

LAND FOR MAINE'S FUTURE PROGRAM:

Increasing the Return on a Sound Public Investment



January 2004

The Executive Summary and full Report are available to download from the Land for Maine's Future web site: <http://www.maine.gov/spo/lmf>

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**The Land for Maine's Future Program:
Increasing the Return on a Sound Public Investment**

A Collaborative Assessment

by

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Executive Summary



Recent decades have witnessed an historic shift in how Maine's landscape is used, owned, and valued. Over the last five years alone, more than a quarter of all land in Maine has changed ownership, with much of that land broken into smaller pieces with multiple owners. In southern and coastal Maine, land values have experienced double-digit annual increases. These dramatic changes may slow, but there is broad recognition they cannot be stopped

or reversed. This recognition is pushing Maine people to reexamine their collective expectations for access, ownership, and development of the state's unique land resources.

In 1986, Governor Joseph Brennan's Special Commission on Outdoor Recreation recommended the creation of the Land for Maine's Future (LMF) program, with the charge of responding through land conservation to growing threats to Maine's natural heritage and traditions. Since then, LMF has protected over 192,000 acres (in fee and easement) in 115 projects, funded through two public bonds approved by Maine voters and a legislative appropriation. These assets of local, regional, and state significance will now be protected for the people of Maine to use wisely and enjoy forever.

By early 2004, virtually all of the funds from LMF's last bond will have been spent or allocated. This presents an opportune moment to reassess the program and identify needed changes. The Muskie School of Public Service at the University of Southern Maine and the Margaret Chase Smith Center for Public Policy at the University of Maine are pleased to present this joint report aimed at fostering understanding of the program's values, accomplishments, challenges, and opportunities.

Preparation of the report involved consultations with experts from various sectors of the state, both within and outside of state government, who have significant knowledge of land conservation and the LMF. We also conducted several case studies to get a better sense of how the program may affect participating Maine



communities and regions. We supplemented this program analysis with a review of current research on issues surrounding land conservation in general.

In all, our research finds that LMF is a well-conceived, wisely administered, and widely supported program. Participants and observers from across the state generally agree that its mission and practices are solidly grounded; that it has avoided becoming politicized; and that it has evolved thoughtfully to respond to new understandings of the role of land conservation and economic development in Maine. The general perception is that LMF well and truly serves the people of Maine. In general, we have found it a fine example of a public *learning organization* open and transparent in its processes; welcoming of public participation and input; careful and strategic in its investment of public monies to achieve the highest public values; and reflective and adaptive to changing circumstances and public needs.

We find that Maine people live in a time of historic change on the landscape, one that presents a singular opportunity to shape the character of the Maine landscape and the quality of Maine life for generations to come. In this context, Maine land conservation especially under LMF is rightly to be viewed as a *basic infrastructure investment* in the future of Maine's environment, economy, and cultural heritage. Like our rail and highway systems, it is a foundation upon which coming generations of Maine people will build their economy and culture, to reflect Maine values, needs, priorities, and diversity. To realize the greatest return on this investment, Maine people might best regard the LMF not as an end in itself, but as a tool or instrument of their larger, abiding purposes: sustainable economic development, environmental stewardship, and community building.

We find that **there continues to be urgent need for a state-funded land conservation effort in Maine, for which there is broad public support; that LMF both deserves and needs to continue its efforts for the foreseeable future, with the timely improvements recommended below; and that new funding is needed at this time, to continue this most important effort.** In particular, we recommend that LMF's purposes will best be served by the following:

1. **Outreach & Technical Assistance:** Increased outreach and technical assistance to potential project proponents and new constituencies, especially the tourism sector, similar to recent efforts made with Maine agriculture;
2. **Scoring Criteria:** Revision of the scoring criteria to consider how proposed projects may enhance local, regional, and state economic development goals and opportunities;



- 3. *Regional Approaches:*** Promotion of a regional approach to proposed projects that involve partnerships and multiple benefits, possibly by providing incentives for cooperative regional inventories of natural and cultural resources.
- 4. *Targeted Needs:*** Water access and farmland preservation represent focus areas that merit continued targeted efforts – in particular, targeted strategic planning to develop adequate water access projects; and continued targeted collaboration with the Department of Agriculture to address farmland preservation needs;
- 5. *Adequate Funding:*** Adequate funding, out of bond revenues, for staff support of LMF's increasing number of projects and program duties, to include technical assistance in collaboration with other state agencies and long-term project stewardship. Ample precedent and statutory authority exist for this.
- 6. *Ongoing Support:*** Consistent with the LAPAC report, establishment of an ongoing revenue source that does not rely exclusively on public bonds, to provide reliable, long-term funding for land acquisition and stewardship.



1. Introduction



Maine is nowhere a more special place than in the quality of its landscape and the traditions of its land use. Among the most privately-owned of all the states, Maine's natural diversity and beauty combine with its traditions of resource stewardship, open access, and appreciation of nature to distinguish it in the public mind and national imagination. In recent decades, however, these

traditions have come under assault from the forces of economic and social change; and the people of Maine have responded. In 1986, Governor Joseph Brennan's Special Commission on Outdoor Recreation recognized the growing threats to Maine's natural heritage and traditions, and recommended an unprecedented \$35 million public bond issue and the creation of the Land for Maine's Future program (LMF) to address the State's growing land conservation needs.

With the exhaustion of the proceeds from the 1987 bond issue, Governor Angus King, Jr., in early 1996 created the Land Acquisition Priorities Advisory Committee (LAPAC), to help shape future land acquisition and protection initiatives in Maine. Among other things, the Governor asked the Committee to identify the types of land and interests in land to be acquired by public and private conservation agencies; to set state and regional goals for acquisition; and to recommend one or more funding sources for acquisition.

Over the next 22 months, the LAPAC consulted widely with the general public and related interests; inventoried existing public land holdings for conservation; examined the State's own land acquisition programs and their management costs; researched a variety of funding options; and, in November 1997, issued its consensus Final Report & Recommendations. The Committee found approximately one million acres of conservation lands in Maine then owned in fee or under easement by the federal and state governments; and praised the work of the LMF which, with the \$35 million bond issue, had completed some 40 projects resulting in over 70,000 acres of fee acquisition and easements, including such notable parcels as Nahmakanta Lake, Mount Kineo, the Cutler coastline, the Kennebunk Plains, and a 12-mile stretch of the Appalachian Trail.



For the future, the LAPAC recommended three land acquisition goals and ten land acquisition priorities, including the doubling of conservation lands in Maine by the year 2010; the issuance of a new bond issue toward this end; and the creation of a more “proactive” LMF program approach, to identify priority acquisition projects rather than simply responding to immediate threats and opportunities.

It was a landmark report, with significant results. In 1999, the Maine Legislature passed and the voters approved a \$50 million bond issue for the LMF. This has allowed the Board to bring its conservation portfolio today to some 115 projects and 192,000 acres of fee interests and easements, in accordance with the goals and priorities recommended by the LAPAC. By early 2004, however, virtually all the bond proceeds remaining to the LMF will have been spent or allocated. A variety of proposals have been put forth that it be succeeded by as much as a \$150 million bond issue to further land conservation efforts throughout Maine.

Meanwhile, Maine land ownership and land use have changed in ways both dramatic and subtle since the issuance of the LAPAC report. Within the last five years, fully one-fourth of all the state's lands have changed hands, often from industrial forestry owners to private institutional investors with shorter financial time horizons. With significant help from federal and private sources, vast tracts of these and other forested ownerships have come under various conservation easements. Private, “kingdom lots” have been carved out of these ownerships in some of the most spectacular settings in the state, threatening historic public access. Scores of local citizen groups and land trusts have formed all across the state, in hopes of protecting threatened public values. In the southwest and along inland lakes and the coast, suburban “sprawl” has accelerated the erosion of Maine's farmland base, wildlife habitat, and traditional access to fields and shore.

Against this background, in the summer of 2003 the LMF and its state agency partners invited the New England Environmental Finance Center at USM's Muskie School of Public Service and the Margaret Chase Smith Center for Public Policy at the University of Maine to engage with them in an assessment of the LMF at this critical juncture. Within the constraints of available time and resources, the USM/UM Study Team proposed the following tasks, to be completed by the close of 2003, in time for the convening of the Legislature in January 2004:

- ❖ That it undertake an external review of the LMF staff's own analysis of the LMF program, in terms of its deployment of resources and its progress since the 1997 LAPAC report and the recommendations set forth therein;



- ❖ That it attend for information purposes several of the “constituency group outreach meetings” conducted by the LMF staff in Summer and Fall 2003;
- ❖ That it consult about the performance and impact of the LMF program with a dozen mutually-chosen expert individuals from various sectors and who have significant knowledge as users or observers of the program, and report on its findings;
- ❖ That it undertake case studies of not less than three mutually-chosen Maine communities, to examine the economic, social, and developmental impacts of LMF program use;
- ❖ That it scan and report on findings of academic and professional studies of the economic, social, and land management impacts of LMF and other comparable land conservation and purchase efforts; and, finally,
- ❖ That it provide an integrated report, including findings and recommendations, based upon its external review of the staff analysis, observations at the outreach meetings, expert consultations, literature review, and case studies. What follows is that report.

Members of the Study Team include Richard Barringer and Jack Kartez, co-principal investigators, of the Muskie School's New England Environmental Finance Center; Jonathan Rubin and Catherine Reilly of the Margaret Chase Smith Center for Public Policy; and Hugh Coxe, independent consultant of Falmouth, Maine. In particular, Coxe assumed responsibility for the expert consultations, and Reilly, for the literature scan and case studies. Stephanie Gilbert of the Maine Department of Agriculture, with the assistance of Dennis Gilbert, developed the case study on the Lakeside Orchard according to the framework developed by Reilly.

The members of the Study Team wish to acknowledge their appreciation and gratitude to their state agency collaborators in this effort: Tim Glidden and the entire staff of the LMF; John DelVecchio and Richard Kelly of the State Planning Office; Ralph Knoll of the Department of Conservation; Stephanie Gilbert of the Department of Agriculture; Ken Elowe of the Department of Inland Fisheries & Wildlife; Richard Davies of the Governor's Office; and Sam Merrill, Tom Wood and Deb Arbique of the Muskie School and Charles Morris of the Margaret Chase Smith Center. Their timely, competent, and professional contributions made this report possible. We are especially grateful to John Delvecchio for his principal authorship of the staff analysis presented in section 3 and the related appendix.



The members of the Study Team also wish to acknowledge the following Maine citizens who were consulted in the course of the study. We are deeply grateful for their time, energy, and thoughtfulness to: Kathy Mazzuchelli, Director, Caribou Parks and Recreation Department; Jay Kamm, Director of Planning, Northern Maine Development Commission, Caribou; Jim Gardner, Town Manager, Town of Washburn; Art Griffin, Owner, Griffin's One Stop, Washburn; Dale Wheaton, Owner, Wheaton's Lodge, Forest City; Lee Sochasky, Executive Director, St. Croix International Waterway Commission, Calais; Keith Ross, Senior Advisor, LandVest, Portland; Ed Suslovic, Member, Maine House of Representatives, Portland; Nan Cumming, Executive Director, Portland Trails, Portland; Larry Mead, Assistant City Manager, City of Portland; Marilyn and Steve Meyerhans, Owners/Operators of Lakeside Orchards, Manchester; Mark Doyon, Town of Manchester; Dale Finseth, Kennebec Soil & Water Conservation District; Ron Desrosiers, USDA Natural Resources Conservation District; LouAnna Perkins, Executive Director, Maine Farmland Trust; Russell Libby, Executive Director, Maine Organic Farmers and Growers Association; Joel Swanton, Vice President, International Paper Company; Jerry Bley, Principal, Creative Conservation; George Smith, Executive Director, Sportsmen's Alliance of Maine; Bruce Hazard, Executive Director, Mountain Counties Heritage, Inc; Herb Hartman, Former Deputy Director, Maine Bureau of Parks and Lands; Paul Schumacher, Executive Director, Southern Maine Regional Planning Council; John Simko, Town Manager, Town of Greenville; Jay Espy, President, Maine Coast Heritage Trust; Roger Milliken, Member, Land for Maine's Future Board; and Dennis Gilbert, writer and chef, South Portland.

Responsibility for the content of this report (with the exception of the SPO staff analysis in section 3 and the related appendix) rests with the members of the Study Team, and may not be attributed to any of these persons.



2. General Findings & Recommendations



General Findings

Widespread Support for LMF Program, with Qualifications:

Evidence from the case studies and consultations that inform this report indicates that the Land for Maine's Future program enjoys broad, though qualified support throughout the state. Perhaps some of the highest praise for LMF

is the acknowledgment that its goals, priorities, and procedures have been dynamic and evolutionary since its inception, and that it has adhered all the while to its core mission to conserve land for Maine people. A consistent message from both sources is that LMF has responded to the changes in Maine's landscape, culture, and economy in reflective and purposeful ways. The revisions to the program following the LAPAC report and the ongoing refinement of the scoring criteria are examples of this responsiveness.

Most of those consulted believe that LMF is an important program with a worthy mission, and that it is very effective in achieving that mission. They view LMF as having achieved an appropriate balance of project types and locations. There is general agreement that the LMF staff and Board are committed to maximizing the return from investment of public funds in Maine land conservation. Virtually all of the comments received about the staff confirm that they are hard-working, professional, and talented; and that they have built strong relationships on many fronts, while keeping the program from becoming politicized.

Such praise for LMF does not come without conditions. The consultations and case studies were designed to discover opinions about how the program might be improved and where it should be heading – questions that inevitably provoke critical thinking and commentary. These comments generally fall into four categories:

- There is a need for more resources in the state agencies for both program administration and land management. Funding for these resource needs is seen as a critical issue to address.



- The LMF program – and Maine land conservation efforts in general – need to be linked more closely to regional economic development prospects and priorities. Those consulted for this study observe that this connection is now being discussed, and believe that LMF needs to lead the discussion of how and where land conservation can advance local and regional economic development goals and opportunities. (We note that in recent years LMF has moved in this direction with the completion of several projects, notably its working farms and forests easements.)
- Some negative perceptions and fears persist in the public mind, concerning the benefits of land conservation efforts in Maine, especially in the more forested regions. The LMF program and land conservation interests need to continue to engage people of varying viewpoints, provide accurate and meaningful information, and demonstrate the many public values proceeding from the investment of LMF funds – including economic, recreational, and community values, as well as ecological.
- Some of those consulted believe that the program needs to consider taking a more strategic, “pro-active,” or intentional approach to land conservation; they have differing views, however, of what is meant by “strategic” in this context. Most feel that, in many ways, LMF does approach land conservation in a strategic manner; but they urged that this be a topic for increasing discussion. Many feel there may be some opportunity to develop *regional conservation strategies*, while others feel that greater consideration of economic opportunities related to land conservation would allow the LMF program to enhance the strategic approach to its investments.

Most of those consulted for this study discussed specific projects and the benefits they bring to the state or a region. Several of those projects are highlighted in the case studies; but people also discussed numerous other projects with enthusiasm and support for those of which they had first hand knowledge or experience.

Profound Changes on Maine's Landscape Challenge LMF's Mission: Since the inception of the LMF program, and even more since the publication of the LAPAC report, there have been profound economic and social changes throughout Maine that impact land conservation efforts. The program was conceived at a time when most of the land in the northern part of the state was owned by a relatively small number of corporate owners, who managed the land primarily for timber harvesting. The land was held in very large blocks and seldom changed hands. The coastal and southern portions of the state generally had relatively modest development pressure and fairly moderate annual increases in property values.

This stable landscape has changed, however, and the LMF has had to evolve by examining and restructuring its goals, priorities, and procedures to meet the



associated challenges. Over the last five years, more than a quarter of all land in Maine has changed ownership, with much of that broken into smaller pieces among multiple owners. This trend toward smaller holdings and swift turnover poses a historic challenge to public access to these lands and their resource values.

Maine has also experienced rapid conversion of rural land over the last decade, accompanied by double-digit annual increases in land values in much of southern and coastal Maine. Accompanying this trend, many of the natural resource-based industries that make up the rural economy of Maine are experiencing historic structural change and pressures as a result of the globalization of finance, technology, production, and distribution systems.

Consumer demand for coastal and inland shoreline is at historic highs, resulting in increased development, rapidly rising shoreline property values, and reduced access to the shoreline. Meanwhile, demand for water-based recreation is creating increased demand for more water access points. Opportunities for public access to private land are diminishing, as well. The vast turnover and subdivision of properties throughout Maine threaten the traditional access enjoyed by the public for recreational activities, at a time when the demand for outdoor recreational opportunities is on the rise.

These dramatic changes create challenges for the LMF program, but also opportunities. Many of those consulted for this report feel that the program has done much to respond to change in the past, and now needs to continue reflecting upon its goals, priorities, and procedures in light of the profound changes afoot in the state.

Some Specific Findings

Timeliness & Priorities: The land use and landownership changes discussed above underscore the importance of conservation decisions now being made in our state. Changes in landownership have never occurred more quickly; in the past five years alone, twenty-five percent of Maine's forestlands have changed hands.¹ There is broad recognition that some opportunities for land conservation may never arise again. There is also a nearly universal view that LMF efforts have been primarily about conserving the natural values of the land, and that this should continue to be the driving priority.

Corridors and Trails: Threats to the continuity of undeveloped corridors or trail systems exemplify the high stakes of some ownership changes. When a piece of

¹ Maine State Planning Office



land that forms part of an undeveloped corridor is lost, the value of the entire corridor, for both recreational use and wildlife habitat, may diminish. When public access to one segment of a trail is restricted, the value of the entire trail system may be threatened. These examples illustrate the need to respond nimbly to opportunities as they arise, and to think about the broader impact of ownership changes on individual tracts of land.

Economic Impacts: In addition to recreational and ecological impacts, changes in land use can have important economic effects on Maine communities. Throughout the state, there is recognition that natural resources have economic value beyond their potential for extraction or development. Land conservation efforts should be recognized as opportunities for economic and community development, and at the very least, should avoid negatively affecting a region's economy. In particular, there is some concern that land conservation may reduce the viability of commercial timber operations. Dialogue on these issues would be aided by a greater ability to quantify the broad range of public benefits gained from natural amenities.

Fitting into a Plan: In the last five years, we have learned important lessons about the value of regional partnerships and the need to link conservation efforts to economic and community development. In light of their economic connections, land conservation projects should enhance local and regional goals for economic development, where these exist. Further, there is general agreement that land conservation efforts should advance local land-use and growth plans. While most observers do not suggest that the application process require the demonstration of consistency with a comprehensive plan, they generally support awarding extra points to projects that do.

Local Initiative and Access: Ensuring local "fit" is facilitated by LMF's efforts to draw heavily on local initiative to identify projects. Local stakeholders often carry the projects through the proposal phase and stay involved with long-term management. However, the reliance on local support leads some to worry that towns and non-profit organizations (NGOs) with greater planning resources may receive a disproportionate share of LMF funds. The process of securing LMF approval is lengthy and complex; some small communities and constituencies may not have the necessary experience or resources to initiate and complete the demanding task. Streamlining the process, perhaps by improving communication among state agencies or assigning one point of contact for the state, could make the program more accessible and effective.

Stewardship & Alternative Tools: Fostering long-term stewardship by local and regional organizations will help address concerns about the state's capacity to manage its growing portfolio of public lands. There is some suggestion that LMF and, to a greater extent, the state agencies that hold the lands should give more consideration to long-term stewardship needs before approving a project. Others



note that too many requirements for stewardship funding may inhibit the state from capturing fleeting opportunities. The LMF should continue, however, to consider the growing number of conservation tools that may supplement fee simple and easement acquisitions, and help address needs for ongoing management and stewardship.

