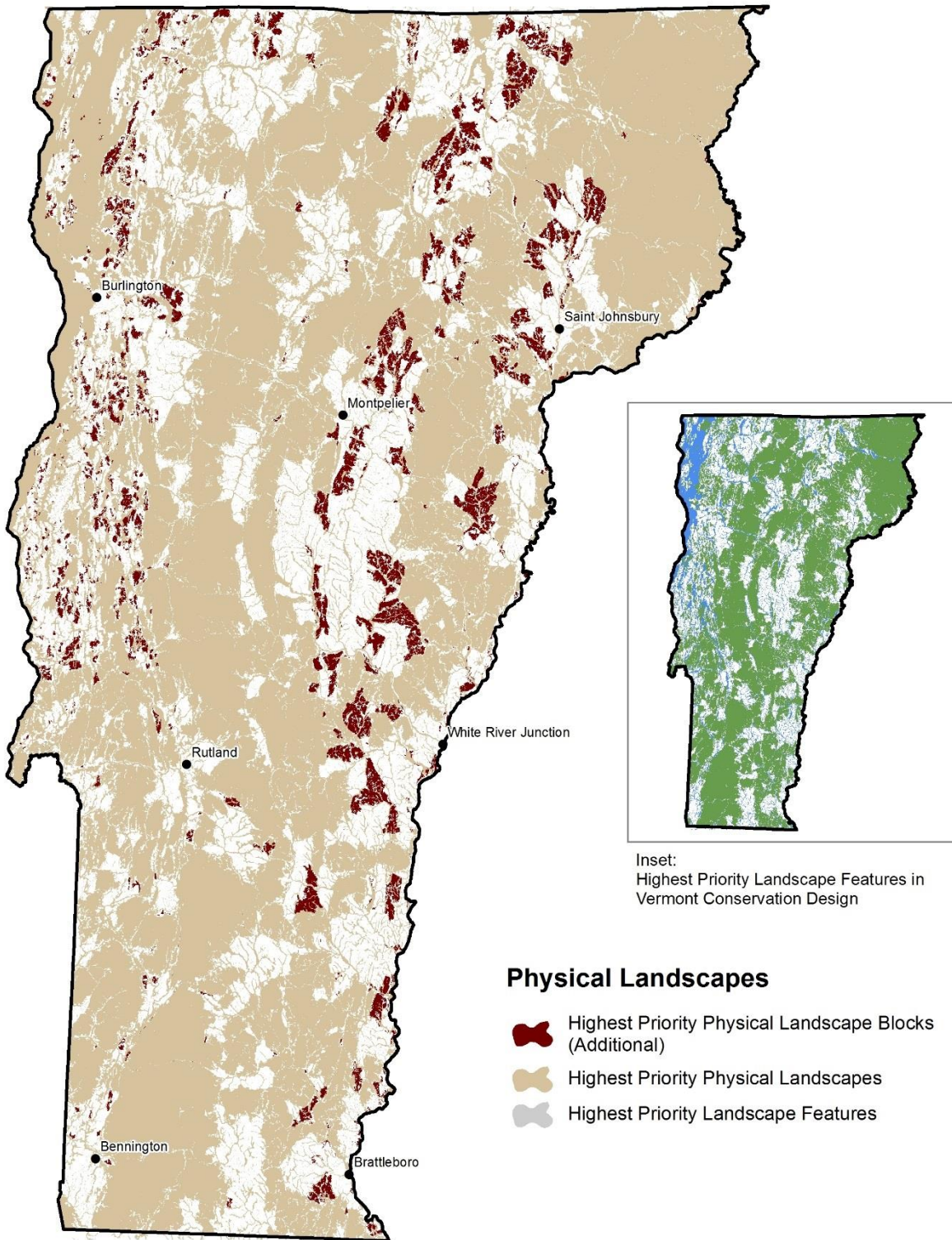


Forest Blocks and Connectivity Blocks in order to reach an overall design that includes the full range of physical diversity found in Vermont. We highlight these Physical Landscape Blocks in Map 4, but stress that the conservation of the entire design is necessary to provide the coarse-filter and climate resilience functions provided by the full range of physical landscapes.

Similar to the Interior Forest Blocks, maintaining and restoring natural vegetation and limiting development within these areas will protect the functions of these physical landscapes. Forest management that maintains forest structure and results in a distribution of all age classes is very compatible with maintaining the physical landscape diversity functions.

For more information on physical landscapes, see the following section in the Part 1 Vermont Conservation Design Technical Report:

- Physical Landscape Diversity Areas



Map 4. Highest Priority Physical Landscapes. Blocks shown in dark red were added to the design specifically to increase representation of rare and important physical settings. Note that Highest Priority Physical Landscapes overlap all of the Highest Priority Landscape Features.