

**NALCC Demonstration Project Title:** White Mountains to Moosehead Lake Initiative—Parcel Level Planning, Progress Tracking and Stakeholder Engagement to Advance Resilient Landscape Conservation

**Project lead:**

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**NALCC Funds Requested:** \$20,000 for staff time, travel, meetings, and development of online applications. NALCC funds will be leveraged by \$140,000 already raised for this planning project by The Trust for Public Land, and prospectively an additional \$250,000 grant that is pending final review by the Wildlife Conservation Society. The latter grant will be used to help design climate resilient features, including a high elevation ecological reserve at Crocker Mountain, into our current and emerging projects.

**Description of the Proposed Project:** The White Mountains to Moosehead Lake corridor covers 2.7 million acres from northern New Hampshire into western Maine. This landscape is of unique interest for climate resilience due to its role in mega regional connectivity, its regionally unique geology, such as ultramafic settings, its great diversity of elevation, slope, and aspect, and its well-watered hydrology. The focus area has been designed to maximize alignment with the *Resilient Sites for Terrestrial Conservation* dataset (Anderson et al., 2012) and with habitat for climate-sensitive species, such as Bicknell's thrush and eastern brook trout. The Trust for Public Land is coordinating a coalition of more than twenty stakeholder organizations working collaboratively to conserve, restore, and appropriately manage this landscape.

The work proposed under this NALCC Demonstration Project is development of a parcel level plan to prioritize tracts for conservation and other activities (e.g., development of ecological reserves on existing conservation land) based on their significance for climate resilience. A range of data will be used, including data funded with assistance from the NALCC. The demonstration project also includes an important new online progress tracking tool that will be used by The Trust for Public Land and its partner organizations. This tracking tool, hosted on Databasin, will allow all the partners to assess how each potential and completed project

addresses priority metrics and the data associated with them. For example, we will be able to assess the number of priority acres within the *Resilient Sites* dataset that were protected within each conservation project. Will also be able to aggregate total accomplishments over different time horizons and track our overall rate of progress on each metric.

Further, this project will make this planning and prioritization available to stakeholders in two ways. The Trust for Public Land will develop an online portal so that stakeholders can view the data, develop customized maps, and access datasets for download. Second, The Trust for Public Land will hold meetings for stakeholders, private landowners, and others who can play a role in utilizing this information for the development of projects, forest plans, and other relevant activities.

Lastly, The Trust for Public Land will take the results of this Demonstration Project beyond the region by presenting at conferences and to interested groups pursuing similar goals in other parts of the NALCC geography.

a. **In what area or state(s) will your project be conducted?** The White Mountain to Moosehead Lake corridor stretches 2.7 million acres from Coos County, New Hampshire to Somerset County, Maine. It is dominated by long ridgelines and high peaks, including the vast majority of Maine's mountains over 4,000 feet in elevation. The geography includes portions of the Androscoggin River watershed and the Kennebec River watershed, including the highest elevation Atlantic salmon habitat in the entire Kennebec drainage. It also contains a substantial concentration of major lakes, including Lake Umbagog and the Rangeley Lakes. The corridor contains a wide diversity of public land ownerships, including federal ownerships through U.S. Fish and Wildlife Service, National Park Service, U.S. Forest Service, and Department of Defense. It also includes tribal lands, myriad state lands, and community owned lands. Lastly, the region has significant private land under conservation easement.

TPL and its partners have traditionally focused on large pieces of the White Mountains to Moosehead Lake corridor (e.g. Mahoosuc Range and Maine's High Peaks) based on their significance within the State Wildlife Action Plans of ME and NH, the Eastern Brook Trout Joint Venture, Staying Connected, Northern Forest Alliance priority areas, and other relevant data. However, new data has shown that the White Mountains to Moosehead Lake region functions in important ways as a single ecological unit, and must remain connected to meet its potential to promote climate resilience. Further, the landscape has a high degree of naturally resilient sites and a strong concentration of climate-sensitive species, such as Bicknell's thrush. This new planning effort will be the first spatially explicit conservation plan covering this entire corridor. Significantly, the U.S. Fish and Wildlife Service announced in July 2012 the approval of a Preliminary Project Proposal for a new High Peaks National Wildlife Refuge within this corridor. The refuge is intended in part to provide a demonstration site for promoting climate resilience.

