

The Nature Conservancy is a global conservation organization dedicated to conserving the lands and waters on which all life depends. Guided by science, we create innovative solutions to our world's toughest environmental challenges so that nature and people can thrive together. For the past 59 years in Vermont, we have helped conserve over 300,000 acres and 1500 miles of shoreline, and we own and manage 55 natural areas totaling 30,000 acres across the state.

In the policy arena, TNC brings a distinctive science-based, non-partisan, and solutions-focused approach to our 21st century environmental challenges. We advocate for sound public policies that address our water quality, forest health, and climate change concerns, as we strive to shape a resilient Vermont for future generations and sustain our natural systems for all the benefits they provide.

SCIENCE PRODUCTS

LAND

Ecoregional Plans for Biodiversity Conservation (Ongoing) These continuously updated plans identify target sites to conserve the full suite of biodiversity in each of Vermont's three ecoregions, areas that cross state borders and share common groupings of plants, animals and natural communities.

WATER

- Nature-based Solutions to Improve Water Quality and Reduce Flood Risk in the Champlain Basin (2019) In collaboration with UVM's Gund Institute for Environment, we have assessed the best locations within the Lake Champlain Basin to reduce phosphorus inputs to Lake Champlain by restoring wetlands. The study found that targeted wetland restoration could reduce phosphorus loading in the Champlain Basin by up to 10%, roughly one-third of Vermont's TMDL requirement. We have also piloted an assessment of river restoration opportunities to reduce flooding impacts. A Decision Support Tool is under development, expected spring 2019.
- Dam Screening Tool for the Lake Champlain Basin (2017) This web-based tool maps the 400 known dams within the basin and ranks them according to potential ecological impact and opportunity for ecological improvement.
- Water Quality Blueprint for the Lake Champlain Basin (2017) This web-based tool combines biodiversity conservation information with known locations of water quality nonpoint source pollution to provide a mapped prioritization of river corridors and wetlands for conservation and restoration.
- VT Headwaters: Opportunities to Protect and Improve Water Quality and Flood Resilience (In development, expected Spring 2019) Developed jointly by TNC, the Vermont Land Trust, and Milone and MacBroom, Inc., this analysis provides a tiered ranking of headwater areas to protect and restore based on factors that will improve water quality and flood resilience.

CLIMATE

- Resilient and Connected Landscapes for Terrestrial Conservation (2016) We have pioneered the first study to comprehensively map resilient lands and significant climate corridors across Eastern North America. The analysis shows that Vermont has a disproportionate amount of key areas relative to other states in the region.
- How Nature Can Heal Our Planet (2018) This published scientific report led by TNC and 15 other organizations, shows that maximizing nature's ability to tackle climate change at a cost-effective price could have the same annual effect as if the world put a complete stop to the burning of fossil fuels.
- Climate Change in the Lake Champlain Basin: What Natural Resource Managers Can Expect and Do (2010) This concise report on past and predicted trends in climate for the Lake Champlain region recommends actions to mitigate the expected impacts. The results have since been corroborated by a major five-year study conducted by UVM and collaborating institutions. Available on request.

Please contact Phil Huffman (Director of Government Relations & Policy) at **phuffman@tnc.org/802-371-9501** or visit <u>www.nature.org/vermont</u> for more information on our recent projects.

We look forward to continuing the conservation conversation with you.