



**OPEN SPACE
INSTITUTE**

LAND PROTECTION PLANNING IN A CHANGING CLIMATE

A five-year review of the Open Space Institute's
Climate Resilient Landscape Initiative in
Northern New England



HELPING LAND TRUSTS RESPOND EFFECTIVELY TO CLIMATE CHANGE

As the climate changes, one of the best opportunities for safeguarding plant and animal habitat is already being deployed: smart, effective land conservation. By identifying and protecting key networks of “climate-resilient” land — meaning, places that feature diverse microclimates and can serve as habitat for migrating species — plants and animals will be better able to adjust to a changing climate. Moreover, conserving these places will safeguard crucial services like flood control, clean water, and carbon absorption which also benefit humans.

For years, few land trusts understood their important role in ensuring natural and human communities could adapt to climate change. To empower conservation practitioners and mobilize protection of critical climate-resilient lands, the Open Space Institute (OSI) launched the Resilient Landscapes Initiative (RLI) in 2012. In the years since, the RLI has helped to translate emerging climate-resilience science to the land trust community, and rally land trusts of all sizes to conserve target lands.

As demonstrated through the RLI, OSI recognizes that conservation for climate resilience benefits from coordinated planning, and is most effective on a landscape scale. Therefore, OSI undertakes a multi-pronged approach, combining (1) strategic grant-making for protection of climate resilient lands; (2) technical planning support; and (3) education and outreach. Together, these strategies have helped to mobilize science-based approaches to conservation for climate change across the eastern United States.

Launched with funding from Jane’s Trust Foundation, with additional support from the Doris Duke Charitable Foundation, the RLI Catalyst Program has made significant investments in climate-resilience education and planning in Northern New England. This report focuses on the outcomes of that investment.

BUILDING KNOWLEDGE THAT LEADS TO IMPACTS ON THE GROUND

To date, OSI’s Capital Program, supported by the Doris Duke Charitable Foundation, is on track to support the permanent protection of more than 42,000 acres of climate resilient lands. Expanding the reach of the capital grants, OSI’s Catalyst Program oversees education, outreach, and planning grants. Across all or part of 12 eastern states, the Catalyst Program has supported the development of climate-aligned conservation plans that create a blueprint for land protection, while deepening engagement of land trusts through a total of 37 workshops and webinars reaching over 1,200 practitioners.

In Northern New England, the RLI Catalyst Program has amplified over \$ 2.2 million in capital grants to protect 9,718 acres with planning that helps direct strategic land protection across critical areas of Maine, New Hampshire, and Vermont (see Table 1 below). The work has spurred adoption of resilient land protection by state agencies and other conservation partners, and yielded replicable models for climate-smart conservation in other geographies. Catalyst-supported projects, supported by 14 grants (see map and list of awards beginning on page 7), have also garnered media attention, including more than 10 articles published in national and local press, including the *Christian Science Monitor* and *Yale 360*.

TABLE 1: RLI CATALYST PROGRAM BY THE NUMBERS

State	Strategic Conservation Plans Developed	Number of Organizations Engaged	Resilient Acres Permanently Conserved as a Result of Planning Projects	Workshops and Webinars Offered
<i>Maine</i>	8*	29	990 acres	4* with 121 attendees
<i>New Hampshire</i>	5*	33	2,798 acres	3 with 105 attendees
<i>Vermont</i>	3	9	2,500 acres	2 with 85 attendees
Total	16	71	6,288 acres	9 with 326 attendees

*Denotes projects spanning two states. For example, a grant to the Appalachian Mountain Club focused on parts of both Maine and New Hampshire.

As the table above shows, with the support of the RLI Catalyst Program, more than 70 conservation organizations (including land trusts, state agencies, and other partners) participated in creating 16 conservation plans guiding conservation priorities across New England. The end users of these completed plans include many more stakeholders, such as municipalities, community groups, and state agencies.

Additionally, to ensure that the concepts of resilience are understood by land trust members, donors, and partners, OSI and the Land Trust Alliance (LTA) have provided training and technical assistance around communicating about Climate Change. OSI and LTA together hosted two in-person, full-day communications workshops and three online trainings reaching over 200 practitioners. The partners also developed a print publication entitled “[How to Talk about Climate Change](#)” as well as an online resource library hosted on the [LTA website](#), to offer examples of successful climate communications by land trusts.