Our myriad partners in this initiative reflect this diverse landscape. They include U.S. Fish and Wildlife Service, National Park Service, U.S. Forest Service, States of Maine and New Hampshire, Appalachian Mountain Club, The Wilderness Society, The Conservation Fund, Forest Society of Maine, Bethel Land Trust, Rangeley Lakes Heritage Trust, Northern Forest Center, Tri-County CAP, Quebec-Labrador Foundation, and many other partners. Reflecting the region's many diverse interests and assets, the White Mountains to Moosehead Lake corridor has been named a pilot project under the Obama administration's America's Great Outdoors initiative.

**b. What are the start date projected end date of the project?** The activities under the NALCC Demonstration Project will commence in the fall of 2012 and continue through 2013 as new LCC-funded data becomes available. While the NALCC funds will support integration of specific new datasets at the outset of the project, they will also support integration over time of new NALCC-funded datasets that will become available over the course of 2013. The online portal will give us the ability to achieve this “rolling” analysis instead of being constrained solely to a single analysis tied up in a printed document. The tracking tools will be completed by the end of 2012. The stakeholder engagement activities will begin in early 2013, as our initial analysis has been completed and put into appropriate format to share with diverse audiences.

**c. What is the goal of your project and what major objectives or tasks will you undertake to achieve that goal?**

The purpose of the White Mountains to Moosehead Lake Demonstration Project is to show how NALCC science products can be used to inform conservation planning for a habitat and resilience “hot spot” within the LCC. Through this demonstration project, TPL will integrate multiple NALCC science products and other data into a parcel-level GIS conservation plan for the 2.7 million-acre White Mountains to Moosehead Lake focus area of Maine and New Hampshire. TPL will coordinate with LCC staff to assure that all relevant NALCC science products are utilized and integrated appropriately.

The White Mountains to Moosehead Lake conservation plan will be used by TPL and a wide range of public and private partners working within this landscape to inform conservation project selection and project design, guide outreach and technical assistance to private landowners, identify restoration opportunities, design ecological reserves, and construct adaptive management regimes. Aligning this plan with LCC science will demonstrate how landscape-level information at the LCC scale can be translated to help partners deliver more effective on the ground delivery of habitat conservation across priority habitat focus areas within the NALCC. Making this linkage supports the Northeast Conservation Framework design for coordinated, range-wide conservation of priority species, and supports development and implementation of the NALCC Conservation Design being led by Steve Fuller.

In summary, we believe that this project aligns extremely well with NALCC Demonstration Project Criteria established by the ad hoc committee and endorsed by the NALCC Steering Committee:

- √ aligns with the Northeast Regional Conservation Framework
- √ facilitates science translation, adoption, and delivery, including utilization of LCC-funded science tools
- √ promotes multi-partner coordination at state and local levels
- √ makes NALCC’s work “real and tangible” for our conservation partners and other key audiences (e.g., municipalities, regional planning entities)
- √ informs local conservation planning efforts, but does not advocate predetermined regulatory approaches

**d. What are the methods by which you propose to carry out your work?**

The White Mountains to Moosehead Lake planning work is being driven through a balance of complementary techniques—primarily data collection and analysis complemented by an expert panel. TPL has established a Technical Advisory Team and a broader Advisory Group to begin developing this analysis. These stakeholder groups complement planning capacity through TPL’s Conservation Vision staff. The Technical Advisory Team is helping to identify appropriate data sets and ground-truth GIS data with local knowledge. In addition, TPL is working with technical experts on different aspects of the plan, such as fisheries, to provide direct input beyond just data. The input of these individuals is particularly important to developing the objectives and metrics for particular species and habitat types that will be built into the plan.