Targeted Areas of Need: Water access and farmland protection opportunities pose uniquely difficult challenges for LMF. Shorefront property often sells quickly, and is *very* expensive. Special procedures for effectively securing and developing public water access points may be needed, and could involve identifying opportunities in a more proactive manner. Current practices of farmland valuation present another challenge; many claim that current appraisal methods generate prices that are too low to make selling development rights worthwhile for farmers.

Public Awareness: There is a general lack of public knowledge about Maine's public lands and landholdings. Many people suggest that the locations and permitted uses of state land should be more widely publicized. This knowledge could foster a better understanding of how and in how many ways conservation efforts fit into residents' daily lives. The degree to which certain lands are advertised should naturally reflect the level of use appropriate to each area.

Strategic Approach: There is a perception that the LMF might adopt an even more "strategic" approach to land conservation. It is our view that, in the absence of an overall state strategy for land conservation and protection, responsibility for this has fallen by default to the LMF, which has performed this role most admirably. By virtue of its sound procedures and substantial resources, LMF has become an indispensable forum for reconciling the strategic goals and objectives developed in various private and public planning efforts – most notably, the Department of Conservation's "Statewide Comprehensive Outdoor Recreation Plan," the Department of Agriculture's "Saving Maine's Farmland: A Collaborative Plan," and the Department of Inland Fisheries & Wildlife's "Beginning with Habitat" program.

Strengthening the LMF Program

We believe, from the totality of our assessment, that Maine people find themselves today in a time of historic change on the landscape; that this presents a singular moment of opportunity to shape the quality and character of the Maine landscape for generations to come; and that Maine land conservation especially under LMF is rightly to be viewed as a *basic infrastructure investment* in the future of Maine's environment, economy, and cultural heritage. It is, like our rail and highway systems, a foundation upon which future generations of Maine people will build



their economy and culture, to reflect Maine values, needs, priorities, and diversity. To realize the greatest return on this investment, Maine people might best look upon the LMF not as an end in itself, but as a tool or instrument of Maine's larger, abiding purposes: sustainable economic development, environmental stewardship, and community building.

The LMF arose in response to changes in Maine's economy, population, and land ownership patterns, with the aims of ensuring public access to the outdoor environment and protection of the landscape. Such change has only accelerated with time, and LMF has evolved thoughtfully in response. This evolution has enabled the program to move in a brief number of years from a largely state, fee-simple acquisition process, to one with:

- Increasing use of easements and management agreements to meet multiple resource objectives;
- Greatly increasing use of partnerships in acquisitions and future stewardship, with local governments and nonprofit organizations;
- Increasing numbers of locally-promoted projects encompassing multiple benefits and regional visions;
- Increasing multi-agency efforts among state departments; and
- Important refinements to the application process and project selection criteria, to reflect urgent areas of need such as water access and farmland retention, as well as the needs of applicants.

Given the profound changes in Maine – including the dislocation of industrial forestry and new ownership patterns in the north, intense development pressures on scarce coastal and shore lands, and dwindling working farmlands in the south – it is all the more remarkable that LMF enjoys unusually widespread public support. LMF expenditures are perceived as a major net benefit to virtually everyone. The evidence gathered for this report confirms that LMF acquisitions can have multiple-types of benefits, including the support of traditional local economies and the building of civic capacity, in addition to the aims of public access, ecological protection, and long-term stewardship.

The historic changes point to several needed directions for LMF's continuing evolution. Some of those providing input to this evaluation are concerned that the LMF should be more strategic in its investments. We agree that limited land conservation funds must be used for projects that will have benefits as great and varied as possible, like those illustrated by the case studies in this report. These projects serve the economy, the environment, *and* community at the same time; and



they demonstrate that strategic land conservation does *not* of necessity mean having a statewide “master plan”. Using the LAPAC framework of priorities and guidelines, the LMF has successfully responded to proposals that have arisen out of local vision, new partnerships, and multiple goals. Each of these proposals is attuned to the aspirations and values of the different regions of the state.

The current LMF decision process is open, inviting, and transparent; it is driven by clear mission, values, priorities, process and criteria that reflect the evolving needs and interests of Maine people in land conservation. Its genius is that projects that gain LMF funding today could *not* have been dictated from above; but they *are*, happily, promoted and enabled with LMF resources. Each region of the state has helped lead the way for LMF, with projects that are consistent with LMF’s mission, and reflect the most important emerging issues.

The strategic framework and approach developed by the LAPAC and LMF have served Maine people well, and may be made even more effective in the future by addressing several needs and issues:

- Lack of widespread knowledge of the purposes and benefits of LMF, especially among important constituencies such as the tourism sector;
- Obstacles to participation in LMF due to differences in specialized capacities and resources among potential applicants;
- Urgent need to respond in timely fashion to opportunities in the area of water access; and,
- Increasing need to promote partnerships among local governments, nonprofit organizations, and resource-based enterprises such as tourism, because these collaborations can result in multiple-benefit LMF projects and their long-term stewardship.

Governor John Baldacci’s recently proposed Maine Woods Legacy program is a good example of the potential of regionally-based, state-assisted projects to help Maine people use land conservation to advance important economic and community values, as well as ecological and recreational goals.

We conclude, therefore, that ***there continues to be urgent need for a state-funded land conservation effort in Maine, for which there is broad public support; that LMF deserves and needs to continue its efforts for the foreseeable future, with the timely improvements recommended below; and that new state funding is needed at this time, to continue this critical effort.*** Specifically, we recommend that LMF’s mission and purposes will best be served by the following:



- 1. Outreach & Technical Assistance:** Increased outreach and technical assistance to potential project proponents and new constituencies, especially the tourism sector, similar to recent efforts made with Maine agriculture;
- 2. Scoring Criteria:** Revision of the scoring criteria to consider how proposed projects may enhance local, regional, and state economic development goals and opportunities;
- 3. Regional Approaches:** Promotion of a *regional approach* to proposed projects that involve partnerships and multiple benefits, possibly by providing incentives for cooperative regional inventories of natural and cultural resources.
- 4. Targeted Needs:** Water access and farmland preservation represent focus areas that merit continued targeted efforts – in particular, targeted strategic planning to develop adequate water access projects; and continued targeted collaboration with the Department of Agriculture to address farmland preservation needs;
- 5. Adequate Funding:** Adequate funding, out of bond revenues, for staff support of LMF's increasing number of projects and program duties, to include technical assistance in collaboration with other state agencies and long-term project stewardship. Ample precedent and statutory authority exist for this.
- 6. Ongoing Support:** Consistent with the LAPAC report, establishment of an ongoing revenue source that does not rely exclusively on public bonds, to provide reliable, long-term funding for land acquisition and stewardship.

Maine is well-served by the LMF today, and future generations of Maine people will be well-served by its continuing growth and development along these lines. Ongoing evolution of LMF through these measures will build on the program's success, creativity, and wisdom, and respond to the urgent present need to accelerate land conservation efforts in Maine.



3. State Planning Office Staff Analysis



(Note: This analysis of LMF was prepared by the Maine State Planning Office, in collaboration with participating state agencies. An earlier draft was reviewed and the final draft was written after extensive discussions with the Study Team who find the work sound, rigorous, and professional, and are grateful for its use as a resource. The Appendix to this report is part of this staff analysis.)

This analysis seeks to:

- Provide a brief history and background to the Land for Maine's Future Program.
- Present Program accomplishments since 2000, when the last Program Progress Report was compiled; and
- Provide analysis and insights into trends and challenges facing the Program and recommendations for accomplishing its goals to secure and protect conservation and recreation lands for Maine's future.

The analysis is a joint effort of the State Planning Office as lead agency and home of the LMF, the program's partner state agencies, the Edmund S. Muskie School of Public Service, and the Margaret Chase Smith Center for Public Policy. LMF staff assisted with this evaluation, collecting and organizing data to give a clear picture of program activities; and assembling land conservation and recreation data from sources in Maine, New England, and elsewhere in the nation. Staff of the Departments of Conservation, Agriculture, Marine Resources, and Inland Fisheries and Wildlife were particularly involved, given their complementary activities in land acquisition, management, and protection.

Evaluation parameters: The Maine Legislature's charge to the program in 1999 forms the basic parameters for this evaluation. In 1999, the Legislature approved the



largest non-transportation bond issue in the state's history. The \$50 million bond proposal to fund the LMF Program was approved by Maine voters that fall. The \$50 million of new revenue came after the initial bond for \$35 million that started the Program in 1988, and \$3 million in additional funds appropriated by the Legislature in 1998.

In addition to approving new funds in 1999, the Legislature also adopted several significant modifications to the Program--modifications intended to broaden the reach of the Program and improve results in land conservation and recreation by using partnerships and leveraging other non-LMF funds. These modifications are outlined below. In enacting this bond, the Legislature relied on the work of the Land Acquisition Priorities Advisory Commission (LAPAC), a study group composed of citizens across Maine appointed by then Governor King. The recommendations of this group, endorsed by the Legislature, established the goals and priorities for LMF's acquisition work in the following years. This evaluation assesses the Program's progress against these goals and priorities.

Public Outreach conducted as part of this evaluation: In order to offer wider opportunity for input on the Land For Maine's Future Program from both the public and the variety of interests with a stake in the Program and its activities, the LMF Program staff and Board members conducted over the last 15 months 6 public meetings around the state and 12 meetings with specific constituency groups.

In addition to these meetings sponsored and conducted by the LMF Program, individual state agencies and organizations have held a number of other meetings, both large and small, covering topic areas related to LMF Program interest areas. LMF program staff monitored (or participated in) these meetings in order to gather additional insights and information useful to the Program. These meetings included: the Blaine House Conference on Maine's Natural Resource-based Industries, the ongoing work of the Maine Office of Tourism's Natural Resources Subcommittee, and other similar efforts.

Program History

The Land for Maine's Future Fund was recommended in 1986 by the Governor's Special Commission on Outdoor Recreation in Maine, and established in 1987 when Maine voters overwhelmingly approved a \$35 million bond for purchasing lands of state significance for recreation and conservation. The fund is overseen by a Board comprised of six private citizens and five state agency commissioners. The Board, the funds, and support staff within the State Planning Office are referred to as the LMF Program.



The concept behind the Program is simple; certain lands rise above the rest because of the exceptional natural values and recreation potential they possess, and they deserve permanent protection through public acquisition of fee interest or a conservation easement. As Maine grows, the use of land changes and there is a very real risk that Maine will lose these “special places” forever. The role of LMF Program is to identify these “special places”, working with the Departments of Conservation, Inland Fisheries and Wildlife, Agriculture, and Marine Resources, the Atlantic Salmon Commission, and many conservation partners in the both the public and private sectors.

The Land for Maine's Future Program has enjoyed continuing Legislative support along with that of four successive governors. Most recently, Governor John E. Baldacci has highlighted the need to conserve Maine lands as part of a balanced program of sustainable economic development and environmental stewardship. Two previous Program Biennial Reports, 1998 and 2001, and a previous evaluation conducted for the Legislature under the Government Evaluation Act in 2002, outline Program activities and accomplishments and are available on the Program's website at: <http://www.state.me.us/spo/lmf/publications>

1997 Land Acquisition Priorities

In January, 1996, then-Governor Angus King established the Land Acquisition Priorities Advisory Committee (LAPAC) to help chart the course for future land acquisition initiatives in Maine. Funds from the \$35 million Land for Maine's Future bond passed by Maine voters in 1987 were largely exhausted, creating a timely opportunity to assess past public land acquisition efforts and to identify needs to be addressed in the coming years.

The LAPAC was asked to do several things, including:

- identify the types of land or interests in land that should be prioritized for acquisition by public and private conservation agencies;
- review current public land ownership and protection to assess the geographic distribution, conservation and recreation values of these lands; and
- establish statewide and regional goals for future acquisition



Priority Focus Areas

In completing the charge to offer its best advice and recommendations on land acquisition, the Committee held seven public comment sessions around the state in 1997, listening to comments from 193 people and received an additional 211 letters. With Maine ranking near the bottom of all states in terms of percentage of land in public ownership (less than 5%) the Committee found a consistent and compelling case for an ambitious acquisition program that would expand significantly conservation land ownership in Maine.

The Committee identified eight Land Acquisition Priorities to guide LMF Program acquisition:

Access to Water: The Committee found that traditional water access sites are increasingly being lost. It recommended that acquisition and development of public access to waters should seek to provide a diversity of high quality recreational opportunities such as boat ramps, carry-in boat access sites, and walk-in access to remote ponds.

Southern Maine Conservation Lands: The southern portion of the state (south of Bangor) is the most rapidly developing and is also richest in biological diversity. For these reasons, the Committee cited this region of the state as a priority for both resource protection and providing expanded recreation opportunities such as parks and trails.

Ecological Reserves: The Committee concluded that Maine's existing conservation ownerships do not protect the full range of native plants, animals and natural communities. It recommended the establishment of an ecological reserve system that protects all of the natural communities and species found in the State.

Farm Land: Citing shrinking amounts of farm land and anticipating a major turnover of farm ownership, the Committee called for the LMF Program to help preserve farm land and open space by providing farmers with an alternative to selling the farm.

River Systems: Maine possesses some of the finest river systems in the Eastern United States, many of which remain largely undeveloped. These rivers are important fisheries, possess critical riparian habitat, and provide unparalleled outdoor recreation opportunities, including trails and water access. The committee called for future acquisition efforts to protect extended corridors on the state's most valued river systems.



Undeveloped Coastline and Islands: With only a small amount of our coastline in public ownership, the Committee recommended that LMF take advantage of remaining opportunities before large ownerships become fragmented.

Northern Forest Conservation Lands: The north woods of Maine are truly unique. While it is where most public ownership currently exists, many of the region's significant natural areas, trails, and other recreational lands, are in private ownership. The Committee cited the fact that the State has both an opportunity, and the responsibility, to work cooperatively with forest landowners and other interests to develop workable acquisition models that protect the economic, ecological and recreational values of this region.

Regional and Local Open Space: The Committee cited several land acquisition priorities related to regional and local concerns. To maintain the quality of life in our cities and town centers, it will be important to expand efforts to protect municipal/urban open spaces both within residential neighborhoods, as well as nearby regional parks offering day use opportunities. Additionally, the Committee cited the need for targeted expansions of existing public lands in order to protect them from encroaching development or other threats.

In addition to establishing these programmatic priorities, passage of the 1999 bond also made a series of changes in the program's operations as follows:

- An overall match requirement was established. The program was directed to seek at least \$25,000,000 of funds from other sources to match against the \$50 million of borrowing authority provided by the bond.
- 10% of the \$50 million was reserved for the Public Access to Maine Waters Fund.
- Up to 10% of the \$50 million was directed toward farmland protection efforts.
- LMF was authorized to conserve sites of local and regional significance and the program was also authorized to make grants directly to cooperating entities with title remaining with the cooperating entities, subject to terms and conditions in a project agreement that is enforceable by the State to ensure the lands are used for the purposes for which they were acquired. These cooperating entities include city and town governments along with qualifying charitable nonprofit organizations.



- In unorganized territories, LMF must seek approval by the county commissioners if the value of the land proposed to be acquired constitutes more than 1% of the state valuation within the county. This provision parallels an existing requirement for projects within the organized towns.

Responding to the LAPAC Priorities

Taken as a whole, these recommendations set an ambitious public and private land acquisition agenda for the Land for Maine's Future Program. Additionally, the Committee stressed that funding is the primary barrier to embarking upon new land acquisition initiatives. It proposed a three-pronged funding plan including bonding, new state revenue sources, and funds leveraged from available public and private sources. In the end, the Legislature approved a new bond and called for matching funds, but did not authorize any substantial new revenue sources for the Program.

Following passage of the 1999 bond, the LMF Board conducted a thorough overhaul of its project evaluation and selection process. The new scoring and nominations process (adopted in 2000 and available on the LMF website) was designed to ensure that the directions charted by the Legislature using the LAPAC priorities have been implemented. Since that time, the Board has refined the project selection process to adapt to emerging trends in Maine's landscape and natural resources. For example, massive and ongoing sales of north woods timberland have radically changed the ownership of the state's commercial timber lands. In response, the state, private landowners and conservations have developed large scale conservation easements as a tool to stabilize this resource.

In May, 2001, the Board also adopted guidelines for applicants interested in securing funding for these large, landscape scale conservation easements designed to prevent large land tract fragmentation, to secure public access to traditionally accessed lands, and to allow sustainable timber harvesting to continue (see appendix of 2001 Biennial Report for the full text). These guidelines are intended to protect the lands from non-forestry related development and strictly limit further subdivision of the parcels while guaranteeing public use of the properties for traditional pedestrian recreational uses.

Between the program's inception in 1987 and the end of 2003, the Land for Maine's Future Program has now assisted in the acquisition of over 139,000 acres of conservation lands, including 325 miles of waterfront land, and 86 miles of former rail line. In addition to "fee" acquisitions, the LMF Program has authority to work with willing sellers to secure the conservation of lands through easements on privately owned lands. The LMF Program protected, through conservation



easements, 53,400 acres of land. Easements provide a flexible and effective tool to assure that the public interest in a holding is protected while at the same time allowing compatible economic use to continue on those still privately-owned properties. The Program completed over 115 projects in all of Maine's 16 counties, many of them improving the public's access to state waters. Projects include mountain summits, river shoreline, lakes, ponds, coastal islands, beaches, forests, grasslands, farmland, and wetlands. A complete listing of all these projects is included in the appendix. In addition, the program has a number of projects still underway in all of the categories discussed above.

Public Land Ownership in Maine

Currently, Maine has a little over 1.25 million acres of publicly-owned conservation and recreation land, with the majority of these holdings in state ownership. This represents slightly more than 6.1% of Maine. In addition, there are just over 120,000 acres of publicly-held conservation easements on private lands for a combined total

of 6.75% of Maine.

As yet, there is no complete inventory of conservation lands owned by Maine municipalities.

State	Acres	% of State	Nat'l Rank
Maine	1,378,000	6.75	33
New Hampshire	908,410	15.8	19
Vermont	486,170	8.21	27
Massachusetts	277,850	5.54	36
Rhode Island	61,160	9.14	26
New York	11,174,550	36.97	10
New Jersey	840,980	17.71	16
Connecticut	179,690	5.79	35
Pennsylvania	4,228,290	14.74	20

Source: State Planning Office 2004, National Wilderness Institute 1995, Natural Resources Council of Maine 1999

In addition to these lands, Maine's land trusts hold an estimated 306,000 acres of conservation land in fee and just over 1 million acres in conservation easements on private lands.

Trends

This section provides an overview of trends influencing the Program by creating new needs and demands for conservation, protection, or public access. It also describes trends or changes to the Program instituted in order to adapt to changing conditions.



Fragmentation of Maine Timberland and Land Ownership: LAPAC's identification in its 1997 report of northern forest conservation lands as an important land acquisition priority presaged the dramatic land sales that have since occurred. Since June of 1998, 5.5 million acres – over a quarter of all land in Maine (over half of the land in Maine's unorganized territories) – changed hands. As part of this change, large timberland ownerships are being broken into smaller pieces with many more landowners than has been the case in the past. Along with the increased number of owners comes increased diversity in management objectives – keeping the mills supplied with fiber or saw logs is no longer the sole purpose for commercial timberland ownership.

The transition in Maine's timberland ownership is changing the old patterns, where there was stability of ownership with relatively few owners, to a new one with increasing turnover rates and decreasing forest parcel size. This trend toward smaller holdings and more rapid turnover poses a threat to continuing long term access to these lands and their resource values.

Maine's timberlands today are offered in a marketplace with a much broader variety of buyers with differing landowner objectives than existed just 10 years ago. Threats to public access to private forest lands are likely to increase as these trends in ownership diversification and shrinking parcel size continues. These trends also raise questions about the future security of fiber supply for the forest products industry.

