

MET “FULL PROPOSAL NARRATIVE” EXCERPT

The following is an excerpt from the FULL PROPOSAL NARRATIVE submitted to the Massachusetts Environmental Trust in March 2009 by the

RESEARCH INITIATIVE FOCUSED ON INNOVATIVE METHODS FOR FINANCING FOREST CONSERVATION

Background: a brief summary of the initiative's history, goals, and key achievements

The Initiative and its Goals

The Research Initiative Focused on Innovative Methods for Financing Forest Conservation (referred to in this proposal as the "Research Initiative" or "the Initiative") is an ongoing set of activities aimed at identifying and advancing financing methods that have the potential to bring new sources of funding or financial capital to efforts that conserve woodlands and wildlands across the Commonwealth of Massachusetts.

Such conservation efforts and associated financing methods may involve policy-makers and administrators working in the public sector, social entrepreneurs and institutions in the non-profit sector, individuals and companies in the private sector, or students, researchers and professors working in the state's outstanding colleges and universities. What all of these conservation efforts, as well as the innovative methods for financing them, must have in common if they are to be of interest to the Research Initiative, is that they must each, to some extent, be intended to result in an outcome that is in the public interest.

Such conservation efforts and associated financing methods might be designed to use public monies to purchase state forestland, or alternatively involve private capital that will help in establishing a working forest easement on a private woodlot. But to come into the focus of the Initiative, they must aim to make a significant, measurably effective, replicable and potentially enduring contribution to the quality of the state's wildlife habitat, scenery, air, water resources or contribute to the state's sustainable development.

Because this grant proposal is being submitted to the Massachusetts Environmental Trust (MET), and because MET aspires to make grants to organizations that will "make a remarkable impact on protecting and enhancing the state's water resources" (see: "MET Overview," on www.mass.gov), the research to be conducted under the proposed grant will have an explicit connection to the conservation of forestland that helps to protect and enhance the state's water resources."

History and Key Achievements to Date of the Research Initiative

In 2005, David Foster, David Kittredge and Brian Donahue, along with a group of Harvard Forest colleagues, completed several years of work in formulating a long-term conservation vision for the forested landscape of Massachusetts. They issued a report, *Wildlands and Woodlands: A vision for the Forests of Massachusetts*, that articulates a bold idea - namely, that we should "add approximately 1.5 million acres to the state's existing protected land base of one million acres, to reach a target of 2.5 million acres," an area equal to half of the land within the borders of the state of Massachusetts.

Such protection would ensure that we pass on the extraordinary environmental, social and economic values of the forest for generations to come. We would, in effect, ensure the continuing provision of clean air and clean water from natural systems at a much more reasonable cost than we would incur if we had to, alternatively, serve human needs for clean air and water with man-made systems. The protected landscapes would be held by a mosaic of owners in the public, non-profit and private sectors; 250,000 of the total protected acres would be wildland reserves embedded within 2,250,000 acres of woodlands managed for a variety of purposes, including sustainable forestry activities.

As enthusiasm for the idea gained momentum, a key question had yet to be squarely addressed: "How can this vision be financed?" With leadership provided by Charles H. W. ("Hank") Foster and Perry Hagenstein at the New England Natural Resources Center (NENRC), a grant was obtained from an anonymous source in the first quarter of 2006 for the Harvard Forest to further pursue that question through a colloquium, known as the Woodlands and Wildlands Conservation Finance Roundtable (WWCFR). The WWCFR, which effectively served as the first effort of the Research Initiative, was designed to bring together about twenty leading conservation finance experts from across the U.S., with a similarly sized group of auditors also attending the meeting, to tackle the complex problem of how to finance this and similar ambitious land protection agendas.

One of the key early achievements of the Research Initiative was the deliverable coming from that meeting, in the form of a published report and executive briefing full of productive concepts for identifying and advancing innovative methods for financing forest conservation (for the executive briefing, see <http://www.wildlandsandwoodland.org/pubs/WWCFRSummaryfinal.pdf>; for the full report, see http://harvardforest.fas.harvard.edu/rsearch/pci/WWCFR_Report_publication.pdf).

Among those most intriguing of the concepts presented at the meeting, in the executive briefing, and in the full report was the consensus suggestion that the conference organizers should continue their work by trying to organize a legislatively-mandated study commission that could recommend for advancement a more limited and carefully targeted set of innovative ideas for financing forest conservation. Specifically, the meeting attendees directed meeting organizers to focus a second round of investigation on those concepts that could benefit from the focused input over a series of meetings of knowledgeable opinion leaders and decision-makers from the public, private, non-profit and academic sectors.

