



*Launching a New*  
**CLIMATE CHANGE**  
**INITIATIVE** *for Land Trusts*

BY Erin Heskett and Erin Derrington



*“I believe we have a moral obligation to address the greatest environmental crisis of our time,” Andrew Bowman, president of the Land Trust Alliance, told the crowd at Rally 2016. “The land trust community can help mitigate climate change by doing what we’ve always done: conserving more land and stewarding it effectively. In doing so we will demonstrate our relevance to people and their well-being, while simultaneously bringing home significant financial resources to power our land conservation efforts.”*

Recognizing the important role land conservation and the land trust community can play in combatting climate change, in January 2017 the Land Trust Alliance launched a new program to provide land trusts with strategies, training and tools to both adapt to and mitigate climate change in their land conservation work. The Land Trust Climate Change Initiative (the Initiative) is funded by a generous catalyst grant from the Doris Duke Charitable Foundation (see box on page 17).

The goals of the Initiative include:

- 1. Increasing the number of land trusts whose strategic conservation plans address climate impacts and promote climate resilience.** The Alliance has developed a partnership with the Open Space Institute (accredited) to deliver training and tools for land trusts that want to incorporate climate science into their acquisition and stewardship planning.
- 2. Advancing the use of land to mitigate climate change, in partnership with The Nature Conservancy (accredited), Finite Carbon, government partners and others.** To do this, the Alliance will:
  - Promote the concept of natural climate solutions (i.e., the ability of soils and vegetation to absorb carbon) within the land trust community;
  - Help land trusts participate in carbon markets (primarily the California Compliance Offset Program) and federal carbon-reduction programs; and
  - Shape federal policies targeting private landowners to promote natural climate solutions.

- 3. Empowering land trusts to encourage the build-out of renewable energy facilities while steering them away from sensitive lands through a pilot project in New York state.** As part of a larger stakeholder process led by The Nature Conservancy, this effort will help shape New York state policy and guidelines related to renewable energy siting. The Alliance will use the outcomes and lessons learned from this pilot to help land trusts effectively navigate similar challenges in other states.

Many land trusts are already addressing climate change, including planning for adaptation and resilience in their service areas, and exploring the role that land management and acquisition can play to help slow the pace of climate change. The Initiative will provide resources and training to help these land trusts advance their work and empower those just getting started to integrate planning and projects that address climate change as part of their core missions.

The Alliance has developed a collection of case studies that offer examples of how land trusts are working to address climate change in their communities. The following two case studies illustrate the types of projects and outcomes the Alliance aims to expand across the land trust community through its Initiative. Land trusts can read all of the case studies in detail on the Alliance’s climate change website (see Resources box on page 16) and find the resources they need to take action.

## HOW DO FOREST CARBON OFFSET PROJECTS WORK?

The California cap-and-trade program's goal is to reduce greenhouse gas emissions in the state to 1990 levels by the year 2020 and achieve an 80% reduction from 1990 levels by 2050. Mandatory compliance with the emissions cap began in 2013 for electric utilities and large industrial facilities in the state and in 2015 for distributors of transportation, natural gas and other fuels. The owners of these facilities can purchase offsets to meet their greenhouse gas emissions obligations. The California Forest Protocol provides detailed and rigorous standards for forest projects to earn offsets.

### Managing Forests to Absorb Carbon and Fund Conservation

In November 2013, Finite Carbon (a developer of forest carbon offsets) and Downeast Lakes Land Trust (DLLT) registered the Farm Cove Carbon Project in the California Compliance Offset Program, one of the first two "improved forest management" projects to be registered in the United States under the California Air Resources Board's cap-and-trade program.

An initial issuance of nearly 200,000 carbon offsets (each offset is equivalent to one ton of carbon dioxide) valued at more than \$2 million was awarded to DLLT. A second project in August 2016—registered by DLLT, Finite Carbon and the Lyme Timber Company—generated over 450,000 offsets and nearly \$5 million in revenue. DLLT has reinvested the income from these carbon projects into conserving vital land and habitat surrounding the community of Grand Lake Stream, Maine.



Downeast Lakes Land Trust volunteers harvest balsam fir tips for an annual community wreath-making event.

The Downeast Lakes region is a haven for fishing, hunting and ecotourism. "Guiding, logging and traditional crafts, such as canoe building, provide many local jobs, all of which depend on public access to healthy forests," says DLLT Executive Director David Montague.

DLLT acquires working forestland that it then sustainably manages for wildlife habitat, public recreation, improved water quality and a thriving forest products economy. Realizing that these forests could be registered with the California cap-and-trade program, DLLT contracted with Finite Carbon. The California cap-and-trade program aligns well with DLLT's long-term management philosophy, which focuses on increasing timber stocking (a term referring to the quantitative measure of the area occupied by trees) and improving habitat for wildlife.

The income from these projects catalyzed more conservation. The first carbon offsets project sparked a \$19.4 million campaign for the acquisition of the 21,870-acre West Grand Lake Community Forest. That property was combined with the Farm Cove Community Forest to create one of the largest community forests in the nation. The West Grand Lake parcel is an integral piece of a 1.4-million-acre international corridor of conserved forests and wetlands between Maine and northern New Brunswick, Canada.

Peter Stein, a Lyme Timber Company managing director, said, "We are proud to be part of a project that will enhance

carbon storage and preserve forest values for generations."