"After a century of general stability, the recent decade has brought unusual turnover in owners and objectives. Long familiar owners have vanished, replaced by newcomers with uncertain motives and clearly shorter time horizons. All of this is not necessarily harmful, but it is different. The ferment, sales, and turnover in the market supply a steady flow of feedstock for "liquidators"—exploitive operators who buy, strip, and resell large tracts, often after subdividing into large lots. Thus do market pressures tilt time preferences. Lands once owned with pride by a family for generations are stripped and converted to remote lots in a matter of months. The lots are sold to new owners, many of whose motives are simply to hold the lot for a quick speculative gain."

Excerpt from "This Evergreen Empire," prepared by Lloyd Irland for the Blaine House Conference on Natural Resource-based Industries, November 17, 2003.

Conversion of Farmland and Loss of Infrastructure: Conversion of rural land has happened faster in Maine than nationally, increasing by 29% in Maine between 1992 and 1997 compared to an increase of 18% nationwide. Over the past 20 years, Maine has lost over 70,000 acres of land that had been used to produce feed for



livestock. This pasture and hay land is the open space that defines Maine's rural countryside.

Maine's prime and important farmland soils are a limited natural resource. Nationally, an average of one million acres of farmland is converted for urban, suburban, and rural development per year. According to the USDA Agricultural Census, the average rate of conversion of Maine farmland was nearly 4,500 acres per year between 1992 and 1997, the most recent available data. Though this rate varies across the State the net effect is that Maine's capacity to produce fresh, safe food is being diminished.

In Maine a double-digit annual rise in land values is common in many of southern and coastal areas. Farmland conversion to residential and commercial use, though most prevalent in southern and coastal Maine, is occurring statewide. Farms are in greatest jeopardy when an increase in land values and property tax rates coincides with a dramatic increase in agricultural production costs or major loss in market prices and profits.

"In much of Maine, farmland is under development pressures, some more severe than others. That pressure must be adequately resolved in favor of maintaining [an] appropriate land [base] in agriculture if Maine agriculture is to remain viable."

Excerpt from "Maine Agriculture: A Natural Resource Based Industry Constantly Adapting to Change," prepared by Stewart Smith for the Blaine House Conference on Natural Resource-based Industries, November, 2003

Faced with a variety of challenges to farming and the loss of farmlands, Maine's Department of Agriculture has responded in several ways:

- a) integrating farmland protection with its overall efforts;
- b) supporting and improving the viability of farming as a rural enterprise;
- c) hiring a Farmlands Protection Specialist to manage all LMF farm projects, steward easements and provide technical assistance to farmers and towns, and
- d) developing and adopting a strategic plan for farmland protection.

The dramatic rise in land/farm prices is exacerbating the challenges of keeping farms and the associated open space from changing to another use. A double-digit rise in land values annually is common in much of southern and coastal Maine. Farmland conversion to residential and commercial use, though most prevalent in southern and coastal Maine, is occurring statewide.

Farmland protection projects are becoming increasingly complex. Today, saving Maine's farmland requires all planners and funders to consider the multiple "tools"



that will be needed to protect the farmers and farms as well as the farmland. When the properties that are strategically important to Maine's agricultural industry are threatened, the Department of Agriculture and other agencies need the ability to respond quickly. Currently, the Department is not able to respond quickly though it is able to provide some assistance through grants for business planning and implementation in exchange 5-year non-development covenants on the farm. Additionally, LMF is becoming flexible and able to adapt to an individual project's structure and circumstance. This may mean funding development rights on key fields or parcels, in addition to protecting whole farms.

High Market Demand for Waterfront and Shoreline: Consumer demand for Maine's shoreline – coastal and inland – continues at a high level for commercial and residential uses. This high market demand fuels a general trend of developing the shoreline in our state, pinching access opportunities. The high demand drives up shoreline values and contributes to a fast market where shorefront lots sell quickly, often changing hands several times in short periods of time. This situation makes public acquisition especially challenging, given the time it takes to package necessary funding and to complete negotiations, as well as issues of appropriate valuation techniques.

Shoreline development trends are also affecting existing shoreline access points. These effects include increased conflicts between those using access points and abutting property owners. Over time, informal public access points are being lost to these same development trends. Invasive freshwater plants bring the specter of subjecting new freshwater bodies to the potential of infestation by exotic aquatic plants such as milfoil, in some instances raising resistance to creating new boating access sites on lakes.

At the same time that Maine is losing public shoreline access points, Maine's Statewide Comprehensive Outdoor Recreation Plan indicates that demand for water-based recreation is increasing with an accompanying increase in the need for more water access points.

Increased Public Demand for Public Recreational Opportunities: With the dramatic turnover and subdivision of properties throughout Maine, opportunities for public access to private land continues to diminish. Whether it is access to coastal or inland waters for boating or other purposes, access to forest lands in the north, central, western or southern portions of the state, concern is high that as current trends continue, access to these private lands will diminish. The use of easements to protect properties from development and ensure public access has proven effective in instances where purchasing lands was not possible or practical given costs or other considerations.



Recreation trends: According to the National Survey on Recreation and the Environment, fastest growing activities nationally (based on increase in participants) between 1994-95 and 1999-01, included:

kayaking – 173%	biking – 43%
jet skiing – 107%	canoeing – 43%
snowmobiling – 63%	wildlife viewing – 48%
hiking – 44%	

While still substantial, some traditional outdoor pursuits in Maine are declining: between 1993 and 2001, fishing licenses declined by 12% and hunting licenses declined by 6%.

Snowmobile and ATV recreational usage continue to play a significant role of ever increasing importance. According to Governor Baldacci's ATV Task Force:

“In the past 10 years, the number of ATVs registered in Maine has increased 136%, to 52,830 in 2002. In the same period, retail sales of ATVs in Maine jumped 574%, to nearly 10,000 annually. ATVs now are outselling snowmobiles by a wide margin at many Maine dealerships. They have the potential to equal or even surpass the \$300 million annual economic impact of the snowmobile industry, since ATVs can be used year-round.”

The trend of ever-increasing motorized off-road activity by those enjoying the Maine outdoors brings an assortment of challenges as well as economic benefits. The effects of this trend are magnified because the base amount of privately owned lands accessible to the public is in decline, while the amount of publicly owned lands is steady or increasing only slightly in some areas. Key challenges are keeping lands accessible that are currently open to the public, and increasing public access, particularly in areas of high demand.

LMF Program Responses

Partnerships: The number of land trusts in Maine has risen appreciably over the past decade. Along with this rise has been a rise in the amount of collaboration and cooperation between land trusts in accomplishing projects. In some instances, local land trusts have merged into a regional land trust.

These land trusts play a critical role and reflect the rising awareness of need for local and regional response to conservation and recreation needs. The efforts of these trusts complement the work of several state-wide charitable organizations whose work is, variously, to conserve coastal properties, working farms and



farmland soils, working forests, outdoor recreation opportunities, and lands with significant biodiversity.

The Program has expanded its capacity to execute and manage projects through broader partnerships. In its early years, the Program's partners were largely limited to state agencies, which owned and managed all the project lands, and a small number of non-profit organizations which acted as negotiators and fundraisers for these early projects. Over time and with changes to the Program's statutory charge, partnerships have broadened to include municipalities, land trusts, and other non-profit organizations. Early LMF project lands were always retained by a state agency. More recently, project partners including land trusts and Maine towns own and maintain the project lands.

Matching funds: Since introducing match requirement for use of LMF funds (the minimum match is fifty cents per dollar of LMF funds), matching funds have played an increasing role in the program. Using LMF funds to leverage other sources of money stretches each state dollar invested in conservation and recreation, and helps stimulate local support and demonstrated commitment to projects. For projects completed since 2000, the estimated match is approximately 2.4 to 1 or \$45.1 million for the \$19 million or purchases to date.

Use of Easements Increasing: In the early years of the Program, funds were used primarily to purchase properties. Until the Nicatous Lake Project in 2000, less than 10% of LMF conservation projects were protected by easement. Since then, conservation easements comprise 30% of the conservation acreage, and that fraction is expected to increase.

Use of easement purchases has increased dramatically as a way of protecting important public values while displacing the minimum of private ownership interests. Large scale working forest easements, such as the Leavitt Plantation Forest, are prime examples of using easements to secure public interests while accommodating economic sustainability for a property.

LMF Project Selection Process: As previously discussed, the LMF project selection process has been refined over the years to be more strategic and effective in ensuring that projects address the goals identified by the Land Acquisition Priorities Advisory Committee in 1997. The projects are measured for their level of importance at the local, regional and state level, and the Program has sought ways to coordinate investment with state and local planning priorities.

- 1. Regional significance considered:** The Program has taken advantage of new tools to improve its effectiveness, especially ways of encouraging regional "bang for the buck". For example, the "Beginning with



Habitat” program data provides a strategic underpinning that maximizes natural resource protection efforts.

- 2. Enhancing prior state investments:** Since 2000 the LMF Board has looked to leverage prior state investments, looking to connect or enlarge existing private and state properties. An example is the ambitious trail project between Bradbury Mountain State Park and the Pinelands.

Stewardship of Protected Properties: Whether owned in fee or protected by easement, the State’s capacity to manage properties is continually challenged. The State and its partners have responded to this challenge by building stewardship funding into all applicable projects. For example, the Department of Conservation has established an endowment with private funding and the help of the Maine Community Foundation. Major new conservation initiatives sponsored by this agency include a stewardship fundraising component from private sources.

Outreach Results

In order to offer wider opportunity for input on the Land For Maine’s Future Program from both the public and the variety of interests with a stake in the Program and its activities, the LMF Program staff and Board members conducted over the past fifteen months 6 public meetings around the state and 12 meetings with specific constituency groups. The six public meetings were: Calais, September 23, 2002; Millinocket, July 8th, 2003; Belfast, Sept. 15th, 2003; Bethel, September 23, 2003; Kennebunkport, October 14th, 2003; and Caribou, October 22, 2003.

In addition to these meetings, individual state agencies and organizations have held a number of other meetings, both large and small, covering topic areas related to LMF Program interest areas. LMF program staff monitored (or participated in) these meetings in order to gather additional insights and information useful to the Program. These meetings included: the Blaine House Conference on Maine’s Natural Resource-based Industries, the ongoing work of the Maine Office of Tourism’s Natural Resources Subcommittee, and other similar efforts.

Overarching Message: There is a broad recognition that major change is underway in Maine: patterns of ownership and land development are affecting Maine’s landscape and natural resources, and the public access to them, in profound ways. It is also broadly recognized that these changes cannot be stopped or reversed. In short, the message given was this: **no action is not an option.** This overarching message was heard at all the meetings and from all constituencies: economic development, conservation, recreation, tourism, neighborhood groups and individuals.



Connected to this imperative for action, we heard this general question raised at all the public sessions and in more specific ways at the various meetings with constituent groups: *How can we use land conservation to help us get to the future we would like to have for ourselves and our children's future?*

From Caribou to Kennebunk, a common message heard at all of the public "listening sessions" suggests that, overall there is good will toward the LMF Program and staff, and a general lack of understanding about particulars of the program itself.

Common Themes from the Sessions: A number of common themes made themselves apparent from these sessions, including:

1. **Partnerships** – Interested parties working together is seen as a way to encourage LMF projects that provide the greatest benefit and receive the best stewardship. Numerous comments and suggestions were offered pointing to the benefits and potentials offered by encouraging and building partnerships. There are a significant number of partnership examples with current LMF projects. Present and potential future partners include municipalities, conservation groups and land trusts, recreation organizations, neighborhood groups, and others.
2. **Conservation/Economic Development** – The connection between conservation and economic development is broadly recognized and understood. While there are many examples of this connection, three of the most common connections raised at the meetings were:
 - Working forest easements not only protect land from fragmentation but also contribute to future fiber supplies on a sustainable basis.
 - Increased recreational opportunities and conserved natural areas help support tourism in the state.
 - Farm land protection gives agriculture an opportunity to continue while at the same time maintaining open space.
3. **Regional Issues** – Participants at a number of meetings pointed out that connectivity is an increasing theme in conservation efforts. Trails, in particular, are increasingly popular. Examples of regional issues, which require regional planning and cooperation and coordination in identifying, protecting and managing, include beach access, trails, river corridors, and landscape scale habitat protection.
4. **Better Connection to Town Planning** – A variety of comments covered various aspects of the relationship between land conservation/ recreation projects and local comprehensive land use planning. Suggestions were



given that land conservation should be part of local comprehensive planning, that LMF funds should be used to motivate thoughtful town planning, and that local officials need to be involved and better educated on the benefits of land conservation.

One commenter suggested that by providing more parks and open spaces in built-up areas, communities would become more livable and fewer people would be inclined to move out to rural areas.

5. **Ownership** – The increased rate of change of land ownership (turnover) was noted throughout the state. It was suggested that the change in the type of owner is a more significant issue than the turnover rate, because new owners hold the land for different purposes which often conflict with traditional use and access. Finally, it was pointed out how high turnover of properties is driving up land costs – something particularly evident in southern and coastal Maine.
6. **Taxes** – Attendees at the meetings were aware of the potential impacts on local property tax caused by LMF acquisitions of land. At the same time, these people appeared to feel that those impacts are either minimal or can contribute to future benefits.
7. **Farm Land Protection** – Protecting Maine's farms continues to be important, primarily for the open space conserved but also for economic and quality of life considerations. Comments were received on the need to consider farm land and farming in a regional context, in order to ensure that sufficient farm land, farming operations, and farming infrastructure continue to exist to ensure viability.
8. **Land Management Issues** – Concern was expressed at several meetings over conflicting public uses on conserved lands, public and private.
9. **Programmatic Issues** – The need for LMF to be able to react quickly was commonly cited in meetings. Other comments pointed to the need to keep programmatic and administrative issues as simple as possible, especially for farm land protection projects.



4. Case Studies



General Findings

LMF's overarching mission is to protect land for the people of Maine. Yet it is difficult to understand how it accomplishes this simply by looking at numbers and maps. The case studies below are meant to illustrate some of the ways that LMF funds have impacted individual Maine communities and citizens. In particular, they illustrate the economic, social, and

developmental impacts of these public investments. In addition to findings that are specific to each case, some general lessons emerge. Note that these lessons are formed from analysis of these specific cases; analysis of other cases may reveal other findings.

Economic Impacts: Changes in land use and landownership have very real economic impacts on Maine communities; these case studies confirm that fact. Decisions about whether land is conserved or developed, or split between the two, are influenced by economic considerations regarding housing, employment, population growth, etc.

The Importance of Local Initiative: Local leadership was the driving force behind all four cases. The proposal process through which LMF projects are selected appears to rely heavily on the dedication of local stakeholders. After funds have been secured, local initiative aids in the maintenance and management of the protected land; this is central to guaranteeing its long-term stewardship.

Consistency with a Regional Vision Strong local support appears to depend on the project being consistent with regional economic development goals that are backed by local residents. Conservation projects gain local support if they are compatible with the long-term economic and social vision of the communities they will affect.



Capacity Building: As a resource for local organizations, LMF can help to foster capacity to influence changes in local land use and landownership patterns. LMF involvement also has the potential to boost support for a particular project. Communities may leverage these initial funds to attract support from a broader range of sources than might otherwise be available. By increasing the ability of local organizations to act, these state funds may generate returns long after they have been expended.

Timing: Changes in landownership often occur quickly, and the timing of conservation opportunities is not always predictable. In order to be successful, local organizations must develop the capacity to recognize opportunities as they arise, and mobilize their resources in an effective, timely manner.

Purpose and Methodology

The dozens of projects completed by LMF over the past 16 years provide a rich source of stories and lessons about how land conservation has impacted Maine communities. The time and resources available for this report have allowed us to develop but a few case studies. These projects represent some elements of the LMF program, but certainly not all. First, we look at the rails-to-trails projects in Aroostook County. About ten years ago, LMF helped residents acquire abandoned rail beds with the intention of converting them into a multiple use trail system. Looking at an earlier LMF project enables us to assess potential long-term economic and social contributions. Second, we discuss LMF's involvement with conservation efforts along Spednic Lake and the upper St. Croix River corridor. These projects help illustrate the connection between an area's natural assets and its economic and cultural heritage. Third, we look at LMF's work along the Presumpscot River in southern Maine. This project reveals the complex nature of balancing dual desires for development and land conservation in areas with growing populations. Finally, we look at LMF's role in protecting Lakeside Orchard in Manchester, Readfield, and Winthrop. This project highlights the challenges to be overcome and opportunities that emerge when preserving working farmland.

Information for these case studies was derived from LMF files, conversations with LMF staff, and consultations with knowledgeable local individuals who were involved with the projects or closely affected by them. Throughout the case studies, the speakers of most quotes are not directly identified. In general, the studies are written as follows: brief background sections describe the local context in which the acquisitions were made; subsequent sections describe the economic, social, and developmental impacts that the projects have had (or are projected to have); and the final sections outline lessons that may be drawn from each case.



❖ **Aroostook Rails-to-Trails:** Supporting an Emerging Tourism Industry in Northern Maine

Abstract:

In Aroostook County, LMF helped acquire rights-of-way for portions of the Aroostook Valley Railroad (AVR) and Bangor and Aroostook Railroad (BAR). Local residents worked for years to smooth the way for the state to acquire the railways and then to convert the neglected infrastructure into a year-round, multiple-use trail system. Today these trails are widely recognized as an economic as well as recreational resource. They are most well known for helping to attract thousands of snowmobilers to Aroostook County each winter. Despite some initial hesitation, local residents and municipalities have become supportive of the trails as their economic development potential becomes visible. The trails are now recognized as being an important component of regional planning. In addition to their economic impact, the process of acquiring and maintaining the AVR and BAR trail beds has strengthened regional cooperation. The trail system is collectively maintained, with towns contributing what they can, volunteers doing most of the work, and the state contributing financial support. Local snowmobile and ATV clubs provide thousands of people-hours each year. They also work continuously to maintain good relations with owners of trailside land. These projects help to illustrate the potential long-term economic and social impacts of LMF funds. These trails have become an integral component of the regional economy and are aiding the County through a difficult economic transition.

Jim Gardner, town manager of Washburn, is very clear about the impact that Aroostook County's rails-to-trails initiative has had on his community. "[The trails] opened up an economic lifeline to the Town of Washburn... We'd been in the economic doldrums for twenty years..." Washburn lies at the confluence of the Aroostook Valley Railroad (AVR) and the Bangor and Aroostook Railroad (BAR). In the last few years, as use of the rail beds for snowmobiling, biking, walking, horseback riding, and ATV-ing has increased, so has the economic vitality of Washburn, Maine.

Background

One of LMF's earliest projects was the acquisition of rights-of-way for portions of the AVR and BAR, with the vision of converting the railways into a year-round, multiple-use trail system. To that end, in 1992 LMF contributed funds toward acquiring 18.5 miles of line through the towns of Washburn, Woodland, Caribou, and New Sweden. In 1994, LMF aided the acquisition of 53 miles connecting Washburn, Stockholm, Caribou, and Van Buren.

When these abandoned rail lines became publicly available, local residents saw a unique opportunity, not only to build a trail, but to preserve an irreplaceable infrastructure asset. Acquiring the land to build such a network today, on multiple parcels with multiple owners, would be virtually impossible (and prohibitively



costly). Building a trail system from scratch would require the state to negotiate with literally thousands of landowners over whose property the state wished to build. Preserving the lineal trails also avoids the need to continually reroute the trails as land changes hands. Indeed, one local leader says “rural sprawl has precluded us from being able to reroute.” In essence, these publicly held lands ensure continuity of the regional trail system.

The timing of these projects was important. Due to decades of neglect, much of the railway was deteriorating. This opportunity had to be taken quickly. “If we didn’t capture it soon, it would have been lost.” After decades of overgrowth and washouts, the infrastructure of these abandoned rail lines was “imploding;” securing public ownership of the trails was only half of the challenge. Once the deal was closed, local organizers had to make the lines usable. For two years, local volunteers and two Americorp work teams removed rail ties (roughly 100,000 on the AVR alone), repaired washouts, replaced bridges and culverts, and graded the trail. Local organizations leveraged the LMF funds to gain financial support for trail restoration from other state and federal entities.