Accordingly, with the support of dozens of conservation and environmental organizations in Massachusetts, the conference organizers presented the idea of such a study commission to members of the legislature, including Senator Stephen Brewer of Barre. Senator Brewer submitted legislation supporting the creation of such a Special Study Commission on Financing Forest Conservation in the spring of 2007. Hearings on the idea were held at the State House in the fall of 2007 before the Joint Committee on Environment, Natural Resources and Agriculture. Panelists testifying before the Committee, and expressing strong support both for the bill itself (then known as Senate Bill No. 477), and more broadly for ongoing research into innovative methods for financing forest conservation in Massachusetts, included the following individuals from the private and nonprofit sectors:

- Tad Ames, The Berkshire Natural Resources Council
- Buzz Constable, A. W. Perry, Inc.
- Dicken Crane, The Massachusetts Forest Landowners Association
- Judy Eiseman, Kestrel Trust
- Tony Green, The Pinehills, LLC

- Laura Johnson, Massachusetts Audubon Society
- Linda Orel, The Nature Conservancy
- Keith Ross, LandVest
- Ted Smith, Kendall Foundation
- Paul Solomon, Selectman from the Town of Belmont
- Leigh Youngblood, Mount Grace Land Trust.

In addition to those who appeared to testify, expressions of support, in the form of letters or phone calls, were provided by, among others:

- Fred Danforth, Ecosystem Investment Partners
- David Foster, Harvard-Forest, Harvard University
- Charles H.W. Foster, Harvard Kennedy School
- Lynn Lyford, New England Forestry Foundation, and
- Matthew Zieper, Trust for Public Land.

After a lengthy legislative journey, the legislation that created the Special Study Commission on Financing Forest Conservation, which in its amended form became Senate Bill No 2874 was passed January 6, 2009, the final day of the 185th session of the session of the General Court of the Commonwealth of Massachusetts. The legislation, eventually known as "Chapter 8 of the Resolves of 2008," was signed into law by Governor Deval Patrick on January 13, 2009. The supporters of the legislation celebrated the signing as another key achievement in the Initiative to identify and advance innovative concepts for financing forest conservation.

The Resolve signed by the Governor calls for the "establishment of a special commission to study innovative methods for funding the conservation of forested wildlands and woodlands in the Commonwealth; The Commission will be one of, but certainly not the only, organized groups that will be keenly interested in the results of the research activities proposed in this application.

Among the others that are quite interested in the advancement of the Research Initiative are the Partners of the Wildlands and Woodlands Partnership - an organization formed to explore and advance the Wildlands and Woodlands vision through knowledge sharing and the sponsorship of innovative programs (see <http://www.wildlandsandwoodlands.org/>). The Partnership has been given regular updates over the past several years regarding potential funding for the Research Initiative, as well as progress reports on the legislation that created the Special Study Commission on Forest Conservation. The Partnership members have been highly supportive of efforts to acquire funding for the Research Initiative, and are highly motivated to understand and use ongoing work to identify novel and effective methods to conserve forestland in Massachusetts.

These Partners, who have been convening periodically (typically, several times a year) include a very broad range of more than 50 conservation individuals and organizations across the state and beyond (for a full list, see www.wildlandsandwoodlands.org/partners/index.html). The Partners include such diverse organizations as: the Appalachian Mountain Club, the East Quabbin Land Trust, the Forest Guild, the Massachusetts Woodlands Cooperative, the Open Space Institute, The Trustees of Reservations, The Harvard Forest, Brandeis University, the Massachusetts Department of Conservation and Recreation, and the USDA Forest Service/Northeast Region.

Recently, interest in the findings of the Research Initiative has been expressed by policy-makers working beyond the borders of Massachusetts. The New England Governors' Conference (NEGC) recently convened a task force on land conservation to commemorate the 100th anniversary of the first meeting of the New England Governors' Conference in 1909. The task force, which will make its report to the NEGC in the fall of 2009, has expressed interest in being updated on the ongoing deliberations of the Massachusetts Special Study Commission on Financing Forest Conservation, and more generally of the activities of the Research Initiative, prior the fall 2009 meeting. In effect, it is becoming evident that the results of the Research Initiative could potentially have impact throughout New England, and perhaps beyond.