“Adding the resilience data has helped us assure people their investments are sound. We can show scientific evidence that supports our work, and demonstrate compellingly why we’re deciding to protect specific lands.”

– Dan Kern
Bear-Paw Regional Greenways

MAINE: 12 RIVERS CONSERVATION INITIATIVE



Board and staff gather to look at climate resilience priorities at a gathering of 12 Rivers Conservation Initiative partners in coastal Maine.

The eight land trusts working under the umbrella of the 12 Rivers Conservation Initiative in mid-coast Maine were faced with an ongoing and worsening problem: they wanted to conserve the places in their service area that would make the most difference to future generations, but how and why protect land that might shift or disappear altogether due to sea level rise? Thanks to three Catalyst grants, 12 Rivers was able to target priority areas that will support marsh migration, prevent damage to inland areas, and help ensure species and people can effectively adapt as sea levels rise (see page 8 for list of awards).

The grants also helped the organization forge new relationships with land trusts working at the edges of its 825,000-acre service area. Buoyed by this new perspective of the region as a “climate-resilient landscape,” the partnership hosted a workshop for land trust staff and board members on strategies to communicate about climate change with key stakeholders, from landowners to municipal planning boards, and has shared their story with others wrestling with sea level rise in South Carolina. As a result, eight conservation plans, include the State’s own Wildlife Action Plan covering all of Maine, have adopted a climate resilience Lens.

NEW HAMPSHIRE: BEAR-PAW REGIONAL GREENWAY

It is not always necessary to be a large organization to make an impact on climate change — or to influence the wider conservation field. Bear-Paw Regional Greenways, then consisting of a single staff person based in southeastern New Hampshire, was an early grantee and among the first land trusts in the country to integrate climate resilience into its conservation planning. The lasting impact of this pioneering effort extends well beyond Bear-Paw's 11-town service area. Today, its partners the New Hampshire Chapter of The Nature Conservancy and the New Hampshire Fish and Game Department remain active in climate-resilience work. Resilience science was even incorporated into New Hampshire's Wildlife Action Plan, which guides annual conservation funding of as much as \$4 million annually.

VERMONT: VERMONT CONSERVATION DESIGN

Conservation for climate resilience requires a landscape-scale perspective, and benefits from a coordinated approach. This is the premise behind the Vermont Conservation Design (VCD), developed by the Vermont Agency of Natural Resources as a statewide framework to guide conservation action and funding. A Catalyst grant from OSI enabled the Vermont Land Trust to bring regional climate resilience data from The Nature Conservancy into the state's analysis to refine the VCD's conservation priorities with a climate-resilience lens.

A workshop on the resulting climate-informed plan attracted 70 land trust and conservation professionals, who will be key partners in implementing the vision across the state. Aided by another round of Catalyst funding, the Vermont Land Trust is now helping to update the Agency of Natural Resources' land acquisition strategy, embedding the VCD's climate change priorities into state policy and informing deployment of as much as \$3 million annually for conservation acquisitions.

“We are incorporating more climate change context into our work, and we are looking for ways to talk about it that keeps a range of different people engaged, without using the kinds of buzzwords that can close the conversation.”

– Anna Fiedler
12 Rivers Conservation Initiative

BUILDING CAPACITY THROUGH PARTNERSHIPS

Strong partnerships make work more effective and efficient. OSI has engaged key partners working in Northern New England to coordinate education and to build the local resources on climate change available to land trusts. The Land Trust Alliance, which engages its 90 member land trusts in Northern New England through capacity building and education, has been a valued partner in hosting workshops and leading climate communications work under Jane's Trust Foundation Grants. Together, OSI and the Alliance have engaged each of the state land trust associations in hosting workshops and ensuring work and outreach to land trusts was coordinated and effective. The Nature Conservancy has also been an early and effective partner, and is now ramping up outreach on climate resilience in each of the three Northern New England states.