DLLT's two carbon projects require its commitment to manage forest stocking at or above a sustainable level for 100 years. The projects encompass over 40,000 acres and will continue to provide valuable support for community-led conservation and a flourishing traditional economy.

### Projecting and Buffering Against Sea Level Rise Impacts

The Hudson River Valley region is a dynamic environment bordering the largest megacity in the United States. Once hosting a variety of industries, Hudson riverfront communities are once again looking to their waterfronts as the key to unlocking their economic futures through a mix of parkland and residential and commercial development. Yet, as Superstorm Sandy and tropical storms Irene and Lee demonstrated, these very same riverfront communities face unprecedented challenges from accelerating sea level rise and the increased frequency of flooding, storm surges and severe weather events.

Scenic Hudson, an accredited land trust, is spearheading efforts to ensure its landholdings will conserve ecologically significant processes and habitats by projecting sea level rise impacts and using GIS mapping to prioritize critical conservation areas that, among other things,

## Resources

Land Trust Alliance climate change website: <http://climatechange.lta.org>

Open Space Institute's *Conserving Nature in a Changing Climate*  
 A guide to help land trusts understand and incorporate terrestrial resilience science into their conservation plans. Available on the website above.



1 Scenic Hudson Park at Peekskill Landing on the Hudson River in Westchester County, New York. Scenic Hudson is helping riverfront communities unlock their economic futures through a mix of parkland and residential and commercial development. ROBERT RODRIGUEZ JR.



2 Flooding at Scenic Hudson's Long Dock Park after Superstorm Sandy. ED MENDOZA



3 The Hudson River shoreline at Esopus Meadows in Ulster County, New York. ROBERT RODRIGUEZ JR. / WWW.ROBERTRODRIGUEZJR.COM

will provide pathways for the migration of tidal wetlands. It is also sharing this data with communities and partners throughout the Hudson River Estuary to help these communities become more resilient. For instance, wetlands can provide valuable storm buffering services by absorbing floodwaters and dissipating wave energy, increasing the resilience of the adjacent uplands and waterfront communities.

Following the swell of public interest that emerged after Sandy and Irene, Scenic Hudson spearheaded 10-month-long, community-based Sea Level Rise Task Forces in three riverfront cities and villages. The task forces examined data on the impact of various sea level rise scenarios at the local level and developed land use and other recommendations for their local elected officials. Scenic Hudson worked with the New York State Departments of Environmental Conservation and State to compile various information resources, including its estuary-wide Sea Level Rise Mapper (SLR Mapper), to inform long-term planning, as well as to aid its own strategic acquisition planning efforts.

Scenic Hudson's SLR Mapper, launched in 2013, uses LIDAR-based elevation data for the estuary to display increments of sea level rise and draws on current census data in order to place potential impacts in a socio-economic context. Projections for future sea level rise along the Hudson River and elsewhere in the state have been provided in the recent ClimAID reports from the New York

State Energy Research and Development Authority. The SLR Mapper is a powerful tool that helps communities shape future development and conservation in a manner that anticipates the impacts of sea level rise.

Scenic Hudson also conducted research to understand the response of the estuary's tidal wetlands to sea level rise, and in May 2016, released the groundbreaking report *Protecting The Pathways: A Climate Change Adaptation Framework for Hudson River Estuary Tidal Wetlands*. "Our study found that the estuary's tidal wetlands have significant potential to expand inland, or migrate," said Nava Tabak, Scenic Hudson's conservation scientist. "In response, we have begun to focus conservation, outreach and policy advocacy efforts to protect these wetland migration pathways."

"These analyses complement each other in enabling us to address climate change on multiple fronts in order for our region to be truly resilient to threats," says Seth McKee, Scenic Hudson's land conservation director.

## A Critical Time

The Land Trust Climate Change Initiative is designed to help land trusts prepare and respond to climate change at a time when land conservation is more important than ever. The next five to 15 years are critical for global action if we want to abate the worst impacts of climate change, and land trusts have an opportunity to occupy a critical niche in this arena. Protecting and stewarding land is a core mission of the land trust community, and through effective planning and targeted land acquisition, land trusts can help strengthen the resilience of our lands for plants, animals and people as climate impacts increase in the decades to come. 🌿

**ERIN HESKETT** IS DIRECTOR OF NATIONAL AND REGIONAL SERVICES FOR THE LAND TRUST ALLIANCE. **ERIN DERRINGTON** HELPED TO BUILD AND NOW MANAGES THE ALLIANCE'S CLIMATE CHANGE WEBSITE AND WROTE THE CASE STUDIES ON IT. THE ALLIANCE CONTINUES TO COLLECT CASE STUDIES HIGHLIGHTING CLIMATE ACTION. CONTACT ERIN DERRINGTON AT EDERRINGTON@LTA.ORG TO SHARE YOUR STORY.

## The Catalyst

The Doris Duke Charitable Foundation's \$1 million grant to the Land Trust Alliance has launched the new Land Trust Climate Change Initiative. The grant will catalyze support from other sources to provide \$2 million over four years. "We share the Land Trust Alliance's commitment to creating enduring conservation outcomes and are excited to support the launch of this critical effort," said Sacha Spector, director of the Doris Duke Charitable Foundation's Environment Program. "We encourage land trusts across the country to make climate change considerations an essential element of their work and welcome other funders to help extend the reach of this important initiative."