Overview of organization's structure and programs, including board, staff, and volunteer involvement

Since 1907 research and education have been the mission of die Harvard Forest, one of the oldest and most intensively studied forests in North America. From a center comprised of 3000 acres of land, research facilities, and the Fisher Museum the scientists, students, and collaborators at the Forest explore topics ranging from conservation and environmental change to land-use history and the ways in which physical, biological and human systems interact to change our earth. The Harvard Forest is a research site for the Long-Term Ecological Research Program sponsored by the National Science Foundation.

Institutionally, the Harvard Forest is a research facility of Harvard University. Harvard University has two governing boards: the President and Fellows of Harvard College, which has 7 members; and the Harvard Board of Overseers, which has 30 members. Thousands of alumni and friends of Harvard volunteer their time in a wide variety of ways, from raising funds to serving on visiting committees. As of 2007, the University as a whole had about 2,200 faculty and 12,000 staff.

David Foster is the director of the Harvard Forest. He interacts with about three dozen researchers presently working at or with the Harvard Forest. About two-thirds of these researchers are directly affiliated with Harvard University. Other institutions that have researchers affiliated with the Harvard Forest include Brandeis University, Clark University, the University of California, the Ecosystems Center at the Marine Biological Laboratories, Franklin and Marshall College, the University of Massachusetts, the University of Michigan, the University of New Hampshire, the State University of New York at Albany, and the Woods Hole Research Center.

One of the research programs based at the Harvard Forest is the Program on Conservation Innovation, directed by James Levitt. Levitt and his research assistant work with selected teams of colleagues on a project-by-project basis. For example, in coordinating the 2006 Woodlands and Wildlands Conservation Finance Roundtable (WWCFR), Levitt worked closely the staff of the Harvard Center or the Environment (HUGE) in Cambridge as well as with Kathleen Fallon Lambert (now at Dartmouth College), who played a key role in organizing the meeting and reporting out on its results. In addition, editorial oversight on the final WWCFR report, and on the executive briefing which was published subsequently, was provided by David Foster and Charles H. W. Foster.

Organization's qualifications to perform work proposed

The Harvard Forest is an internationally recognized leader the field of ecology, forest science and conservation. David Foster is the director of the Harvard Forest. He has been a member of the Harvard faculty, in the Department of Organismic and Evolutionary Biology, since 1983, and is the author of

several books and a long list of professional articles in the field. He actively collaborates with colleagues around the world on cutting-edge research efforts. The *Wildlands and Woodlands* paper which he co-authored with colleagues at the Harvard Forest is widely recognized as a pathbreaking paper in the field of forest conservation. David Foster's CV is attached for your reference.

James Levitt, director of the Program on Conservation Innovation at the Harvard Forest, Harvard University, has become a widely recognized expert in the field of conservation finance in the past five years. He is the editor of a widely recognized book in the field which is used in university courses from Yale and the University of Pennsylvania to the Universidad del Pacifico in Peru (*From Walden to Wall Street: Frontiers of Conservation Finance*, Island Press and the Lincoln Institute of Land Policy, 2005). He is also the editor of a forthcoming book on international conservation finance which includes many of the case studies from the conference which Mr. Levitt organized at the Universidad Austral de Chile in January 2009 (*Conservation Capital in the Americas*, Lincoln Institute of Land Policy, Island Press and the Ash Institute for Democratic Governance and Innovation at the Harvard Kennedy School, in press). In addition, Mr. Levitt is the author of several reports that offer findings from conferences he has organized on the subject in Massachusetts and New York state (for example, *The Report on the Woodlands and Wildlands Conservation Finance Roundtable*, mentioned above). His CV is also attached for your reference.

In short, Dr. Foster and Mr. Levitt are particularly well-qualified to lead the project described in this document.

Project Description

Location of project

The Research Initiative will be performed through field visits, through work in the offices of the Harvard Forest and its Program on Conservation Innovation, and through presentations of the findings of the Research Initiative to decision-makers in Boston, and in several relevant locations throughout the Commonwealth.