LOOKING FORWARD

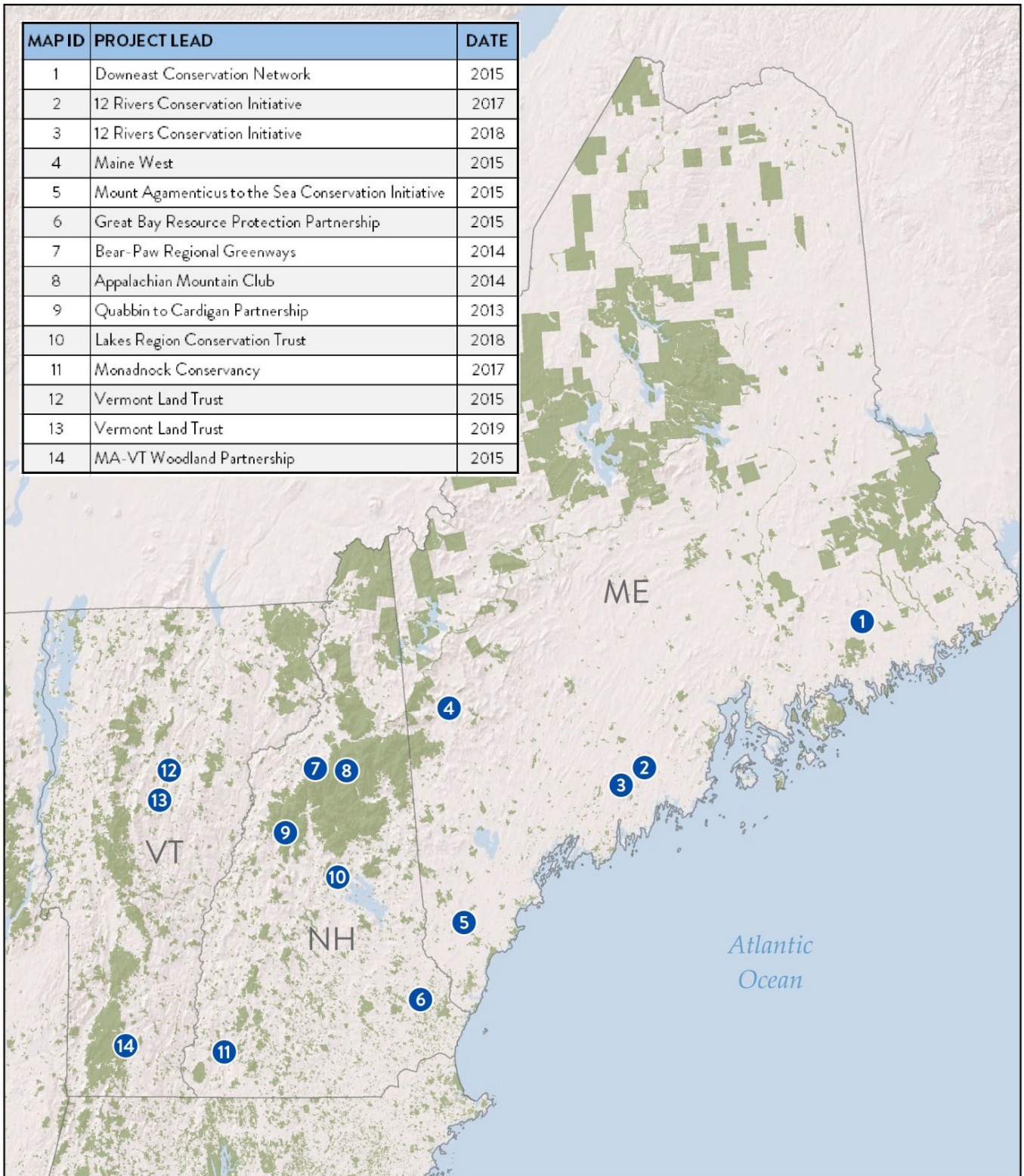
Six years after OSI launched the RLI with the support of Jane's Trust Foundation, there is now greater awareness and stronger plans guiding land protection to support adaptation for natural and human communities. Workshop surveys suggest that as many as 45% of land trusts in Northern New England have conservation plans that integrates climate change impacts on wildlife. Now, The Nature Conservancy and Land Trust Alliance are taking up the torch to support land trust implementation of ecological resilience.