Under the proposed Demonstration Project, this balance of data-driven analysis complemented by expert evaluation will be applied to new coarse filter and fine filter data for the White Mountains to Moosehead Lake focus area. Priority species within this landscape include Canada lynx, American marten, Bicknell’s thrush, eastern brook trout, and Atlantic salmon, and our efforts will be aimed to promote resilience for these species and a small group of others that represent suites of species and habitats across this region.

The new White Mountains to Moosehead Lake resilience plan is designed to reshape and better integrate the on the ground work in this landscape to reflect new information developed by the NALCC and other sources. The recent release of initial components of the *Designing Sustainable Landscapes* data has illuminated important landscape-level connections that had been previously overlooked. For example, TPL and the Technical Advisory Team for the White Mountains to Moosehead Lake planning project have redesigned the initial planning area in response to *Resilient Sites for Terrestrial Conservation in the Northeast and Mid-Atlantic Region (The Nature Conservancy – Anderson et al., 2012)*. The redesign has added 700,000 acres to the original 2 million-acre planning area, and has significantly increased the complexity of the project. Additional work will be needed to model parcel-level priorities within the context of this and other new data, such as the *Designing Sustainable Landscapes* data that is being developed specific to the Kennebec River watershed.

TPL and its partners will also integrate (at minimum) the following LCC-funded science products:

- Additional elements of *Designing Sustainable Landscapes in the North Atlantic Landscape Conservation Cooperative (LCC and University of Massachusetts Amherst—McGarigal et al.)*
- *Forecasting Streamflow (LCC and University of Massachusetts—Lecher, et al.)*
- *Landscape conservation design and synthesis of regional information for State Wildlife Action Plan Updates (LCC and Northeast States)*

e. **What measurable products or outcomes will result from your project?**

TPL has committed \$140,000 to develop the White Mountains to Moosehead Lake resilience plan. We are also in the final round of consideration for a \$250,000 grant that will support resilience-oriented project design. Lastly, we have secured \$29 million of a needed \$30 million to complete almost 50,000 acres of current conservation projects in this region, projects that will become our initial templates for resilience-oriented project design. The requested \$20,000 (a portion of the \$60,000 FY 12 NALCC Demonstration Project recommendation) will cover staff time of GIS technicians and time and expenses related to data collection and analysis, convening the Technical Advisory Team, identifying and meeting with experts, and other related tasks that will go into completing our landscape conservation plan and the associated online tools for

collaboration, updating, and tracking. The funding will also be used to make the final products accessible so that we maximize the potential for education and replication. This includes public meetings with stakeholders within the White Mountains to Moosehead Lake region, presentations to interested parties from other geographies within the NALCC, and development of an online web mapping application so that interested parties can utilize the plan or review it for educational purposes. The White Mountains to Moosehead Lake conservation plan and associated online products will tentatively be finalized by the end of calendar year 2012, with the public meetings and associated products to follow in 2013. Rolling updates of the plan with new LCC data will also continue in 2013. Finally, the funding will be used to help cover staff time and travel costs associated with sharing the results of our work in other venues within the NALCC to promote replication.

#### Products:

Completed parcel level analysis showing priorities for resilience across the White Mountains to Moosehead Lake corridor

- A publication will be created with the initial results, anticipated in early 2013.
- A password protected online portal and tracking tool will be created on Databasin and made available to all participating stakeholders and any interested NALCC stakeholders

The Trust for Public Land will hold at least three public stakeholder meetings across the White Mountains to Moosehead Lake corridor to release the results of our initial analysis

The Trust for Public Land will update the analysis at least once in the course of 2013 to integrate new data anticipated from NALCC-funded investigators in the latter half of that year

The Trust for Public Land will present on its results in late 2013 or early 2014 to the NALCC Steering Committee meeting and one additional public forum.