The years of work dedicated to acquiring and restoring the rail beds have paid off in many ways. Local residents have not only created a prized recreational asset, they have cultivated an emerging tourism industry and expanded regional thinking.

Economic Impact: Tourism

These trails are widely recognized as an economic as well as recreational resource. They are probably most well known for helping to attract thousands of snowmobilers to Aroostook County each winter. While the success of the industry cannot be attributed to these trails alone, they do provide the opportunity to ride on smooth, well-maintained terrain and they serve as a conduit to other trails. Regional planners doubt that the area would have gained its reputation as a snowmobile destination without them. The County trail system has been mentioned in national publications such as *Outdoors Magazine*, *National Geographic*, *Down East*, and *Maine Sportsman*. Hence, in addition to contributing to the vitality of the towns through which they run, these trails contribute to the economic health of the region as a whole. A 1999 study found that the snowmobile industry in Maine generates approximately \$261 million annually and much of that is in Aroostook County.²

Griffin’s One Stop, in Washburn, is a fine example of the potential economic impact of the trails. A combination gas station, convenience store, and restaurant,

² Stephen Reiling, “An Economic Evaluation of Snowmobiling in Maine: An Update for 1997-98,” Department of Resource Economics and Policy, University of Maine.



Griffin's has become Washburn's second largest employer. Owner Art Griffin claims that the trails make the difference between him being there or not. When Griffin was considering locating his business in Washburn six years ago, gas company representatives doubted that such a small town could support the necessary sales volume. Today, Griffin's is doing well and its owner credits his success to the trails. During the winter, 1/3 to 1/2 of his gas sales are to snowmobilers. In the summer, he'll see 20-30 all-terrain vehicles (ATVs) at a time on Saturday morning. "There are days when you can hardly get a car in here." He also does business with some walkers, bicyclists, and dirt bikers.

Many businesses and residents are drawn to trailside property. In Washburn, an old three-story construction building that sold for \$132,000 several years ago is now being touted as a B&B for trail users and recently sold for \$250,000. Also in that town, municipal officials report that four new homes have been built and three out-of-state families have moved into homes near the trail.

Social Impact: Fostering Regional Thinking

Acquiring and maintaining the AVR and BAR trail beds has strengthened regional cooperation. "It was a tool for more regional thinking and planning," says one participant. "The initial process of trying to get support began a collaborative regional thinking... [The trail system] gave merit to the concept and we started working together more..." Today town managers and planners from throughout the region regularly meet to discuss common concerns. There is general recognition that if the trail section through one town deteriorates, then everyone will suffer. The trail system is collectively maintained, with towns contributing what they can and volunteers doing most of the work. Given limited resources, most municipalities provide in-kind contributions such as the use of town equipment, gravel, or a culvert. Since the inception of the trails, local organizations have received funding from a variety of state, federal, and non-profit organizations and the trails are primarily maintained by volunteers. Local snowmobile and ATV clubs provide thousands of people-hours each year. They also work continuously to maintain good relations with owners of trailside land.

Trust and communication between landowners and those who use and maintain the trails have greatly increased. When the trails were initially proposed, the idea received a mixed reception from local residents. Many were worried about loud motorized vehicles passing through their backyards and potential property damage. Since then, landowners have seen that most trail operators and users will go out of their way to address landowner concerns. Local sentiment has "really come around." In retrospect, the perceptions of potential problems have proved to be greater than actual the problems that have arisen. "The problems everyone said we'd have haven't happened." Continual efforts by trail operators to work with local landowners seem to have mitigated problems and helped sustain the trails.



Among trail users, education and communication regarding appropriate trail use and rights of way are an on-going task. However, for the most part, “user conflicts really aren’t there.” Initial fears about ATV use have lessened over time, as users have become accustomed to sharing the trail. In fact, these trails may help alleviate some potential problems between ATVs and landowners. In the words of one local leader, “we’ve given them a place to ride ATVs and have taken a lot of burden off the private landowners.” One signal of the growing acceptance of this recreational activity is the Town of Washburn’s recent donation of public land on which to build an ATV club.

Developmental Impact: Building off the Trail

These trails are an important component of regional economic development. As their value as a development tool becomes more visible, local towns become more supportive. In the words of one local official, “[it’s] no panacea for economic development, it’s one more tool.” Art Griffin says “in the County, we don’t have an influx of big businesses. We need people like me. I employ fourteen people and, with the exception of the school system, I’m the biggest employer in town.”

The trend for municipal comprehensive planning has increased in the years since these projects began. More and more towns are crafting community visions regarding growth and land use, and increasingly these visions incorporate the trails. Local planning committees have become more conscious of the trails and the surrounding scenic landscapes that draw people to them. Planners try to keep development away from the trails and some towns have begun zoning to protect trail view-sheds. There is an overall recognition that these scenic spots are why many people use the trails in the first place.

Moving forward, local leaders are working to secure the BAR trail from Phair Junction to Houlton, which has recently become available. This is another unique opportunity that local planners have identified as being a very important strategic investment. LMF is currently considering the proposal.

In terms of usage, planners are hoping to attract more bicyclists to the trails and to guide and foster the expanding ATV use, two goals that may be difficult to balance. Northern Maine has not yet seen the increase in bicycling that much of the rest of the country has, and some locals see the trail system as an untapped resource for bikers. Roads in the area aren’t always safe and the trails provide an easily accessible, safe place to ride. Increasing bike use could also expand visitation in what is now considered the off-season. ATVs are perhaps even more likely to generate economic benefits during that season. After all, they are a growing industry. Between 1998 and 2002, annual ATV sales in Maine more than doubled;



during the same time, the number of ATV registrations grew by 56%.³ Additionally, “lineal trails provide the opportunity of an environmentally sound place to operate,” and hence may alleviate potential problems elsewhere. Trail managers will have to work hard to balance the expectations and needs of growing numbers of bicycle and ATV trail-users.

Lessons

- Looking at one of LMF’s earlier projects helps to illustrate the potential long-term economic and social impacts of state funds. These trails have become an integral component of the regional economy and are aiding the County during a difficult economic transition.
- The importance of local leadership and vision cannot be overemphasized. These acquisitions were part of a regional development vision that had strong local support. As this case shows, LMF funds can help begin a process that feeds off local energy and resources. LMF funds can also be leveraged to secure financial support from federal and private sources. In these ways, well-placed state funds can produce a very high return.
- Local residents’ worries were eventually overcome by their willingness to take a risk, and the ability of the trail organizers to deliver on their promises regarding noise and property damage control. Facilitating cooperation between trail users and landowners has been an on-going process.
- Timing, flexibility, and persistence were important components of these projects. Faced with a unique opportunity, local and state officials had to work creatively. The process took several years and even required the passage of new legislation to address legal hurdles to the state acquiring the right-of-way. This process would not have been successfully completed without the dedication and diligence of local organizations.

³ Governor John Baldacci’s ATV Task Force, “ATV Solutions: Recommendations of Governor John Baldacci’s ATV Task Force,” October 6, 2003.



❖ **Spednic Lake and the Lower St. Croix River:** Preserving a Traditional Maine Industry Downeast

Abstract:

LMF has assisted several acquisitions in Washington County around Spednic Lake and along the upper St. Croix River corridor. Visitors have long been drawn to the secluded wilderness of this area, where they can escape the sounds and sights of development. Securing the unmarred nature of the land has helped ensure the continued existence of the sporting lodge and guide service industry that is an integral part of the regional economy. Like other LMF projects, local energy fueled this effort. Strong local support drew from a deep love of the land and a desire to preserve traditional livelihoods. That support reflects the value of undeveloped land as one component of a viable local economy. Working toward their conservation goals has helped to organize local stakeholders and has increased their capacity to influence changes in land use and landownership. The projects also advance a joint U.S.-Canadian commitment to protect the natural character of the St. Croix international waterway. They complement larger projects on both sides of the river that are working toward protecting the entire St. Croix watershed. The timing of these efforts is important, especially during the current era of rapidly changing landownership patterns. LMF has been recognized for its ability to work with a variety of stakeholders, and to support a variety of solutions for landownership and stewardship. "LMF was the only vehicle that could make this possible," says one participant.

Dale Wheaton and his wife, Jana, operate a fishing lodge on East Grand Lake, where clients can find some of the best landlocked salmon and smallmouth bass fishing in the country. When Wheaton's parents opened the business in 1952, they competed with lodges across Washington County and in other Maine locales such as Belgrade and Rangeley lakes. Now Wheaton competes mainly with lodges in Ontario and Quebec. Why the change? According to Wheaton, the fisheries in those other Maine spots remain strong. What has changed is the nature of the surrounding land and the overall experience available to visitors. The product of a secluded fishing vacation, away from the sound of cars and the sight of camps, no longer exists in many locations throughout the state.

In the northern St. Croix watershed, which includes Spednic Lake, this experience still exists, and it plays an important role in the local economy. LMF's projects in this area have been driven largely by local support. The acquisitions have helped sustain an economic industry by conserving the undeveloped land on which it depends. They have also fostered local capacity to influence rapidly changing landownership patterns and contributed toward the fulfillment of international agreements to protect the St. Croix watershed.



Economic Impact: Preserving the Experience

Outdoor recreation is the region's second largest industry, after forestry. Sport fishing alone is estimated to add over \$5 million to the local economy annually.⁴ Each year, thousands of people from across the country and beyond visit to fish, canoe, and camp. They stay at local lodges and hire local guides. The money that they spend is critical to the local economy. Wheaton's Lodge alone provides work for roughly twenty employees and guides, both part- and full-time. "It's a small business, but in Forest City, we are the biggest player." LMF funds have played a role in preserving these traditional occupations.

Securing the unmarred natural setting that visitors expect and demand helps ensure the continued existence of a historical Maine industry. The Maine sporting lodge and guiding industry is an invaluable part of our state heritage and a critical source of income for local residents. At the same time, this initiative sought to minimize its impact on commercial forest management by maintaining a tight focus on waterfront lands.

Recognizing these connections, and motivated by a deep love for their natural surroundings, local residents have been very supportive of LMF's Spednic Lake and St. Croix River projects. LMF has helped fund several easements and fee purchases beginning with the 1992 fee acquisition of 523 acres on the peninsula between Mud and Spednic lakes and a 13 acre conservation easement. In 1994, LMF helped secure 16 miles (831 acres) of shorefront on Spednic Lake, mostly through easement, and several small islands. Birch Island was protected in 1996. It has a rudimentary landing and campsite that have historically been used by local guides, campers, and fishing parties. In 2003, LMF helped close the largest project – a 500-foot corridor along 16 miles of Spednic Lake and 34 miles of the upper St. Croix River, plus several islands, almost 3,000 acres in all.

Social Impact: Strengthening Local Networks

These LMF projects have received strong support from local guides, landowners, and municipalities and helped expand local capacity to lead and fund conservation efforts. "In every acquisition, local people were the prime supporters... [they] had the persistence and vision." The most visible product of this strengthened capacity is the Woodie Wheaton Land Trust (WWLT, named for Dale Wheaton's father). Momentum for this trust began in 1994 when a small parcel of shorefront property on Mud Lake went up for sale. Local stakeholders contacted the Maine Department

⁴ St. Croix International Waterway Commission, "Anadromous Alewives and Freshwater Smallmouth Bass on the St. Croix System, Maine and New Brunswick: Responses to Questions," April 2000.



of Inland Fisheries and Wildlife (IF&W) and agreed to split with the state the cost of acquiring the property.

This led to the formation of the land trust; local interests now had a vehicle with which to pursue land protection. To date, WWLT has had a role in protecting almost all of the land along Maine's side of Spednic Lake. As one participant observed, "the ability of LMF to make an early pledge to a project can galvanize local organizations to see that it can really happen... The success of the project has provided [WWLT] with much more credibility and expanded [its] donor base for future projects."

In the process of raising money, guides and lodge owners sent letters to their clients, many of whom were glad to contribute. In fact, one of the benefits of the formation of this land trust has been closer collaboration between "locals" and "people from away." The joint effort has revealed a shared appreciation for the land and willingness to collaborate to protect it.

In many ways, LMF has been a tool for local residents seeking to preserve their economic and cultural identities. However, the projects have significance at a much higher level; they advance an international planning effort that began almost two decades ago.

Fostering International Partnerships

The invisible U.S.-Canadian border runs down the middle of Spednic Lake and the St. Croix River. Fortunately, governments and civic organizations on both sides have recognized the importance of protecting the area's pristine character. A 1982 study identified the St. Croix River as one of twenty outstanding rivers in Maine, and the Canadian government has designated the St. Croix as one of twenty-five Canadian Heritage Rivers. In 1986, Maine and New Brunswick signed an international memorandum that led to the formation of the St. Croix International Waterway Commission. The commission was charged with coordinating bilateral efforts and helping to craft a joint management plan for the river corridor "with a particular focus on its resource and recreational values."

An integral part of that plan is the protection of the undeveloped character of Spednic Lake and the upper St. Croix River. The Georgia-Pacific Corporation (G-P) owned a very large percentage of the land. When the company divested its forestland in 1999, the Province of New Brunswick purchased all of the 385,500 acres within its borders. It subsequently designated 64,000 acres beside Spednic Lake as Protected Natural Area, essentially an ecological preserve, and applied special protection to the upper river corridor.



On the Maine side, Wagner Timber Partners, LLC acquired most of the G-P land. LMF has since secured a 500-foot strip of land along the St. Croix River corridor, purchased from Wagner. In all, about 95% of the Spednic Lake and upper St. Croix River section of the corridor is now protected; Maine is fulfilling its commitment to protect this unique natural resource.

These ventures have fed into a larger project. The Downeast Lakes Forestry Partnership is currently working toward purchasing a conservation easement on 320,000 acres of working forestland managed by Wagner, mostly in the St. Croix watershed.

The cross-border relationships developed through this project have been “remarkable.” “This project has created that partnership,” says one participant. “Working together to bring this area into protection has involved agencies, land trusts, landowners, and land users working together... It has focused people’s attention.”

Lessons

- Undeveloped land can have value beyond its use for resource extraction. Rural residents of the upper St. Croix watershed recognize this land as a crucial component of their economy; protecting its natural character is a tool for protecting their economic existence and cultural heritage.
- Local support is crucial. The long-term success of these projects relies heavily on local commitment. During the proposal process, WWLT even committed to assuming “future monitoring costs and responsibilities” along the Spednic Lake portion of the acquisition. The Forest City Guide Association and IF&W are also working toward shared management responsibilities on some lands along the lake, and DOC will manage use of the river corridor with help from other local groups. Local support may be a valuable resource for lightening the state’s management burden as it acquires more public lands. As one local planner observes, “there need to be local partners in stewardship as well as acquisition.”
- Timing is important, especially during the current era of rapidly changing landownership patterns. Being able to aid a particular region when land is changing hands helps capture opportunities that may be lost forever if not taken quickly.
- LMF’s flexibility makes it a valuable tool for land acquisition. The program’s ability to work with a variety of stakeholders, and its ability to support a variety of solutions for landownership and stewardship make it



versatile and effective. “LMF was the only vehicle that could make this possible,” says one participant. After exploring several other local and federal funding sources, LMF emerged as the only one that could accommodate the purchase of the 500-foot corridor. “LMF was designed for just this sort of thing.”

- Local support is more likely to exist if conservation efforts are embedded within a sound strategic vision for regional development that is compatible with traditional economies. In this region, local support drew upon a strong love of the land and water as well as a desire to protect an important industry. The projects also strove to accommodate desires to sustain the local wood products industry.

❖ **Presumpscot River: Balancing Growth and Conservation in Southern Maine**

Abstract

Since 1999, LMF has aided in the acquisition of several parcels along the Presumpscot River in Portland and Falmouth. These projects are part of an emerging green corridor along the Presumpscot River that provides public opportunities for fishing, biking, hiking, and boating. The first and largest acquisition became the Presumpscot River Preserve, which encompasses 48 acres of forested ravines and shorefront in the North Deering neighborhood, within miles of downtown Portland. The preserve was originally part of a larger parcel slated for development. The City of Portland and several local community organizations opposed the development. Many stakeholders wanted to protect the entire parcel, while others pointed to the region's growing housing need. This project reveals the difficulty of balancing the very real building needs of a growing population with the desire to protect undeveloped land. According to one participant, the possibility of securing LMF funds to buy all or part of the land, combined with the LMF requirement of a willing seller, brought all parties to the table. The resulting compromise was a 48 acre nature preserve and building lots for 30, rather than 67, homes. In the words of one participant: “We saved the most precious parts of the property and some houses were built.” Today, the preserve is owned by the City of Portland and is managed in partnership with Portland Trails, a local conservation organization and land trust. Portland Trails is still organizing capital improvements of the site including trail upgrades and consolidation and improvements to signage and access. Since this project is still in its infancy, some benefits are yet to materialize.

Balancing the very real building needs of a growing population with the desire to protect undeveloped land is a difficult task. Allowing unlimited building can lead to the irreversible loss of treasured land. Completely limiting development can push construction into neighboring communities and increase sprawl. In 1999, these issues emerged when owners of a large undeveloped parcel along the



Presumpscot River in Portland and Falmouth submitted plans to convert the property to residential housing.

Background

To understand the objections that arose, one must first know a little local history. Several years prior, another large parcel of undeveloped land in Portland had been similarly developed. The land had been recreationally used for years by residents of the surrounding neighborhood. Once it was developed, there was a general sense of loss within some segments of the community. This experience prompted the City of Portland to establish a Land Bank Commission, charged with identifying other land to be protected.

When word spread of the proposed development on Presumpscot River, an organized effort to oppose the development formed. Once heavily polluted, the river had benefited from twenty years of clean up efforts and the recent removal of the Smelt Hill Dam, resulting in rebounding fisheries and new boating opportunities along that section of the river. Reluctant to compromise the restored character of the river, many stakeholders wanted to preserve the entire parcel and not allow any development. Concurrent with this emerging conflict between landowners and conservationists, the Portland area had a recognized housing shortage.⁵ The developers' proposal to build 67 new homes on the property could have been a small step toward alleviating that problem.

The landowners and the city negotiated unsuccessfully for months. The city didn't have the funds to fully purchase the land and preferred not to take it through eminent domain, although it was positioned to do so. Portland Trails, a local conservation organization and land trust, had the will and resources to fundraise, but no clout. According to one participant, the possibility of securing LMF funds to buy all or part of the land, combined with the LMF requirement of a willing seller, brought all parties to the table. The resulting compromise was a 48 acre nature preserve and building lots for 30, rather than 67, homes. In the words of one participant: "We saved the most precious parts of the property and some houses were built."

The Preserve

The Presumpscot River Preserve encompasses 48 acres of forested ravines and shorefront in the North Deering neighborhood, within miles of downtown Portland. This area has traditionally been used for fishing and mountain biking.

⁵ See for example: Bouchard, Kelley. "Housing Crunch Grips Southern Maine." Portland Press Herald, May 27, 2001.



Even before the land became publicly owned, regular users had developed a series of well-worn trails. Now public access is legal and has been guaranteed into perpetuity.

The preserve is owned by the City of Portland and is managed in partnership with Portland Trails. Today, Portland Trails is still organizing capital improvements of the site including trail upgrades and consolidation, and improvements to signage and access. All parties expect use of the property to increase as word of public accessibility spreads.

Subsequent Projects

During the initial proposal process, LMF challenged the cities of Portland and Falmouth to think beyond an isolated urban park and to find more property along the river to protect. In response to this challenge, local and state organizations have subsequently orchestrated the acquisition of two parcels downstream from the preserve. Together, these projects are part of an emerging green corridor along the Presumpscot River that provides public opportunities for fishing, biking, hiking, and boating.