More specifically, field visits will be to gatherings of the representatives of public, private, non-profit and academic institutions interested in the conservation of Massachusetts forests, watersheds and marine resources (for example: upcoming meetings of the Wildlands and Woodlands coalition in central Massachusetts; upcoming meetings of the Massachusetts Association of Conservation Commissioners). Office work will be done in the offices of the Harvard Forest in Petersham, Massachusetts, and of its Program on Conservation Innovation in Belmont. And findings will be presented at venues such as the State House in Boston and at convenient locations around the state, (for example, at college, university, or non-profit facilities in Amherst, Williamstown, Beverly and Woods Hole).

Team Members

David Foster will be the Principal Investigator on the project. James Levitt and his research assistant (Kate Isenberg) will personally perform and oversee the bulk of the research for the project, in collaboration with team members who will be selected on a topic-by-topic basis. The qualifications of Dr. Foster and Mr. Levitt are described above.

Project Description/Scope of Work

Task 1: Selection of Two Topics for Investigation

Once the award has been granted, Mr. Levitt, in consultation with Dr. Foster, will consult with forestry and watershed experts assembled through several ongoing task forces, including the members of the Special Study Commission on Financing Forest Conservation as well as the DCR task force on forest operations now being organized. He will discuss with them their ideas for potential topic for investigation in seven areas of interest identified in the Woodlands and Wildlands Conservation Finance Roundtable, including: a) local and state ballot measures; b) tax incentives; c) philanthropic initiatives; d) emerging ecosystem service markets; e) enhanced forest-based economies; f) limited development opportunities; and g) the use of settlement funds from legal proceedings.

From the ideas generated in these conversations, Mr. Levitt, in consultation with Dr. Foster, will designate two topics for further investigation. These two topics will be offered to the MET staff and board of directors for review and comment. The list of topics for further investigation will then be revised on consideration of review and comment from the MET staff and board.

While it is not possible at this point to say which concepts will be proposed for further examination, the following is offered for illustrative purposes. In the event that a "forest and watershed mitigation bank" were suggested as a promising concept for further investigation in the category of "emerging ecosystem service markets," Mr. Levitt would write up a brief description of the idea and ways in which it might be implemented. The write-up would be circulated to the MET staff and board for review and comment. Specific refinements for the investigation might be suggested by an MET board member, and that refinement could be integrated into the research agenda for the topic.

Should funding for this proposal become available on July 1, 2009, Task 1 should be completed by the end of the third quarter of 2009.

Task 2: Investigation of Each of Two Topics

In consultation with Dr. Foster, Mr. Levitt would then pursue the research agenda for each of the two topics selected. If the modest budget for each topic allows, Mr. Levitt might bring in an outside expert with specialized knowledge of the field to assist with each of the investigation. Draft findings would be circulated to other experts in the field for comment prior to publication.

For example, should a "forest and watershed mitigation bank" be selected for further investigation, Mr. Levitt might seek assistance from one of several experts from around the United States with extensive experience in setting up mitigation banks that help to preserve forestland that serve as critical watershed buffers. That expert could help tailor a recommendation for a forest mitigation bank that suits relevant federal regulations as well as relevant administrative and environmental conditions in Massachusetts. The first draft of the recommendation could be circulated to other experts around the United States for review and comment.

Should funding for this proposal become available on July 1, 2009, Task 2 should be completed by March 15, 2010.

Task 3: Publication of Findings

A final report on the two topics for further investigation would be prepared and posted on the Internet for distribution to all interested parties. The format of the report might be similar to that of the WWCFR report mentioned above. The content, of course, would look in detail at the concept and means for its rapid implementation in the Commonwealth of Massachusetts.

Should funding for this proposal become available on July 1, 2009, Task 3 should be completed by the end of the first quarter, 2010.

Task 4: Dissemination of Findings in Presentations Throughout the State

As described above, the report would be presented at a series of four or five meetings around the state, so as to familiarize interested constituencies as to the concepts themselves and their means of implementation. One presentation would likely be at the State House, or in a nearby location in Boston. Other presentations could take place at other locations distributed around the state (for example, at college, university, or non-profit venues in Amherst, Williamstown, Beverley and Woods Hole).

Should funding for this proposal become available on July 1, 2009, Task 4 should be completed by the end of the second quarter, 2010.

Goals and Objectives

The goal of the Research Initiative is to identify and explore in some detail innovative concepts in conservation finance that might be implemented in the relatively near-term to enhance the long-term sustainability of the Commonwealth's forests and water resources. It is possible that some of these concepts could develop into programs that bring substantial amounts of financial resources to the effort to conserve the Commonwealth's forests, watersheds, fresh water bodies and marine resources.