#### **e. Budget**

Personnel	\$17,000
Travel and Meeting Expenses	\$3,000
Direct match	\$140,000

(Note: We can detail these matching funds if needed)

#### **F. Qualifications of Principal Investigators**

##### **Kelley Hart**

As Associate Director for TPL's Conservation Vision Services, Kelley Hart designs and manages strategic park and conservation planning processes and research projects for local governments, TPL staff and other partners. This includes forming and managing steering committees; conducting targeted interviews; overseeing current conditions research; facilitating community consensus-building that generates tangible results; and supervising development of outreach materials. Kelley worked previously as a staff attorney at UCLA Law School's Environmental Law Center, where she supervised various student projects, including an assessment of Los Angeles County's stormwater permit and municipality compliance. She has conducted extensive

research on using green infrastructure solutions to mitigate flooding and water pollution, and she co-authored *Path to Protection: Ten Strategies for Successful Source Water Protection*. In 2003 she published the “The Mojave Desert as Grounds for Change: Clarifying Property Rights in California’s Groundwater to Make Extraction Sustainable Statewide,” in *Hastings West-Northwest Journal of Environmental Law and Policy*. Kelley has also had previous environmental planning and policy experience working in the private sector and for the federal government. Kelley has a B.A. in Government from Dartmouth College, and she earned a JD and a Masters in Urban Planning from the University of California, Los Angeles.

### **Bob Heuer**

Bob Heuer is Associate GIS Director for The Trust for Public Land. Mr. Heuer manages the GIS component for TPL’s *Greenprint* projects, ParkScore™ Project, Protected Places Initiative, Large Landscape Analysis, and provides expertise in developing new tools and standards for use in TPL’s GIS work. He received the Special Achievement in GIS Award from ESRI in 2006. Mr. Heuer holds a Master’s degree in geography from the University of New Mexico.

### **Mitchel Hannon**

Mitchel Hannon is a GIS Program Manager for The Trust for Public Land. Since 2005 he has developed land conservation priority models for communities across the country, developing GIS models to identify working lands, wildlife priorities, connectivity corridors, water quality and park access priorities. Using training acquired through a M.S. in Biology from the University of Nevada-Reno and 5 years as a biologist in the Yellowstone Ecosystem, he uses GIS to transfer scientific information to the land conservation community and develop plans to best conserve these areas.

### **Wolfe Tone**

Wolfe Tone, State Director for Maine, joined The Trust for Public Land in 2001 as a project manager in the Ohio Office. Wolfe joined the Maine team in 2004 and assumed the role of State Director in 2009. Wolfe has enjoyed deep engagement with communities across the state helping them achieve their conservation priorities, from coastal access points, working farms, and working forests. During his career at TPL, Wolfe has served as the primary lead on projects to conserve over 17,000 acres and raised over \$37 million in public and private funding. He has a Master's degree from Yale University, and prior to joining The Trust for Public Land, Wolfe worked for the City of New York’s Drinking Water Supply on source water protection and the Raytheon Company’s SIVAM program with Brazil.

### **Jad Daley**

Jad Daley is the Director of The Trust for Public Land’s Climate Conservation Program, and holds the Martha Wyckoff Fellowship. Jad coordinates TPL’s development of landscape-scale conservation initiatives and urban-climate initiatives targeted to climate change objectives. Jad also leads TPL’s climate policy work, including as the founding co-chair of the Forest-Climate Working Group. Jad has a long history in landscape-scale land conservation. From 2000 to 2008, he led the 22-state Eastern Forest Partnership, a joint federal advocacy effort among groups from Mississippi to Maine. In parallel during that period, he helped to lead conservation efforts in the Northern Forest (2004-2008) and Highlands Region (2002-2004). In these roles he helped to author two pieces of enacted federal legislation, the Community Forest and Open Space Conservation Program and the Community Wood Energy Program, led

lobbying efforts to enact the Highlands Conservation Act (H.R. 1964), and served as the founding Chair of the Friends of Silvio O. Conte National Fish and Wildlife Refuge. Jad is a graduate of Peddie School, Brown University, and Vermont Law School where he earned an M.S.E.L. degree summa cum laude.