Across the river and downstream from the preserve, the Town of Falmouth acquired 4.4 acres, with 627' of shorefront, with financial assistance from LMF and a private landowner. This property secures access to popular shore fishing spots, as well as water access for canoeists and kayakers. Immediately upstream, LMF, Falmouth, Portland Trails, Falmouth Conservation Trust, the Department of Conservation, and other landowners combined resources to secure an additional 2,200' of shorefront on property that contains a traditional access path.

Economic, Social, and Developmental Impacts

These projects are in their infancy, so their long-term impact is still unknown. Even effects on usage are unclear since the area is still being prepared for public use and the resources haven't been widely publicized. However, a few social benefits have already emerged.

One indirect benefit from this collaborative effort is stronger local capacity to address conservation opportunities. Specifically, orchestrating fund raising and property management has strengthened Portland Trails as an organization, and created a stronger relationship between Portland Trails and the City of Portland. According to one participant, gaining the LMF seal of approval on the Presumpscot River Preserve project enabled Portland Trails to raise more funds than they could have raised otherwise. They received contributions from over 200 individuals, businesses, municipalities, and organizations, including large gifts from several



national foundations and federal agencies. They even got calls from nearby property owners looking to protect their land.

Its proximity to Maine's largest population center makes Presumpscot River Preserve a unique spot. One potential long-term benefit of this undeveloped land may be the preservation of Portland's identity as a green city. In the words of one participant, urban green spaces like this "have more impact on people's daily lives than a once-in-a-lifetime trip to Baxter." Portland sees its green spaces as a draw for residents and visitors. These areas arguably benefit the long-term economic health and vitality of the city.

Lessons

- Land-use compromises can help balance the dual desires of a growing population for increased development *and* secure access to undeveloped land. We can expect that these issues will arise more frequently as growth spreads beyond southern and coastal Maine.
- LMF funds can be leveraged to secure support from other sources. LMF requires \$1 match for every \$2 of state money committed. However, several projects, of which Presumpscot River Preserve is one, exceed this requirement. In this sense, Maine taxpayers receive a high return on their investment.
- In retrospect, some feel that the city could have gone farther toward encouraging high-density development. "We could have created more housing and saved more land if setback and lot requirements have been changed," said one participant. LMF may have been able to leverage its funding power in such a way as to encourage this type of thinking. After all, if homes are now more likely to be built in a surrounding community, then land development has simply moved, not lessened. Hence this development situation could repeat itself and LMF could end up paying again someplace else.
- LMF funds can bring people to the table and advance compromises. The balance between growth and conservation reached during the formation of the Presumpscot River Preserve was difficult to broker. Cooperation between the city, conservation groups, and landowners peaked with the acquisition of LMF funds and seems to have deteriorated since then. Post-acquisition there were disagreements and delays on how the land earmarked for development would be used and construction of the second phase of the development has been delayed. It is unclear if LMF funds could have been managed differently and promoted more sustained cooperation.



❖ Lakeside Orchard: Preserving Farmland in Central Maine

Abstract:

In 2002, by a purchase of development rights, LMF made possible the acquisition of Lakeside Orchard by Steve and Marilyn Meyerhans, owners of The Apple Farm in Fairfield. The Meyerhanses had been leasing Lakeside since 1999. Having reached full capacity at the Fairfield operation, their ultimate objective was to purchase the larger, better equipped Lakeside Orchard and build on their earlier successes with The Apple Farm. Lakeside's owners, Reed and Priscilla Markley, explored different avenues of support to make the sale feasible. The existence of a conservation easement made it possible to appraise the land's value for its agricultural use. Through contributions from LMF and matching federal funds, the Meyerhanses were able to realize their objective. This project is the result of a successful private-public partnership.

Protecting farmland in Maine is becoming increasingly complex. Development pressures and market competition, coinciding with an aging farmer population (half of Maine's farmers are approaching retirement age) present difficult challenges for the task of transitioning Maine farms to a new generation of farmers. When a farm's fair market value or development rights exceed its earning capacity, keeping the land in agricultural use is often economically unfeasible. Yet, the widespread desire to preserve farmland in Maine reflects a growing consensus that farms are worth more than their development rights or production capacity. The Maine farm is a unique example of natural amenities exceeding extraction potential: although farms are commercially "developed" properties, they provide many of the benefits associated with undeveloped lands, such as open space, wildlife habitat, and scenic views. They also embody long held notions of cultural identity and traditional values. The social worth of these qualities locates the Maine farm on a middle ground where private ownership and public interest co-exist.

Background

Lakeside Orchard is located in the central Maine towns of Manchester, Winthrop, and Readfield (primarily in Manchester). In operation since the 1880's, its original 5,000 acres have dwindled to 189. At the date of purchase, the orchard consisted of some 8,000 trees producing mixed varieties of apples, pears, and plums. There were also two large storage facilities. The Meyerhanses have since introduced a cider operation and limited vegetable production. Lakeside also provides storage capacity for other farmers. Its current business plan calls for a conversion of twelve acres of orchard to mixed fruit and vegetables to diversify products and increase the attractiveness of their retail store on Rte. 17.

The Apple Farm/Lakeside mission statement reflects some of the ways that the Meyerhanses are embracing trends among farmers to sustain agriculture in Maine and to engage the public more actively in the "ownership" of farms: "We are



committed to preserving agricultural land for today's and tomorrow's needs. We are also committed to providing open space and public access to the land. We feel the need for good food can and should be met locally as much as possible and we strive to meet that need."

The Meyerhanses have implemented some of these objectives by turning an operation based on out-of-state wholesale markets into a supplier of locally grown foods. Ninety-six percent of Lakeside's production now reaches Maine residents through contracts with Bowdoin and Colby Colleges, the Augusta Public School System, and North Center Food Distributors, which serves hospitals and institutions through out Maine. Implementing their recently-developed business plan, the Meyerhanses are diversifying and increasing production of vegetables; adding a bakery; increasing and diversifying juice production; and improving customer appeal. Many of these priorities are calculated to develop a more active relationship with the local public, one that involves more than retail sales. "Because of the growing interest in agritourism, [Lakeside is] well situated to enhance services that allow customers to tour, hike and enjoy the farm as a personal connection with nature," Marilyn Meyerhans notes.

Economic Impact: On and Off the Farm

LMF's purchase of development rights dramatically reduced the real value of the Lakeside property. One outcome of this change has been a reduction in town tax revenue from \$10,000 per year to approximately \$4,000. However, the loss of value due to a conservation easement characteristically brings additional value to neighboring properties. Both Manchester's Town Manager and Assessor believe that "nearby properties gained in desirability and therefore value."

It is too soon to know if the increased values of neighboring properties will offset the loss of tax revenue; however, based on the Meyerhanses' success with The Apple Farm in Fairfield, a substantial net increase of economic activity at Lakeside is likely. One indication of this increase is already apparent in the growth of the Meyerhanses' workforce from 1 to 4 full-time employees and 10 to 20 seasonal part-time workers. Additionally, one of the Meyerhanses' priority objectives is to provide housing and benefits for apprentices and seasonal workers.

Increased production and processing at Lakeside will also generate revenue for local agricultural infrastructure and support services. To help implement its NRCS Conservation Plan, Lakeside will receive \$20,000 from the USDA as a cost-share to construct a pesticide mixing facility (the first in Kennebec County). In February and June of this year, LMF granted Lakeside a total of \$18,000 to develop a business plan and implement capital improvements to the land. This plan, which calls for the conversion of 12 acres of orchard to mixed fruit and vegetables, will require excavation and soil preparation services as well as the purchase and installation of



fencing and irrigation equipment. All of these expenditures reflect a new center of economic activity in the area, demonstrating once again that LMF investments bring real benefits to local economies.

Social Impact: Growing Community Ownership

Like many LMF projects, Lakeside vividly demonstrates that the economic and social values of land conservation are inseparable. Clearly the Meyerhanses' philosophy is to enhance the economic viability of their business by making it more valuable to its clientele, generation to generation. A family tradition of apple picking not only reinforces traditional rural values but also contributes to the sustainability of the farm.

The Meyerhanses have actively cultivated these sources of sustainability by providing a source of recreation as well as healthy local food. Among the services they currently provide are tours for school children. Young adults at Colby and Bowdoin Colleges, who have come to recognize the slogan "The Apple Farm – Your Maine Orchard," regularly travel to the farm to pick apples together as a dorm or club event. The Meyerhanses also anticipate offering nearby Community School Districts opportunities to conduct on-farm educational activities centered on local and natural history.

The ways in which the Lakeside purchase has made the area more attractive for residents are many and various. The Town of Manchester's Long Range Planning Committee identifies Lakeside as "an important visual resource...and vestige of [the town's] traditional rural character." According to Town Manager Mark Doyon, "multiple surveys of town citizens indicate a strong collective desire to design places where neighbors can meet neighbors in safe, informal settings." These desires coincide with the Meyerhanses' mission to encourage neighbors and visitors "to take possession of this orchard as their own."

Social and development impacts are linked. The sale of Lakeside development rights originated as a private transaction, farmer-to-farmer. When LMF's involvement made this transaction possible, it stimulated local residents to assess the municipality/state relationship as it pertains to land use planning. Before the Lakeside easement was executed, residents of Manchester, for example, had only just begun to develop a strategy for use of public facilities and open space. Lakeside added considerable energy and momentum to the Manchester Long Range Planning Committee's charge to develop its Long Range Public Facilities and Open Space Plan. In spring 2004 the town will vote on the Plan. Neighboring towns will likely follow Manchester's lead.



Developmental Impact: A Good Example Makes All the Difference

Had LMF not participated in the Lakeside project, the result of the Markleys' retirement would have almost certainly have been a housing development of 50-plus lots. According to Mark Doyon, "The average lot in Manchester currently sells for twenty-five thousand dollars. The average base lot at Lakeside would likely have been larger and valued at closer to forty thousand." These prices could have been met by market demand, and any effort to include affordable housing in such a subdivision would have required a "major grant" from a federal public housing source. In either case, "...there would have been significant municipal costs to bring sewer and water out there."

Traditionally Manchester has been a bedroom community for the larger service center of Augusta, but at present it is difficult to know whether protection of Lakeside has pushed development into other areas. What is evident is that the Lakeside project has sparked renewed enthusiasm for conservation planning, contributing energy to the overall development planning of the region. For example, Manchester's long-range strategies reach forward to 2015 bringing citizens and elected officials to a point where they must finalize their plan and begin to assess implementation costs, identify funding sources, and raise revenue to phase it in over the next twelve years.

The success of Lakeside's integration into the its economic, social, and agricultural communities is evidenced by the Meyerhanses' distinction of having been named 2003 Cooperators of Year by the Kennebec Soil and Water Conservation District. This achievement recognizes not only their success in agriculture, but also the emerging effectiveness of farmer-community and farmer-agency reciprocity. Their value as role models and risk-takers committed to innovative community-based stewardship distinguishes them as an important resource for a growing number of Maine people concerned about land conservation. According to the District Conservationist, "having real people explain the pros and cons from their own perspective is better than anything the government guy might say." The District's Executive Director adds that "having one good example that demonstrates how to check development pressure and sprawl while promoting farmland, open space, wildlife and natural resource protection – right in our own back yard – is really a plus."

Lessons

- Farmland protection costs money. The Department of Agriculture's Farmland Protection Program is a joint investment of state, federal, municipal and local private funds. It is important to remember, however that the participating farmers are equal partners in every protection effort. Without a willing seller, there can be no farmland protection in Maine.



- While LMF requires a one dollar match for every two dollars it spends, the Federal Farm and Ranch Lands Protection Program matches acquisition costs dollar for dollar. Such a valuable resource should be leveraged as often and as much as possible.
- Privately held commercial land can also provide recreational opportunities for Maine communities. Current trends in agritourism indicate that successful agriculture can match tourism in entertainment value while also providing healthy, locally grown food.
- In any conservation project, long-term stewardship is a fundamental challenge. In farmland protection projects, the economic well-being of the farmers themselves depends upon prudent management of the resource. Farmers are naturally and necessarily committed to long term stewardship. However, farm businesses consistently face the risk of market fluctuations and therefore will need additional business planning and implementation support through existing and evolving mechanisms, such as the Farms for the Future and the Agricultural Marketing Loan Fund programs.
- Farmland protection requires continuing innovation. While the Lakeside project is exemplary for its success as a public-private partnership and its contributions to local communities, it achieves these successes at considerable risk to the landowners. Under current protocols, the only way to realize this project was to use an alternative appraisal method that valued the land solely on the basis of its productivity (income potential) coupled with a requirement that any future resale also be limited to this value. If the Meyerhanses “were not building on decades of success and the security of a separate farm, [they] would never have done this deal.” Current appraisal methods need study. In order to promote future farmer-community partnerships, the Department of Agriculture, LMF and the ir partners should develop appraisal methods that offer landowners incentives to sell and next-generation farmers greater security.
- Farmland protection is often more complex than other conservation transactions because more people and funding partners are involved. Assisting transfer of the farm from one owner to the next while protecting the resource depends upon the dedication and perseverance of limited staff and the commitment and patience of the funders, buyers and sellers alike. Meeting the growing desire for the protection of farmland across the state will require greater investment of resources at every level of participation.



- Often a farm is the most prominent feature of a neighborhood or community. Whenever a farm reaches a point of transition, its ultimate disposition underscores the reality that land use planning is fundamentally a community- or even neighborhood-based project. More and more, farmland protection is posed to be a leader in the effort to preserve much of Maine's most valuable assets.



5. Stakeholder Consultations



General Findings

Broad Support: The LMF enjoys broad, though qualified support throughout the state. Most of those consulted feel that LMF has responded to the changes in Maine's landscape, culture, and economy in reflective and purposeful ways; and that the program strikes an appropriate balance of project types and locations. Most also believe that

the evaluation process and the criteria are objective, fair, and reasonable. Virtually all believe the LMF staff and Board are committed to maximizing the return from investment of public funds in Maine land conservation.

Stewardship: Many of our respondents are concerned that the LMF program and, to a greater extent, the state agencies that hold the lands lack sufficient capacity to manage the lands, the easements, and the agreements going forward.

“Strategic” Approach: Generally, there is support for looking into ways to take a more “strategic” approach to land conservation; but there is not consensus about what that would mean, other than trying to ensure the highest return on the public investment. To the extent there is a consensus view, it is that LMF *has* been strategic, particularly since the LAPAC study. There is also general consensus that the targeting of specific properties, or mapping that identifies areas for acquisition, would be a *bad* idea. There is recognition of the tension between being more strategic, and the requirement that LMF negotiate only with willing sellers.

North v. South: There is some concern, not shared by all, that the LMF program has tended to focus on large forestlands in the north; and that smaller, southern, and coastal lands (that often face significant development threats) have not had equal attention from LMF. Some believe this flows from a mindset among some that acres conserved per dollar of investment is perceived as a measurement of success for land conservation. Several suggested that, for many conservation projects, public value might better be evaluated by *amount of public access and use* acquired per dollar of investment.



Local & Regional Projects: Generally, there is support for local and regional projects; but there is also concern that towns with higher levels of financial and social capital may be over-represented. Most feel that the existence of a “consistent” comprehensive plan should not be a prerequisite to LMF funding; but most also feel that the scoring system should continue to benefit towns that have seriously addressed land use and open space issues through planning or some similar, identifiable mechanism.

Economic Values: Most feel that land conservation efforts should consider opportunities for economic development, and should in any case attempt to avoid negatively impacting a region's economy. Projects should accommodate the permanent protection of vital natural systems while not precluding flexibility of use, so as to allow for future economic development.

Application Process: There is broad agreement that the application process is complex and often frustrating for some landowners and for some partnering non-profit organizations (NGOs). Most feel the state should provide more technical assistance during the application process; and several suggest that there should be one point of contact at the state that the applicant may rely upon.

Public Information: Many, but not all, believe that the state and the land conservation community need to do a better job of making information about LMF-funded conservation lands available to the public, both in the form of maps and in some details of easement provisions.

Water Access: Many feel that water access projects have some unique issues that warrant the state proactively to seek out water access sites; to develop procedures for responding quickly when sites come on the market; and to develop policies to prevent local decision-making from overriding development of water access projects.

Farmland Protection: Farmland protection has issues unique among land conservation efforts. Respondents believe that the market-value approach to appraising farmland does not capture the appropriate value of farmland for purposes of farmland protection. They believe market value appraisals of farmland often result in appraisals that are too *low* to make it worthwhile to farmers to sell development rights; and that there needs to be continued research and discussion about how best to value farmland development rights. They also suggest that Maine's farmland protection strategy needs to be reassessed, and consideration given to protecting high value farmland for future agricultural use, whether or not it is currently in agricultural use.



Trails & Corridors: Almost universally, people are enthusiastically supportive of projects that enable trail and corridor linkages.

Fees for Use & Compensation: Several feel that because the state's fiscal resources for management of its public lands are stretched so thin, the state should consider charging more fees for the use of public lands. Similarly, some feel that one way to continue to ensure public access to private land is to provide greater compensation to landowners for providing public access.

Warm Support: Though all of the respondents conveyed many ideas and criticisms for improving LMF, when given the opportunity to make general summary comments about the program, every one expressed positive feelings for LMF, and wish to be sure these sentiments are captured in the report.

Purpose and Method

Twelve consultations were conducted during Fall 2003 with representatives from various interests throughout the state, including land trusts, sportsmen's organizations, landowners, municipal officials, regional planners, farmland interests, timber industry, an LMF board member, tourism and cultural interests, and former state agency personnel.

The purpose of the consultations was to understand current thinking about the LMF program among a group of people involved in land conservation and familiar with LMF. A fundamental goal of the consultations was to get a sense of where the LMF program in particular, and Maine's land conservation efforts in general should be heading.

A list of proposed topics of discussion was sent out in advance, along with a link to the LMF website for anyone who wished to familiarize themselves with any aspects of the program. The consultation was not limited to the proposed topics, but generally concentrated on them. Information gathered during the consultations was summarized and then compiled for this report. This summary is not an exhaustive report of all that was said during the consultations, but is, rather, an account of the key messages and differing points of view gleaned overall.

Impressions of LMF

Virtually everyone consulted has praise for LMF, and states that it is a positive program that plays an appropriate role for natural resource conservation in Maine. There is general sentiment that the program has struck a good balance between



project types and locations, and that it is vital to keep this balance. The program criteria and process are viewed as objective, fair, and generally reasonable. The program is seen as very professional, its staff as talented and hard working, and its projects as very worthwhile and serving the interests of Maine people. Several cite the Kennebec Highlands, Mount Agamenticus, and Tumbledown/ Mount Blue as particular examples of excellent projects.

State agency staff and the LMF staff have built strong relationships on many fronts, which have served the program well. The staff and the program have largely managed to stay outside perceptions of political bias, and have kept the program from becoming a political instrument. The positive perception of the LMF program's integrity cannot be over-stated.

One of the strongest concerns about state land conservation efforts is with *the level of staffing*. Most feel there are not enough resources to handle all the land acquisition responsibilities; and that this is likely only to get worse, as interest in land conservation grows and as state land holding (and easements) multiply. Some feel the need is "urgent" at the Bureau of Parks & Lands, the Department of Inland Fisheries & Wildlife, and, to a lesser extent, LMF.

There is a concern among some that there is a built-in bias within the LMF towards large forested tracts. This is seen by some as driven in large part by the facts that the landowners of these tracts have the capacity to bring the projects forward; and that these projects attract and leverage more money, particularly federal money such as Forest Legacy funding. This is not a universal concern, and others believe the current mix of projects is fine.

Several, particularly those interested in maintaining traditional recreational uses of forested areas, urge that the LMF be cautious about the amount of public land it acquires in fee, and the type of public use permitted on that land. Public ownership of land has increased at a fairly rapid rate, and with this has come more conflicting uses and, in some instances, efforts to restrict certain types of traditional uses. For some, the increased use of easements is a positive change for land conservation, as it keeps land in private ownership; keeps land productive; maintains access for traditional recreational uses; and ensures that the land will not be developed. The sense of many is that public ownership of land in Maine has not gotten out of balance, but needs to be monitored regularly in order to maintain an appropriate balance.