As OSI looks ahead, there is a strong need to continue to support land trusts in understanding their role in addressing fresh water and coastal flooding and in reducing atmospheric carbon through carbon sequestration that can complement and amplify their protection of climate resilience landscapes. With all three Northern New England states active participants in the Climate Alliance, there is also a strong need to support states in meeting their Working and Natural Lands carbon mitigation goals through effective land protection. With research underway and partnerships in development, these two challenges are the focus of OSI's work



Tucker Mountain, Vermont (Tom Kidder)

MAP ID	PROJECT LEAD	DATE
1	Downeast Conservation Network	2015
2	12 Rivers Conservation Initiative	2017
3	12 Rivers Conservation Initiative	2018
4	Maine West	2015
5	Mount Agamenticus to the Sea Conservation Initiative	2015
6	Great Bay Resource Protection Partnership	2015
7	Bear-Paw Regional Greenways	2014
8	Appalachian Mountain Club	2014
9	Quabbin to Cardigan Partnership	2013
10	Lakes Region Conservation Trust	2018
11	Monadnock Conservancy	2017
12	Vermont Land Trust	2015
13	Vermont Land Trust	2019
14	MA-VT Woodland Partnership	2015



 Grant  Protected Land

0 50 100 Miles




STRATEGIC CONSERVATION PLANNING GRANT AWARDS IN NORTHERN NEW ENGLAND

Project Lead	Project Description	Grant Amount	Date	State
Appalachian Mountain Club	Completed an assessment of the resilience of the high peaks region and integrated climate change into the Androscoggin Atlas	\$20,890	2014	ME, NH
Bear-Paw Regional Greenways	Developed a climate-inclusive conservation plan for their 11-town service area	\$7,500	2014	NH
Highstead	Grant to Highstead allowed this organization to provide technical assistance and grants to four Regional Conservation Partnerships in Northern New England	\$34,000	2015	ME, NH, VT
MA-VT Woodland Partnership	With support from Highstead, developed a climate-inclusive conservation plan	see Highstead	2015	VT
Downeast Conservation Network	With support from Highstead, developed a climate-inclusive conservation plan	see Highstead	2015	ME
Quabbin to Cardigan Partnership	With support from Highstead, developed a climate-inclusive conservation plan	see Highstead	2015	NH, MA
Great Bay Resource Protection Partnership	Presentations and technical support from Highstead allowed for education and outreach on climate change to this partnership	see Highstead	2015	NH
Maine West	Regrant from Highstead resulted in a climate-inclusive conservation plan	see Highstead	2015	ME
Mount Agamenticus to the Sea Conservation Initiative	Working with State agency partners, developed a local conservation plan and review state priorities against resilience datasets	\$19,001	2015	ME
12 Rivers Conservation Initiative	Working with OSI staff, integrated resilience and coastal marsh migration into future priorities	\$3,000; \$7,500*	2017 and 2018	ME
Monadnock Conservancy	Developed a climate-inclusive conservation plan	\$3,000	2017	NH
Lakes Region Conservation Trust	Developed corridor priorities in and out of the region to support wildlife migration	\$7,500*	2017	NH
Vermont Land Trust	Integrated climate resilience strategies into the Vermont Agency of Natural Resources acquisition plan	\$7,000; \$10,000	2015 and 2019	VT

* Asterisk indicates that the financial support for the project was provided by a partner as match to Jane's Trust funding

ABOUT THE OPEN SPACE INSTITUTE

The Open Space Institute protects scenic, natural, and historic landscapes to provide public enjoyment, conserve habitat and working lands, and sustain communities. Working from Canada to Florida, OSI has noteworthy transactional expertise. We have partnered in the protection of 2.2 million acres. OSI has achieved land conservation at a landscape-scale - no easy feat in the Northeast, the country's most heavily populated region.

The Open Space Institute partners with public and private individuals and organizations on conservation programs and projects in the regions where we work, including financing acquisitions, developing conservation strategies, and ensuring ground management, stewardship, and responsible public use of the lands we've worked to protect.

We understand conservation politics at the federal, state, and local levels. With our experienced and thoughtful staff, we stand ready to refine and advance a national conservation agenda that will bring meaningful conservation results through the effective leverage of growing political constituencies, diverse funding sources, and financing tools.

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CONTACT

Abigail Weinberg
Director of Research
212-290-8200 x 1235
aweinberg@osiny.org



OPEN SPACE
INSTITUTE

1350 BROADWAY SUITE 201
NEW YORK, NY 10018
212-290-8200
openspaceinstitute.org