Project implementation is in need of greater structure and predictability, according to many of the consultants. They suggest the process is sometimes cumbersome, slow, and difficult for landowners. There is concern that project review is not always well-coordinated by the necessary state agencies, thereby leaving landowners uncertain about the status of a deal. It was suggested that there should



be one point-of-contact within the state that the landowner or applicant may rely upon. Back-and-forth dealing can create some animosity among landowners, ultimately making it more difficult to find willing sellers.

Generally it is felt that the process of having local land trusts and smaller groups looking for and submitting projects is good. However, a few suggest that, because the application process can be complex, more support from state staff is needed for some applicants.

Land Conservation and the Economy

A nearly universal view is that LMF efforts have been primarily about conserving the natural values of the land, and that should continue to be the driving priority. But almost everyone also expressed the view that impacts on the economy should also be considered and need to be discussed in conjunction with land conservation. As one person saw it, a fundamental question to ask is: "How can land conservation support, or at least not constrain, the economic development of a community?"

How this would work, or what this should mean in terms of program administration was not so easily agreed upon. Some people believe LMF's scoring system should have an economic development component; but nobody ventured to say how that scoring might be done. A few suggest LMF projects should be required to consider the economic impacts of a project, and perhaps even to do some sort of cost-benefit analysis. However, it was generally agreed that it would be difficult to include an economic component in the scoring, and that it would complicate an already slow process. Most people feel that though the economic development impact of a land conservation project should be considered, it probably should not be part of the scoring system.

One of the questions on the mind of many is how to think of the state's land conservation efforts in a new context, particularly now that land conservation has dramatically increased in its scope and practice. One person suggests a possible framework that is, to some extent, echoed by others. He suggests that one can think of land as having three primary sets of values: natural, material, and experiential. The natural values are the natural systems and their ecological values. The material values are the things that can be extracted from the land such as food, fiber, energy, etc. The experiential values are those recreation opportunities present on the land, such as the use of trails, rivers or waterfronts, or the experience of hiking, camping, fishing, or canoeing.

Especially with large landscapes, there may be different sets of values that apply in different areas across the landscape. One approach to structuring a conservation



project might be to ensure that the highest natural values are preserved permanently, but that those lands with high experiential values or high extractive values might be put into some kind of a management plan that has sufficient flexibility to respond to changes in the economy of the region, including land use needs. Such a program may require a level of management capacity that does not currently exist; but it was suggested that increased capacity for management might come from working with local interests, including business, landowners, and government.

Several people commented that *the tourism industry* is not as engaged with land conservation efforts as it might be. Preserving the Maine way of life is essential for tourism, yet tourism proponents often do not make a connection between land conservation and tourism. Land conservation is an important way of preserving those aspects of Maine that draw tourists.

Most people feel it is likely that the rural economy of the state will transform over time (possibly not much time) from an extractive natural resource-based economy toward a more recreation-based or natural tourism-based economy. They suggest that land conservation could and probably should be structured to allow for the changes in the local economy that likely will occur. The question is how to accommodate the permanent protection of the vital natural systems, while accommodating the need for flexibility of use, to allow for future economic development. It is felt that as land, especially large parcels of land, is conserved, it will be important to have this issue at the forefront, to provide some level of greater development that will support a recreation economy. This may include designating specific areas of land – that is, carve outs - that will be available for certain types of future uses that could support tourism infrastructure.

A number of people express the opinion that from an economic development point of view, trails are a great asset. Areas such as Sebago, Hiram, and the communities along the Mountain Division trail would not normally be terribly supportive of land conservation, but are supportive of trail linkages because of the potential for economic activity.

Not all our consultants view an economic development – land conservation connection in terms of tourism and recreation opportunities. Several express concern that land conservation efforts *not* reduce the availability of adequate timber. As a positive example, they point out that the money that has become available to landowners in some large easement projects has been put back into their forestry operations and has helped to maintain an active wood products industry. Land conservation has become part of the business model for some wood products companies.



Other projects have been seen as vital for traditional recreation, such as fishing, hunting, or sporting camps. Land conservation in the minds of some can play an appropriate role in supporting local economies, by ensuring access to resources for such traditional recreation.

While some do not see much of a connection between economic development and land conservation, most believe the connection is both very real and very important. As one consultant stated, there need to be healthy economies to achieve LMF's conservation mission. Compatible economic development gives the people closest to the land a stake in protecting that land.

Several people also point out that, politically, it is important to the LMF program that the public understand the connection between economic development and land conservation, though it is also important that the connection not be overstated.

Generally, people feel that land conservation efforts have focused primarily on preserving the environmental values of the land. They feel that it may be appropriate, without compromising those values, to look at the economic value of conserving land by more closely considering the resource for its potential for compatible, sustainable economic development.

Land Conservation Strategy

There is a broad range of opinion as to whether the LMF program is taking an appropriately strategic approach to land conservation. In part, the divergence of views is due to different notions as to what "strategic" means in this context. To the extent that there is a consensus view, it is that LMF *has* been strategic, particularly since the LAPAC study, and the changes to the scoring system that followed that study; but that it should continue to look at appropriate ways to get the most value from its investment of public funds. There is also general consensus that the targeting of specific properties, or mapping that identifies areas for acquisition, would be a *bad* idea that would only serve to agitate landowners – either because they are being "targeted" or because they are not in the priority acquisition zones.

One person comments that if land planners were given a fresh opportunity to do strategic planning for land conservation throughout the state, they would almost certainly draw a map that would differ from a map of the currently existing public lands. But he adds that there are some compelling reasons for following the current "opportunistic" approach. Chief among these are the requirement that LMF deal only with willing sellers, and the likelihood that targeting properties would have the effect of inflating their purchase price. Nevertheless, most people feel there is



some room to be more “intentional” in planning priorities for land acquisition; and everyone agreed that the concept of taking a more intentional approach needs to be a topic for continuing discussion.

Most consultants state that the LMF competitive scoring process is good, and has been getting better; it is way ahead of other land conservation efforts (such as the Forest Legacy program). Though it can sometimes be cumbersome, it does a good job as a filter, weeding out inappropriate projects and blunting the worst aspects of opportunistic land conservation. The system rewards larger, landscape-scale linkages, and seems to result in a fairly good mix of project types.

Several people note that the LMF board has held the line on purchasing only for appraisal amounts; so, pricing for opportunistic projects has not gotten out of line. But to continue this, conservation buyers must be willing to walk away from a deal, even when they have “land lust,” if the asking price is above the appraisal.

A big strategic issue is where LMF should spend its funds: in northern Maine, where larger tracts are available at lower per acre costs; or in southern Maine, where opportunities are decreasing and land is very expensive. LMF got a strong message with the last bond that the focus needs to be more in the south. Several people commented that LMF has done a good job of focusing in the south, while recognizing that there are some opportunities in the north that, because of scale and timeliness of the opportunity, LMF should not let go by. As one person stated, we are in a “once in a century upheaval of land transfer;” and it would be foolish not to take advantage of it.

It is acknowledged that the current, case-by-case evaluation of projects may miss some opportunities to involve economic development in land conservation strategy. Because there is a greater interest in and understanding of land conservation, some believe this may be a good time to bring more economic development strategy into the land conservation process. This is especially relevant for areas where LMF, or land conservation in general, are viewed skeptically because of the belief that land conservation limits what land can do. Several people suggested it is important to engage these people; one way to do that is to include an economic development component in the scoring, so that the proponents of a project would be required to make the case that the project will, at the very least, not negatively impact local economic development. *The challenge is to move the perception of land conservation as a negative to one of a positive.*

In this regard, people note that LMF should play a leading role in setting conservation priorities; but it should engage others, including those who do not necessarily come from a land conservation background, such as NGOs involved in economic development, and want to learn and grapple with the question of priorities. *Looking at land conservation in a broader context and inviting comment from*



outside the land conservation community in an intentional way will serve land conservation and economic development well.

At least a few comments focus on statewide, long-term natural resource policy. The lack of such a policy was regarded by some to be a major stumbling block to realizing more strategic land conservation. They feel the state needs to ask where it wants its natural resource-based industries to go. It should do a comprehensive plan for natural resources that examines goals and priorities, as well as gaps in state policies. Some suggest that, as a starting point, it would be a good idea to do some interdepartmental strategic planning for the entire LMF program.

Several see opportunities for LMF to be more strategic at a regional level. (We note that the LMF has recently done several regional projects, notably the Mount Agamenticus, Spednic Lake/ St. Croix and Kennebec Highlands projects.) While it would be difficult to be pro-active on a statewide scale, there may be some opportunity to develop *regional conservation and development plans*. Examples might be to set out plans for connectivity of blocks of land, trail systems, river corridor projects, or linking various projects on a large-scale basis. The chance to do linkages is there because of the patchwork of preserved lands. Looking at linkages in a strategic way is appropriate for LMF, since they are involved in so many of the state's land conservation projects, and because the Board has developed a broad, state-wide vision by which to assess regional efforts.

Land Conservation and Local Planning

A full range of views is expressed toward the concept of linking LMF funding for local projects to local land use planning. Some feel that local comprehensive planning generally has been a failure in Maine, and therefore should not be a requirement for LMF funding. Others feel that land conservation at the local level should be part of an overall plan for the town, and LMF funding should be tied to some demonstrated local land use planning.

Those in support of linking funding to some planning recognize that LMF funds alone are not a significant-enough carrot to convince towns to do comprehensive planning; but LMF money can be one of the rewards for a town that does comprehensive planning. They feel that the existing criteria are appropriate, by which towns get higher scores for land conservation projects if they are part of an overall town plan. Most feel that LMF should not be supporting towns that are *not* trying to take their future into their own hands. The overall effect of such a policy will be beneficial, even if it results in losing a few good local projects. Generally, people do not feel that such a policy should go so far as to tie funding to the State Planning Office' finding that the town has a "consistent" plan.



A couple of commentators observe that land conservation needs to work alongside efforts to build communities that are denser, more livable, and have affordable housing.

The Mount Agamenticus project was referred to as a good example where a land conservation project helped achieve multiple goals, including guiding growth and helping to prevent sprawl.

Stewardship and Public Access

There is a difference of opinion among respondents, regardless of their perspective, with respect to stewardship of conserved lands. For projects that have been developed since the LAPAC study, people generally feel that stewardship issues have been addressed by the Board. The agencies have been directed to address stewardship issues, and seem to be requiring that stewardship funding be set aside. Most people feel that land trusts are putting the necessary resources and planning into projects, so as to meet future stewardship needs on the lands that they own or hold easements to. This model of local land trust management or stewardship seems to be working pretty well because there is a *local ownership interest* close to the property.

However, several identify a gap where management is performed at the state level. They cite unmet needs that are eroding the value of the state's investments in its public lands and parks. Some feel that the management plans and record-keeping associated with these plans are insufficient. Others feel that the state's stewardship and management of its lands has been satisfactory, but there are concerns about the state's future capacity for monitoring its properties. This is a particular concern for monitoring easements, as the amount of land ownership and easement activity increases, and as lands with easements change ownership. They do not see the responsible agencies as having the resources to do the monitoring, let alone bring enforcement actions. While the NGOs may have more monitoring capacity, they generally do not have the resources for enforcement actions.

A key question will be *funding for management*. Some feel that endowment money should be raised at the time a project is being pulled together, and that LMF money should not be devoted to management or stewardship. (We note that LMF has recently built stewardship management funding into several projects, such as its new working farm and forest projects.) There is also recognition that efforts to seek additional state funding to manage existing properties are politically sensitive. It is often taken by opponents of public land acquisition to indicate that the state does not have the capacity to manage what it already has, and therefore should not be buying any more. Several people cite a need for additional revenue streams to



support land management, within both the public and private sectors. They feel it may be appropriate to consider user fees or other income sources, including timber harvesting. Maine's unique tradition of public access to private land may need to be looked at, due to the pressures on natural resource industries and the cost of managing land.

There is a consensus that the LMF Board is committed to public access, so any project that goes through the scoring and review process has a strong public access component. However, it is also recognized that the public often does not know where the public land is. People feel that any lack of access to lands or any lack of public awareness is mostly due to a lack of resources within the state-level agencies, and will be dealt with over time. But most also feel that not all lands should have easy public access; some should be relatively wild and difficult to access.

Many would like to see LMF and the state agencies do more public dissemination of information and more marketing and mapping, so that people can recognize the projects, where they are, how to access them, and how much they have to offer. Sportsmen would like to ensure continued public access such has been traditionally granted in Maine. There is concern that, on many public lands, there is sentiment towards restricting hunting and fishing, particularly where hunting and other uses come into conflict.

Conservation at Different Scales

Most people state that it was good for LMF to go in the direction of having state, local, and regional level projects. This improves public support and provides for broader understanding of what land conservation can mean – all of which is essential to promoting and continuing land conservation. A few think it may make sense to use this multilevel aspect of the program to garner even more public support. For instance, people in the northern and interior part of the state often think of land conservation projects as threatening to them. However, as one suggests that if a couple of smaller projects of local interest – such as Aroostook Rails-to-Trails project mentioned in the case studies – were done in these areas, it may help turn people's minds about what land conservation can achieve.

A few comments are made that there is some confusion and mixing of the criteria for statewide versus local/regional projects. One person suggests that separate programs for statewide and local/regional might make more sense; he feels the LMF Board is overextended, that statewide projects are very different from regional and local projects, and that allocation of resources should favor the statewide projects.



A few feel the program has not adequately focused on projects in southern Maine, as was intended with the last bond issue; they feel there continues to be a focus on northern Maine and its large forested tracts. Another notes that many of the local projects seem to be from high income towns that have the ability to raise matching funds and/or have the community capacity to pull together a project. He is quite concerned about that trend, and suggests that some areas do not have a lot of community capacity, are fairly poor communities, but have some wonderful lands that should be considered for preservation. He raises an “out-of-the-box” thought as to whether LMF should be charged to consider under-served communities when determining local and regional projects – essentially, some communities could get a “shot in the arm” through conservation projects.

People feel the water access portion of the program presents some unique problems, but to date has not been fully effective, as evidenced by the fact there is still money available. The agencies involved have not been able to respond quickly enough to available sites, and often the asking price comes in above appraisal. With water access projects, LMF needs to be more strategic and seek out the projects pro-actively. The respondent recognizes the difficulty of doing this, because of the requirement that there be willing sellers.

Agricultural Land Conservation

Like water access projects, agricultural land protection has unique challenges that differ from other, more “traditional” land conservation efforts. Respondents state that the methods for valuing farmland result in appraisals that often come in too low to make it attractive to farmers to sell their development rights. Also, they assert, many farmers feel the application process is often too slow to meet their needs; the Department of Agriculture’s screening process does not always target the best types of projects. They indicate that Maine has some prime farmland that may not currently be in use, but which would be worthy of protection for future agricultural use.

They state that the farms being preserved through LMF funding under current policies are typically in high development pressure areas, such as the coastal areas and the suburban “sprawl belt.” One comments that this reinforces the perception that farmland preservation is a tool reserved for farms that happen to be in fast growing communities – communities that often have very little farming left – and has little positive impact on long term preservation of agriculture in Maine. It is felt that the program should look at making some strategic investments that provide examples to encourage farmers throughout the state to consider farmland preservation. By doing this, the LMF program could make a statement that the



program and the state are interested in preserving farms other than just those in the high development – and often wealthy – communities.

The respondents suggest that there needs to be continuing research and discussion about how best to do farmland development rights appraisal. In their opinion, a market-value approach to appraising farmland for purposes of determining the value of the land's development rights is not generally an appropriate way to value farmland. Because the value of development rights usually are significant enough to justify a farmer's selling an easement only when the land is ripe for development, farmland not currently threatened by development is not likely to be preserved under the current easement program. They feel that farmland not under development pressure is likely to be permanently preserved only through outright purchase, then leased or resold with development restrictions to farmers. Such a system might stabilize the land base and help ensure long term preservation of agriculture in Maine and future food production needs. It would also be a wise investment of public funds, since prime farmland in low development pressure areas is relatively inexpensive.

Working Forest Easements

Working forest easements are cited in several discussions as a tool that strikes the right balance between environmental, economic, and social concerns. Easements for land conservation are largely considered a good use of public resources. As one person said, "working forest easements are a critical tool because it makes all kinds of sense from the point of view of being cost effective, to buy the values at risk and not spend money on the values that are not at risk."

However there is broad recognition that there currently are some challenges associated with their use. One of these is to build some flexibility into the easement, particularly those for large forest conservation projects, that allow for change in the use and management of the land as new needs develop. Another unresolved issue with easements is the proper balance of ensuring public access while providing landowners the flexibility to institute reasonable protections from liability, should the law or the types of uses on the lands change in the future.

Likewise, the issue of appropriate timber harvesting is not fully resolved. The LMF Board has developed some standard easement language which, among other things, attempts to address the issue of timber management on easement properties. The Board's language insists on a sustainability provision for working forests – trees should not be cut at a faster rate than they are growing by species group, and landowners need to provide enough data to monitor this. At least one person states that even with these easement-related issues unresolved, if the easement protects



against further development, then the public has realized great value from the project. Others are less inclined to believe that the public realizes full value for its investment, if easements only extinguish development rights. Most support the current requirement that LMF-funded easements of this type require sustainable forestry and public access guarantees, in addition to prohibitions on incompatible development.

Looking Ahead

These are suggestions for program improvements that do not easily fall into the topics of this report, but which merit mention:

- Continue to focus on developing stewardship funding, even though the amount of money needed for stewardship for a project is often difficult to determine. Some portion of bond money for the LMF program could be allocated to a stewardship endowment, but that may take away from the immense leverage power that LMF funds have for acquisition.
- There should be a greater effort to promote the sometimes hard-to-quantify public benefits of preserving land. For instance, the public benefits of preserving view-sheds are an important but sometimes difficult aspect of conservation to articulate.
- Let the Legislature and policymakers know on a regular basis (maybe every 2 years) what is happening with LMF.
- Search for ways to create a more sustained program, either through further leveraging of money or by developing a steady revenue stream. Consider creative options such as transfer of development rights and local option taxes. Could LMF act as the land bank for a development rights trading program, on either a regional or a statewide basis?
- Revisit the LMF mission statement, and consider refining it in light of the economic realities of Maine's natural resource-based industries.
- Be cautious about the amount of influence NGOs have over state-funded land conservation policy and priorities. There is a perception – particularly in the northern part of the state – that some NGOs have an agenda (even perhaps an “extreme agenda”) to change land ownership patterns; allowing them too much say would likely politicize the program to its detriment.



- To satisfy its mission strategically, LMF should identify and protect those lands that have the most significant, long term benefit to the people of Maine. Often the protection of the land will create economic opportunity.



6. Literature Review



General Findings

Conservation and preservation efforts require careful and concurrent consideration of a region's economic, recreational, and preservation goals. Balancing these goals is difficult; attempts to do so have sparked national debate and inspired a growing body of literature. In particular, researchers are investigating whether natural amenities have

economic value apart from their use as resources for extraction. The overall conclusion is *YES*, they do. In Maine and elsewhere, scholars have measured the broad economic impact of natural amenities on employment, wages, migration, and property values.

- In general, research has established that areas with more conserved land do not have lower employment, wage, or population growth rates than areas with less protected land.
- Many studies observe land conservation and economic growth within a given area increasing in tandem.
- In terms of property values, research shows that restricting development decreases a property's taxable value, but generally increases the value of surrounding developable land.
- There is generally need for more research on topics of particular relevance to Maine communities and on the design of land conservation programs.

The value of protected land has changed over time, and will continue to change (Bowes and Krutilla 1985). Whereas undeveloped land was once desired for its productive capacity, there is now more demand for its non-commodity benefits. Changes in rural land use reflect this change in demand. In Maine, increased demand for land's residential rather than commercial capacity has resulted in high



population growth rates in areas surrounding urban centers and low growth in more distant areas (Maine State Planning Office 1997, Plantinga et al. forthcoming).

Employment and Wage Growth

Maine residents are familiar with the concern that conservation and economic development are opposing goals. Maine's economy has traditionally benefited from natural resource extraction, and a common fear is that more conservation will mean fewer jobs. Recent studies suggest that natural amenities, such as forests, lakes, and mountains, are assets that can attract new economic activity because of the living and working environments that they collectively create, not because of their material value (Power 1996).

For the Northern Forest region (which spans Maine, New Hampshire, Vermont, New York, Michigan, Wisconsin, and Minnesota), there is currently no strong evidence that increasing the amount of conservation land within a given area decreases wages or employment growth. A study of 92 rural Northern Forest counties finds that 1990-1999 wage growth rates did not vary significantly with the proportion of county land under preservation, nor with the proportion of publicly-held land that was available for multiple uses (that is, state and federal land used for both resource extraction and recreational activities) (Lewis, Hunt, and Plantinga 2003). Similarly, employment growth within those 92 counties between 1990 and 1997 did not vary significantly with the share of public conservation land (either preservation or multiple use) (Lewis, Hunt, and Plantinga 2002). Additionally, changes in total annual timber sales during the 1990-1999 period did not have a significant effect on migration rates, employment, or wage growth.

Population Growth

Evidence suggests that natural amenities are important factors in the location decisions of businesses and individuals. Mobile Americans may be drawn to areas that offer more scenic landscapes, outdoor recreational opportunities, and protected land. Several studies have found quantitative evidence that geographic regions containing more protected lands also tend to have higher population growth rates. However, it is important to note that observing parallel trends does not necessarily reveal whether one caused the other.

Two recent studies of the Northern Forest region suggest a connection between natural amenities and population growth. In Maine and neighboring states, rural counties containing more public multiple use land tend to attract more new residents and/or lose fewer established residents than similar counties with less



public land (Lewis, Hunt, and Plantinga 2003). The county share of public conservation land also has a small but significant positive effect on net migration rates (Lewis 2001). The amount of preserved land within a county had no measurable effect on the attraction or retention of residents.

Several national studies reflect the trends seen in northern states. Throughout the country, land conservation and population growth seem to occur in the same areas. A survey of residents in eleven U.S. counties with high 1970-1980 growth rates and federally designated wilderness areas within their boundaries found that recent migrants generally place higher importance on the presence of wilderness areas in or near their county than permanent residents (Rudzitis and Johansen 1991). Likewise, analysis of 325 rural counties in the western U.S. revealed that the amount of protected federal land within 50 miles of a county's center was positively correlated with population, income, and employment growth over the last three decades (Lorah and Southwick 2003). In other words, counties with more federally protected lands also tended to have higher growth rates.

Another study had more ambiguous results. An examination of population-density and total-employment-density growth from 1980 to 1990 in 250 rural counties in western mountain states found no relationship between those variables and the lack or presence of federally designated wilderness land within the counties (Duffy-Deno 1998). In other words, the nature and pace of growth within those counties was not influenced by the presence or absence of wilderness land within their borders.

Property Values

Conservation and preservation agreements that restrict future development of a particular parcel of land generally decrease that property's taxable value. Therefore, considering effects on local tax bases is an important element of conservation and preservation efforts. When evaluating the overall effect on the tax base, it is important to consider the decreased value of the conserved land *and* the potential increased value of surrounding land.

Throughout this discussion, it is also important to remember that the flip side of land's ability to generate property tax revenue is the cost of providing services to support the land. From this angle, there is evidence that undeveloped land requires fewer municipal services than residential or commercial land. For example, undeveloped land does not require the use or construction of public infrastructure like roads or sewer systems. It follows that lower tax generated from undeveloped land may be balanced by lower usage of municipal resources by that land (Freedgood 2002). Note, however, that development and demand for services may



increase on land surrounding protected open space. Additionally, more research is need on the relative magnitudes of total tax revenue (not just property tax) and service demand increases on developed land.

Lower valuations of conserved lands reflect the restrictions on future commercial or residential development.⁶ Changes in valuation can decrease both the landowner's tax bill and the municipality's tax revenue (Lindstrom 2001). However, surrounding property values may increase. Studies have shown that buyers are willing to pay more for property located near open space and wilderness areas. Apparently, potential residents like living near undeveloped land and are willing to pay extra for it. Further evidence suggests that they are willing to pay even more if conservation of that land is guaranteed into perpetuity.

In Maryland, proximity to open space has been shown to have a significant positive impact on the sale prices of residential homes (Irwin 2002). Furthermore, the type of open space is important – conserved land adds more of a price premium than land that potentially could be developed. In other words, people are willing to pay a little more for a home located next to undeveloped land. On top of that, they are willing to pay even more if they are certain that the land will never be developed. A study of real estate developments in Grand Rapids, Michigan found that building lots adjacent to preserved forestland garner higher prices than other nearby lots (Thorsnes 2002). The price premium ranged from 19% to 35% of the final sale price. Additionally, the impact of being next to the preserved forest was greater than the impact of adjoining a large, “potentially developable” lot.

These findings generally hold in urban environments as well. Using similar price comparisons, researchers in Oregon assessed the value of urban wetland in that state's capitol. They found that being near a wetland increases the value of a home, and proximity to larger areas of wetland tends to increase home values more than proximity to smaller wetlands (Mahan, Polasky, and Adams 2000). An historic study in Columbus, Ohio, found that houses facing urban parks sold for substantially more than comparable homes in other locations (Weicher and Zerbst 1973). However, the study noted that this positive benefit did not extend to houses overlooking recreational facilities within urban parks (e.g., ball fields) or to houses adjacent to a park but not facing it. A study of 1990-1999 sale prices for single-family homes in Greenville, South Carolina, had mixed results (Espey and Owusu-Edusei 2001). Proximity to urban parks had both positive and negative effects on nearby home prices, depending on the size and attractiveness of the park. This

⁶ It should be noted that a study of farmland sale prices in Maryland found no strong evidence that preserving agricultural land through development rights purchases decreases the land's price (Nickerson and Lynch 2001).



suggests that urban parks have the potential to increase surrounding property values, but capturing that potential depends on park maintenance and management.

By comparing sale prices of agricultural land in Wyoming, researchers found that farmland with natural amenities (scenic views, wildlife habitat, fishing access, etc.) in addition to its production capacity garnered higher prices than land on which agricultural production was the primary activity (Bastian 2002). Researchers interpreted the difference in prices as reflecting the market value of those natural amenities.

Studies such as these suggest that preserving the integrity of local natural assets may have benefits beyond aesthetic, moral, and recreational value. Specifically, buyers have demonstrated a willingness to pay more for properties that provide them with pleasing natural surroundings. While the taxable value of preserved land may decrease, the value of surrounding land may increase. However, the relative magnitudes of these changes and the corresponding effect on municipal tax revenue have yet to be investigated.

Program Design

Despite the abundance of land conservation and preservation organizations throughout the nation, there is little research on the effectiveness of different program designs. For instance, how should states prioritize protection of their various natural resources? Should conserved lands be publicly or privately managed? What is the most efficient combination of easements and in-fee purchases, conservation and preservation? How can public funds create incentives for local municipalities to plan actively for future land-use needs?

One of the most important questions is: How effective are conservation efforts at managing growth? If population growth is inevitable, then conservation efforts should be part of a regional development plan. One recent study begins to address this topic. Analysis of land use policy in North Carolina reveals that some protection strategies may simply move development from one location to another without reducing the overall amount of new development (Walsh, forthcoming). The study suggests that protecting urban green spaces may result in a higher positive welfare impact than protecting land along the urban fringe.

Corollary questions addressed by the same study are: What is the relationship between land protection and zoning? And, should land protection be considered in the context of an overall growth plan? Policy simulations using data from Wake County, North Carolina, which experienced very high growth rates during the last



few decades, reveal that restrictive zoning changes would have decreased the overall amount of land development more than land conservation policies.

In addition to the choice of how to conserve land, there is the issue of what land to conserve. Decision makers dealing with finite resources must choose where to target their efforts. While some researchers support economic cost and benefit analysis (Babcock et al. 1997), others contend that some benefits, such as biodiversity and habitat preservation, can never be fully quantified (Dixon and Sherman 1990).

Research Needs

Many of the findings above can aid Maine's citizens as they make difficult and expensive conservation decisions. However, economic and land use changes are happening quickly in our state, and it is important to note some areas in which further research would be most helpful. First, there is a need for more in-depth work on topics of special significance to Maine locales. There is, especially, need for more in-depth research on the relationship between natural amenities, conservation, preservation, and the tourism and retirement industries; and on the interaction of all those elements with commercial forestry and other natural resource-based activities. Second, we need to know more about the relationship between conservation and high-density development. How do conservation programs fit into overall growth plans? Finally, more research about the process, not just the outcome, of land protection efforts could assist policymakers facing difficult tradeoffs. How should a public conservation fund like LMF balance competing land-use visions? How do we encourage municipalities to take the lead in planning for their futures? These are just some of the topics that we need to investigate.

Conclusion

There is considerable, growing evidence that undeveloped land has private and social value distinct from its potential as a resource for extraction or for residential and commercial development. Some land protection programs encourage private individuals to make socially beneficial land-use decisions which they might not choose otherwise. Some programs increase government ownership and management of land in order to realize social benefits. Using either strategy effectively requires careful consideration of the potential spillover effects of land protection on local economic, demographic, and social conditions.



Annotated Bibliography

Bastian, C.T. 2002. "Environmental Amenities and Agricultural Land Values: A Hedonic Model Using Geographic Information Systems Data," *Ecological Economics* 40:337-349.

Bastian uses a hedonic price model and GIS data to assess the demand for environmental amenities (scenic views, wildlife habitat, fishing access, etc.) on agricultural land in Wyoming. Bastian finds that agricultural lands that have those amenities garner higher prices than those on which agricultural production is the primary activity.

Bowes, M.D., and J.V. Krutilla. 1985. *Multiple-Use Management: The Economics of Public Forestlands*. Washington, DC: Resources for the Future.

Bowes and Krutilla provide an historical overview of changing land-use valuation, with specific application to forestland in the United States. The uses for which land is demanded change has over time. Demand has shifted away from productive use and toward recreational and residential use. They also discuss the economics of multiple-use management and develop a framework for incorporating forest dynamics into an economic model.

Duffy-Deno, K. 1998. "The Effect of Federal Wilderness on County Growth in the Intermountain Western United States," *Journal of Regional Science* 38: 109-136.

In this book, Duffy-Deno examines population-density and total-employment-density growth from 1980 to 1990 in 250 rural counties in the western mountain states. The study finds no relationship between those variables and the existence of federally designated wilderness land within the counties.

Dixon, J.A. and P.B. Sherman. 1990. *Economics of Protected Areas: A New Look at Benefits and Costs*, Island Press, Washington, D.C.

Dixon and Sherman discuss the attributes and drawbacks of existing methods of valuing protected land. They conclude that benefits are generally undervalued since they are often long-term and difficult to quantify. This results in less-than-optimal levels of land conservation.

Espey, M. and K. Owusu-Edusei. 2001. "Neighborhood Parks and Recreational Property Values in Greenville, South Carolina," *Journal of Agricultural and Applied Economics* 33(3): 487-492.

This analysis of 1990-1999 sale prices of single-family homes in Greenville, South Carolina, reveals that proximity to urban parks can have mixed effects on nearby



home values. Attractive parks with amenities had a positive or insignificant effect on surrounding property values; some parks with fewer amenities were actually found to have a negative impact on surrounding home values.

Freedgood, J. 2002. "Cost of Community Services Studies: Making the Case for Conservation," American Farmland Trust, Washington, D.C.

This publication reviews studies that address the balance between public costs and benefits of various land uses as measured by demand for public services and property tax contributions. Based on this fiscal analysis, the studies suggest that viewing land as both a consumer and provider of public resources can influence a community's growth decisions.

Irwin, E.G. 2002. "The Effects of Open Space on Residential Property Values," *Land Economics* 78: 465-480.

This study examines the spillover effects of various kinds of open space (cropland, pasture, farmland, public and private preserves, etc.) on property values in Maryland. Irwin finds that proximity of open space increases property values and that the type of open space does not matter as much as the guarantee against future development.

Lewis, D., G. Hunt, and A. Plantinga. 2003. "Does Public Lands Policy Affect Local Wage Growth," *Growth and Change* 34: 64-86.

Lewis, Hunt, and Plantinga study wage growth within 92 non-urban counties in the Northern Forest region (which spans Maine, New Hampshire, Vermont, New York, Michigan, Wisconsin, and Minnesota). They find that 1990-1999 wage growth rates in these counties does not vary significantly with the proportions of land under preservation or used for multiple purposes (i.e. resource extraction and recreational activities).

Additionally, the study finds that multiuse land had a positive effect on net migration rates and that the effect of preserved land was insignificant. Declines in timber sales during that time period did not have a significant effect on migration rates, employment, or wage growth.

Lewis, D., G. Hunt and A. Plantinga. 2002. "Public Conservation Land and Employment Growth in the Northern Forest Region," *Land Economics*, 78(2): 245-259.

This paper is very similar to the previous one, with the added finding that employment growth within those 92 counties between 1990 and 1997 did not vary significantly with the county share of public conservation land (either preservation or multiuse).



Lewis, D. 2001. "Public Conservation Land and Economic Growth in the Northern Forest Region," Thesis: U of Maine.

Using the same 1990-1997 county level data, Lewis finds that County share of public conservation land has a small but significant positive effect on net migration rates.

Lindstrom, T.C. 2001. "A Simplified Guide to the Tax Benefits of Donating a Conservation Easement," The Jackson Hole Land Trust, Jackson, WY.

This guide outlines various potential tax advantages for landowners who donate a conservation easement. These opportunities include reduction in income, property, and estate taxes.

Lorah, P. and R. Southwick. 2003. "Environmental Protection, Population Change, and Economic Development in the Rural Western United States," *Population and Environment* 24: 255-272.

Lorah and Southwick use GIS mapping to correlate the population, income, and employment growth rates of 325 rural western counties with the amount of protected land within a 50 mile radius of the each county's geographic center. They find that all three variables are positively correlated with the amount of protected land within that area.

Mahan, B., S. Polasky, and R. Adams. 2000. "Valuing Urban Wetlands: A Property Price Approach," *Land Economics* 76: 100-113

Mahan, Polasky, and Adams use a hedonic property price model to assess the value of urban wetland in Portland, Oregon. Their study finds that distance to, and size of, the nearest wetland have positive effects on home values.

Maine State Planning Office. 1997. "The Cost of Sprawl." Executive Department, May.

This report presents a comprehensive analysis of development trends in Maine. It addresses the individual, social, and environmental costs of sprawl and discusses potential strategies for managing growth.

Nickerson, C. and L. Lynch. 2001. "The Effect of Farmland Preservation Programs on Farmland Prices," *American Journal of Agricultural Economics* 83: 341-351.

This study looks at the effect of development rights purchases and farmland sale prices in Maryland. Nickerson and Lynch find no strong evidence that preserving farmland in this manner decreases its sale price.



Plantinga, A.J. and S. Ahn. 2002. "Efficient Policies for Environmental Protection: An Econometric Analysis of Incentives for Land Conversion and Retention," *Journal of Agricultural and Resource Economics* 27: 128-145.

Plantinga and Ahn compare the cost efficiencies of conversion and retention programs aimed at increasing forest and agricultural land area in the South Central U.S. They find that a combined policy is least expensive but when used separately, conversion is most cost effective policy for increasing forest area and retention is most effective for increasing agricultural area.

Plantinga, A.J., K. Boyle, J. Rubin, and M. Teisl. "Objectives and Perspectives." In *The Economics of Rural Land Use Change*. K. Bell, K. Boyle, and J. Rubin (eds.), Ashgate Press, Aldershot, England. In press.

This forthcoming book presents economic analysis of land-use change with a focus on economic models of land-use policies. Applications of these models concentrate on rural areas of the United States.

Power, T. 1996. *Lost Landscapes and Failed Economies: The Search for a Value of Place*, Island Press, Washington, DC.

This book examines the relationship between environmental goods and amenities and the location decisions of individuals and businesses. Power's overarching claim is that natural landscapes are increasingly attracting economic activity.

Rudzitis, G. and H. Johansen. 1991. "How Important is Wilderness? Results from a United States Survey," *Environmental Management* 15: 227-233.

Rudzitis and Johansen surveyed residents of one Eastern and ten Western U.S. counties with high 1970-1980 growth rates and federally designated wilderness areas within their boundaries. The survey found that recent migrants generally placed higher importance on the presence of wilderness areas in or near their county than permanent residents.

Thorsnes, P. 2002. "The Value of Suburban Forest Preserve: Estimates from Sales of Vacant Residential Building Lots," *Land Economics* 78: 426-441.

This paper examines price premiums of vacant building lots adjacent to preserved forestland in Grand Rapids, Michigan. Thorsnes found that prices for building lots adjacent to a preserved forest were 19% to 35% higher than prices for nearby lots that did not adjoin the forest.



Walsh, R.P. 2003 “Endogenous Open Space Amenities in a Locational Equilibrium,” forthcoming.

Walsh creates a land-use model to assess the aggregate effects of land protection on regional development patterns. He finds that some protection policies simply move development from one location to another and do not result in higher density growth. Using policy simulation on data from Wake County, North Carolina, Walsh also concludes that protecting urban green spaces may result in a higher positive welfare impact than protecting land along the urban fringe.

Weicher J. and R. Zerbst. 1973 “Externalities of Neighborhood Parks: An Empirical Investigation,” *Land Economics* 49 (1): 99-105.

Weicher and Zerbst compare prices of houses surrounding five urban parks in Columbus, Ohio. They find that views of, and proximity to, the parks positively affect prices and can account for 7% to 23% of property value. However, the home's orientation in relation to the park and its proximity to public recreational facilities can diminish that effect.



Appendix:

LMF Program Activity by Priority Focus Area

(Note: This Appendix is part of the State Planning Office staff analysis presented in section 3 of this document.)

Focus Area: Access to Water

Excerpt from LAPAC report describing Access to Water:

“Maine is blessed with abundant rivers and lakes, as well as a spectacular coastline, which provide outstanding fishing, boating, and shoreline recreation opportunities. However, traditional water access sites are increasingly being closed off by private landowners or and opportunities to acquire affordable shorefront properties suitable for public access are dwindling. A recent study by state agencies found that the growth in public fishing and boating access sites will probably not keep pace with demand unless additional funding becomes available. The study includes a ten-year plan for acquisition of priority water access sites, as well as shorelands. Acquisition and development of public access to waters should seek to provide a diversity of high quality recreational opportunities such as boat ramps, carry-in boat access sites, and walk-in access to remote ponds.”

LMF projects addressing access to water take in a wide variety of types of access—from paved boat launches for trailered boats, to carry in boat launches, to “walk-in” pedestrian access purely for recreation and sightseeing, and for recreational fishing and hunting. 76% (47 out of 62 projects) of LMF projects provide access to waters of the state. As a subset of the overall program, a separate fund exists in the LMF program for boat launch sites. The LMF Program funded fifteen of these sites since 1999. As discussed below, these launch sites present unique challenges.

Three departments in the state: Inland Fisheries and Wildlife, Conservation, and Marine Resources have policies and priorities for water access. All the access projects LMF has undertaken address agency needs. However, the list of needs identified by state agencies is long and the funding limited. In this situation, maintaining priorities will help focus acquisition and search efforts for new sites, assuring that the limited funds that exist are spent wisely. The Department of Marine Resources and State Planning Office issued a report on coastal water access



needs for the Land for Maine's Future Board and state agencies with water access-related programs in 2000. That report identified priority areas for access as well as two types of access needs: regions popular with boaters and anglers that currently have no State sponsored and assisted boat access facilities, and others that have limited facilities but need added capacity to keep up with demand. LMF uses these priorities in evaluating its water access projects, especially those involving boat launches.

Addressing state priorities in the acquisition of water access sites through the LMF Program is complicated by several issues:

- a) the overall scarcity of sites that are suitable (especially for boat launches) considering environmental and physical and constraints;
- b) scarcity of suitable sites that are available on the open market (and the short time those sites stay available before being purchased); and
- c) the extreme high cost for suitable sites in a highly competitive marketplace. Parking is increasingly a limiting factor at some sites.

Projects with Water Access Component	Boat Launch Projects
(conserved since 2000)	
Aroostook State Park	Bear River Rips
Brunswick to the Ocean Trail	Big Falls - Grand Lake Stream
Choice View Farm	Clary Lake
Crooked Farm	Kennebec River - Gardiner
Denny's River	Kennebec River - Shawmut
Devil's Head	Jacob Buck Pond
Ducktrap/Lacombe	Mere Point
East Ridge	Mill Pond Park
Flag Island	Pettegrow Beach
Florida Lake	Pocomoonshine Lake
Jugtown Plains	Presumpscit River Bridge Site
Kennebec Highlands (ongoing)	Round Pond "The Pines"
Kennebunk Plains II	Tibbets Pond
Lake George Regional Park	Tidal Falls Acquisition
Little Pond Acquisition	Presumpscot Falls
Machias River - Phase 1	
Mattawamkeag Lake Region	
Morong Cove Acquisition	
Narraguagus River (Gross parcel)	
Page Farm	
Presumpscot River Preserve	
Robinson Woods	
Scarborough Beach	
Skolfield Farm	
Spednic Lake/Upper St.Croix	
Thorne Head	
Tinker Island	
Turfant-Summerton Long Reach	
West Branch	
Whaleboat Island	
Pending:	
Boston Hills	
Johnson Point Acquisition	
Lower Kennebec Estuary	



Focus Area: Southern Maine Conservation Lands

Excerpt from LAPAC Report describing Southern Maine Conservation Lands:

“The southern portion of the state (south of Bangor) is richest in biological diversity. It is also the part of the state where development threats to plant and wildlife resources are the greatest and where existing public land holdings are most limited, particularly larger holdings. There are still opportunities to acquire significant public lands protecting critical natural resources while also providing Maine's largest population centers with greater access to expanded recreation opportunities closer to home.”

In addressing the southern Maine conservation lands objective, the LMF Program also has been sensitive to local economies and multiple use demands. As the pressures of growth and development in southern Maine have created new demands and stresses, the LMF program has been evolving to adapt to the new challenges. The LMF program has tried to stay adaptable and innovative in applying LAPAC guidelines as conditions evolved and the Maine economy changed over the years.

The Program encourages the development of projects that span several towns or that link existing holdings. The Board favors projects that have a demonstrable role in addressing local and/or regional conservation or recreation strategies. The needs for conservation lands continues to grow in southern Maine, and the competition for funding between projects of local significance versus projects of state significance will become more acute. It is hard for local projects to compete against regional projects such as a trail corridor spanning many communities.

Some of the greatest challenges arise because of the increasingly rapid pace of development and its sprawling nature, and the need for better coordinated, regional approaches not only for managing growth but also for protecting conservation lands. Further progress in addressing this focus area depends on effective local comprehensive planning, regional planning, and interlocal cooperation to ensure that LMF funds achieve maximum benefit and compliment other local and regional efforts.

The Leavitt Plantation Forest protection project in Parsonsfield is an illustrative project for this category. The tract is the largest block of undeveloped forest land in York County—8,600 acres. Careful design was required to create a successful project that fit LAPAC protection goals while achieving town goals for protecting an economically viable commercial forestry resource and preserving public access to the land. Executing the package demanded partnership from all the key players—taxpayers, local business, conservation groups, state and federal government. Significantly, the town of Parsonsfield allocated \$50 thousand raised from local



taxes for the effort, matching LMF, federal Forest Legacy Program, and significant private funding.

With growing concern about over use of recreation resources in the southern conservation lands area, LMF has sought to acquire access of other lands to spread the load.

A striking number of LMF projects to date meet multiple objectives identified in the LAPAC study. Conservation lands that provide water access as well; boat launch sites that in addition protect undeveloped shoreline; trails that also play an important role in open space and habitat protection are but a few examples.

Southern Maine Conservation Lands (conserved since 2000)	
Black Brook Preserve	Machias River -Phase 1
Blackstrap Hill	Mt. Blue/Tumbledown Mountain
Boothbay Harbor Wetlands	Mount Agamenticus (ongoing)
Bradbury-Pineland Corridor (ongoing)	Presumpscot River Preserve
Brunswick To The Ocean Trail	Robinson Woods
Choice View Farm	Scarborough Beach
Crooked Farm	Sebago Headwaters Preserve (ongoing)
Ducktrap/Lacombe	Skolfield Farm
Flag Island	Thorne Head
Florida Lake	Tinker Island
Fuller Farm	Turfant-Summerton Long Reach
Jugtown Plains	Whaleboat Island
Kennebec Highlands(ongoing)	<i>Pending:</i>
Kennebunk Plains II	Boston Hills
Lake George Regional Park	Hancock Lands
Leavitt Plantation Forest	Johnson Point Acquisition
Lower Kennebec Estuary (ongoing)	Sawyer Mountain Highlands
Little Pond	

Focus Area: Ecological Reserves

Excerpt from LAPAC Report describing ecological reserves:

“Maine is a state of enormous natural variety. A State Planning Office study and follow-up efforts by the Maine Forest Biodiversity Project (a consensus-based, collaborative effort involving State agencies, landowners, scientists, and environmentalists), has characterized the full range of ecosystem types in Maine and



documented that Maine's existing conservation ownerships do not protect the full range of these natural communities. In order to establish an ecological reserve system that protects all of the natural communities and species found in the State, additional lands will need to be acquired to complement existing sites. Special attention should be given to those areas that include rare species, as well as unique or exemplary natural communities. Ecological reserves can serve as benchmarks which will provide important information about changes to our environment. These sites can be used for scientific research, long-term environmental monitoring, education, and in most cases can also provide important outdoor recreation opportunities."

To address this focus area, the LMF Program has funded the protection of significant examples of important Maine ecological complexes that will serve as benchmarks going into the future to evaluate human disturbance on systems. It is a limited category and not intended to serve as many purposes as other land conservation categories. There are seven examples of this category funded since 1999.

To work most effectively, a viable ecological reserve must be designed at a landscape scale and must be quite large—commonly exceeding several thousand acres. Due to their character and size, funding partnerships with other sources (LAWCON and Maine Outdoor Heritage Fund, for example) are especially important for ecological reserves.

Ecological Reserves

(conserved since 2000)

Denny's River

Flag Island

Kennebunk Plains II

Machias River - Phase I

Mt. Abraham (ongoing)

West Branch (partial)

Focus Area: River Systems

Excerpt from LAPAC report describing river systems:

"Maine possesses some of the finest river systems in the Eastern United States, many of which remain largely undeveloped. These rivers are important fisheries, possess critical riparian habitat, and provide unparalleled outdoor recreation opportunities. Future acquisition efforts should protect extended corridors on the state's most valued river systems."



Rivers tie a landscape together. Their banks provide essential habitat and corridors for wildlife movement. These corridors also support extensive economic activity through hunting, fishing, guided recreation and other activities. Maine still has opportunities to protect long stretches of rivers that are undeveloped, and has taken advantage of recent opportunities to do so. There is significant value in the long stretches of undeveloped river corridors as well as the wildlife and fisheries resources in our rivers. LMF projects on the Spednic Lake/St. Croix River, as well as the Dennys and Machias rivers, all involve lengthy corridors which now enjoy significant protection.

On Spednic Lake and the St. Croix River, the protection reaches back 500 feet from the shoreline for fifty miles along its length. On the Dennys River, a 500 foot protection zone on both sides of the river is mostly geared towards protecting significant wildlife habitat there and fisheries habitat within the river itself. Along sides of the Machias River and its major tributaries a 1000 foot corridor, protected by both fee and easement acquisitions, affords access and resource protection while maintaining compatible commercial timber harvesting in much of the protected area. These three significant river corridor projects in Downeast Maine succeed in offering appropriate protection levels, through careful, almost surgical, approaches particular to the river and the resources—while only modestly impacting the working forest.

River Systems

(conserved since 2000)

Denny's River
Ducktrap River
East Ridge
Kennebunk Plains II
Lower Kennebec Estuary (ongoing)
Machias River - Phase I
Narraguagus River (Gross parcel)
Presumpscot River Preserve
Spednic Lake/Upper St. Croix
West Branch

The Presumpscot River offers another type of river corridor. Once polluted and undesirable from a recreation standpoint, this river has emerged as a clean, recreational and fisheries asset with high public access demand. Three different LMF projects created a hand-carry launch site and bank fishing access and hiking opportunities. This project protects the gains made in improved water quality by not only protecting shoreland and providing access. It is also an excellent example of partnerships with the communities of Portland and Falmouth as well as two non-profits—the Falmouth Land Trust and Portland Trails.



Focus Area: Undeveloped Coastline and Islands

Excerpt from the LAPAC report describing undeveloped coastline:

“Maine is famous for its coastline. However, only a small percentage of the coast is in public ownership. In particular, there are significant undeveloped stretches of shore, including coastal wetlands and estuaries that provide critical habitat to many species of wildlife and offer opportunities for expanded coastal recreation. It is important to take advantage of remaining opportunities before large ownerships become fragmented.”

Maine’s coastline is where public lands and public access is most fragmented and where the real estate market is hottest, suffering from double digit inflation of values (highest on the islands). Maine’s coast is a key defining element for residents and tourists alike, and one of the state’s greatest challenges.

The LMF Program has achieved some notable success in protecting the headlands of Washington County’s “Bold Coast”. Most of the rest of LMF funding in this focus area protects coastal access parcels. Examples include Devils Head, Morong Cove, Robinson Woods, Scarborough Beach and Throne Head. LMF has also participated in the conservation of several significant island properties which represent a particularly limited natural asset along Maine’s coast.

Undeveloped Coast & Islands

(conserved since 2000)

Devil's Head
Flag Island
Johnson Point Acquisition (pending)
Lower Kennebec Estuary (ongoing)
Morong Cove Acquisition
Robinson Woods
Scarborough Beach
Skolfield Farm
Thorne Head
Tinker Island
Turfant-Summerton Long Reach
Whaleboat Island

Focus Area: Northern Forest Conservation Lands

Excerpt from the LAPAC report describing Northern Forest Conservation Lands:

“The expanse of undeveloped forest, rivers, lakes, mountains and wetlands that comprise the north woods of Maine is truly unique, providing a sense of wildness and remoteness that is becoming increasingly rare in today’s world. It is the part of the State where the majority of public ownership currently exists, and yet many of the region’s finest natural treasures and recreational lands have been maintained in private ownership. Some of these areas, most notably



the shorelines of lakes and ponds, are coming under increasing development pressures.

“In the near term, acquisition efforts in the northern forest should focus on those lands that possess a high concentration of wildlife, recreation, and scenic values and are most threatened with fragmentation and development.

“The conservation goal for Northern Forest Conservation Lands should be to maintain their natural character, preserve public recreation opportunities, protect important habitat, and manage timber resources in a sustainable manner.”

In response to this directive, LMF has developed a clear policy statement of its conservation priorities for northern forest lands along with comprehensive easement drafting guidelines to assist in specific projects.

Eight LMF projects address the northern forest conservation lands priority. Two, the West Branch and the Katahdin Forest projects, are noteworthy for their large area. The approach taken by the LMF Program for northern forest conservation lands is the development and use of working forest easements with limited use of fee acquisitions.

Conserving Maine’s northern forest lands through easements on private land can be a cost effective way to achieve a combination of public objectives—land conservation, public access for recreation, sustainable commercial forestry, to name a few. The goal is a balanced one: to protect those public values that require protection, and to assure sustainable use and economic value into the future.

Northern Forest Conservation Lands

(conserved since 2000)

- Big Hill/Second Pond (pending)
- Leavitt Plantation Forest
- Katahdin Forest (pending)
- Mattawamkeag Lake
- Mt. Abraham (ongoing)
- Mt. Blue/Tumbledown Mountain (ongoing)
- Nicotous Lake
- West Branch

Focus Area: Farm Land

Excerpt from the LAPAC report describing Farm Land:

“Over the past 35 years, the amount of farm land in Maine has shrunk by over 50%. In some parts of the state, the number of farms is barely sufficient to support the infrastructure necessary to make



farming viable. With at least half of Maine's farmers approaching retirement, a major turnover of farm ownership is anticipated in the coming years. Other states facing similar losses of farm land have initiated ambitious programs to acquire development rights to help ensure that land stays in agriculture. Such a program would not address all of the pressures facing Maine farmers, but can provide farmers with an alternative to selling the farm and preserve strategic agricultural and open space lands.”

Before 1999, the Department of Agriculture was less engaged as a sponsoring agency of the LMF farmland protection projects. Though the Department did obtain federal matching funds to leverage Land for Maine's Future funds, it was not able to devote the necessary staff time to project management and relied heavily on LMF to educate farmland owners and assist them with project planning and implementation. A significant boost was given to farmland conservation efforts in Maine when the Department hired a Farmland Protection Program Manager in 2002.

Now, the Department has an overall strategic plan for *Saving Maine's Farmland*, distributed to the Legislature in June 2003, and a much more comprehensive farmland protection program. The Department's full-time program manager screens potential LMF applicants to determine readiness and access resources to be protected. Screening criteria are aligned with the Department's strategic objectives, LMF's scoring criteria and the federal Farm and Ranch Lands Protection Program criteria.

Since 1999, the Department has successfully drawn \$4,800,000 in matching funds through federal agencies, towns and non-governmental organizations. The Department has also been instrumental in obtaining stewardship endowments from landowners and local partners (approximately \$200,000) to address long-term management of easements.

The Department of Agriculture now considers all potential farm projects within their local and community contexts, looking for consistency between the location and type of farm and how agriculture is addressed in the town's Comprehensive Plan. Detailed information about local land use planning is now required in all farm proposals.

Farmland Projects
(conserved since 2000)

Bowden

Clary Hill (ongoing)

Hiatt

Lakeside Orchards

Lorio Farm

Pending:

Brae Maple Farm

Five Fields Farm

Hanson's Ridge South

Packard-Littlefield Farm

Sunrise Farm

Jordan Farm



Focus Area: Trail Systems

Excerpt from LAPAC report on Trail Systems:

“A number of trail development efforts in Maine--including the State snowmobile trail network, the Appalachian Trail, and the recently established island trail network--have proven very successful. However, there are additional recreational trail needs and opportunities that require attention including the development of extended loop hiking trails (2-5 days), as well as the creation of extended interconnected multi-use trail systems for uses such as hiking, biking, skiing, and snowmobiling and ATV riding. In particular, acquisition efforts should focus on opportunities to link existing public land holdings by trail corridors and to acquire ready-made trail corridors such as abandoned railroad beds. Additionally, expanded inland and coastal water trail systems are needed to accommodate small boat use.”

In 2003, LMF funded the acquisition of the old rail bed between Newport and Dover-Foxcroft which serves as an essential link in the State's snowmobile trail system. Similar to the Aroostook County rail trails profiled in the case studies of this report, this trail in western Maine is an important asset to the local economy. Using funding for both easement and acquisition, LMF's Bradbury Mountain-Pineland corridor project connects both pedestrians and snowmobilers to these two destinations. Fifteen other LMF projects provide a variety of trail opportunities, including a “water trail” along the Machias River and another along Spednic Lake and the upper St. Croix River on the border with New Brunswick. Trail systems, serving both local and regional roles, also complement a variety of public values besides recreation. Properly managed, trails often serve double duty as vegetated buffers along waterways providing shade as well as runoff protection and flood mitigation, and habitat for wildlife.

Trails

(conserved since 2000)

Bear River Rips
Boothbay Harbor
Bradbury/Pineland Corridor
Brunswick to the Ocean Trail
Kennebec Highlands
Machias River
Middle Bay
Mt. Agamenticus
Mt. Blue/Tumbledown Mountain (ongoing)
Presumpscot Falls
Presumpscot River Bridge Site
Presumpscot River Preserve
Spednic Lake/Upper St. Croix River
West Branch



Focus Area: Significant Mountains

Excerpt from LAPAC report on Significant Mountains:

“While many of the state's highest peaks are currently in the public domain, there are still a number of significant mountains in private hands that are worthy of public acquisition. Acquisition efforts should focus on those mountain areas with outstanding vistas, established recreational uses, or significant ecological values, as well as those that are in close proximity to population centers.”

From Agamenticus and Sawyer in the south to Cadillac and Battie on the coast to Katahdin in the heart of Maine—mountains have always played a significant role—ecological, recreational, and inspirational. LMF projects on Mt. Blue and Tumbledown Mountain demonstrate the potential for these projects to serve multiple purposes.

Significant Mountains (conserved since 2000)

Devil's Head
Mt. Blue/Tumbledown Mountain (ongoing)
Leavitt Plantation Forest
Kennebec Highlands (ongoing)
Mt. Agamenticus (ongoing)
Mt. Abraham (ongoing)
Sawyer Mountain (pending)

Focus Area: Regional Parks & Additions to Existing Public Lands

Excerpt from LAPAC report on Regional Parks:

“Residents of many of the state's population centers have limited public recreation lands within a reasonable traveling distance to where they live (one hour drive). In particular, there is a need for parks offering day use recreation opportunities such as hiking and picnicking. The popularity of the State's recent acquisition of Dodge Point in Damariscotta highlights this need.”

Excerpt from LAPAC report on Additions and Access to Existing Public Lands:

“Many public lands in Maine would greatly benefit from targeted expansions. Additions to existing ownerships can be a highly cost effective way of increasing recreation opportunities, securing public access rights and preserving ecological values. In certain instances, additions to existing public ownerships are necessary to protect resources from encroaching development or other threats.”

Whether through additions to existing holdings or the creation of new parks, LMF has worked with its partners to acquire regionally significant recreational properties to meet the needs throughout the State.



Regional Parks	Additions and Access to Existing Public Lands
	(conserved since 2000)
Black Brook Preserve	Aroostook State Park
Blackstrap Hill	Blackstrap Hill
Bradbury-Pineland Corridor (ongoing)	Bradbury-Pineland Corridor (ongoing)
Brunswick to the Ocean Trail	Choice View Farm
Kennebec Highlands (ongoing)	Kennebec Highlands (ongoing)
Lake George	Kennebunk Plains II
Leavitt Plantation Forest	Lake George Regional Park
Little Pond	Little Pond
Mt. Agamenticus (ongoing)	Mt. Blue/Tumbledown (ongoing)
Page Farm	Morong Cove Acquisition
Presumpscot River Preserve	Mt. Agamenticus (ongoing)
Sebago Headwaters Preserve (ongoing)	Page Farm
Thorne Head	

Focus Area: Municipal/Urban Open Space

Excerpt from LAPAC report on Municipal and Urban Open Space:

“As Maine communities continue to grow, local open space lands are increasingly being developed or closed off to public use. To maintain the quality of life in our towns and cities, it will be important to expand efforts to protect local open space resources including greenways, neighborhood parks, town commons, beaches, town forests, wetlands, and wildlife habitat. Productive agricultural lands in proximity to growing residential areas are particularly at risk. Growing concern over development sprawl has prompted state and local governments to search for effective means to encourage growth in appropriate locations while better protecting valued resources. Land acquisition is an important tool in community efforts to address sprawl and preserve the character of a community. Several southern Maine municipalities have recently initiated land acquisition programs. It is likely that many more towns and cities would follow suit if matching funds were available from the State.”

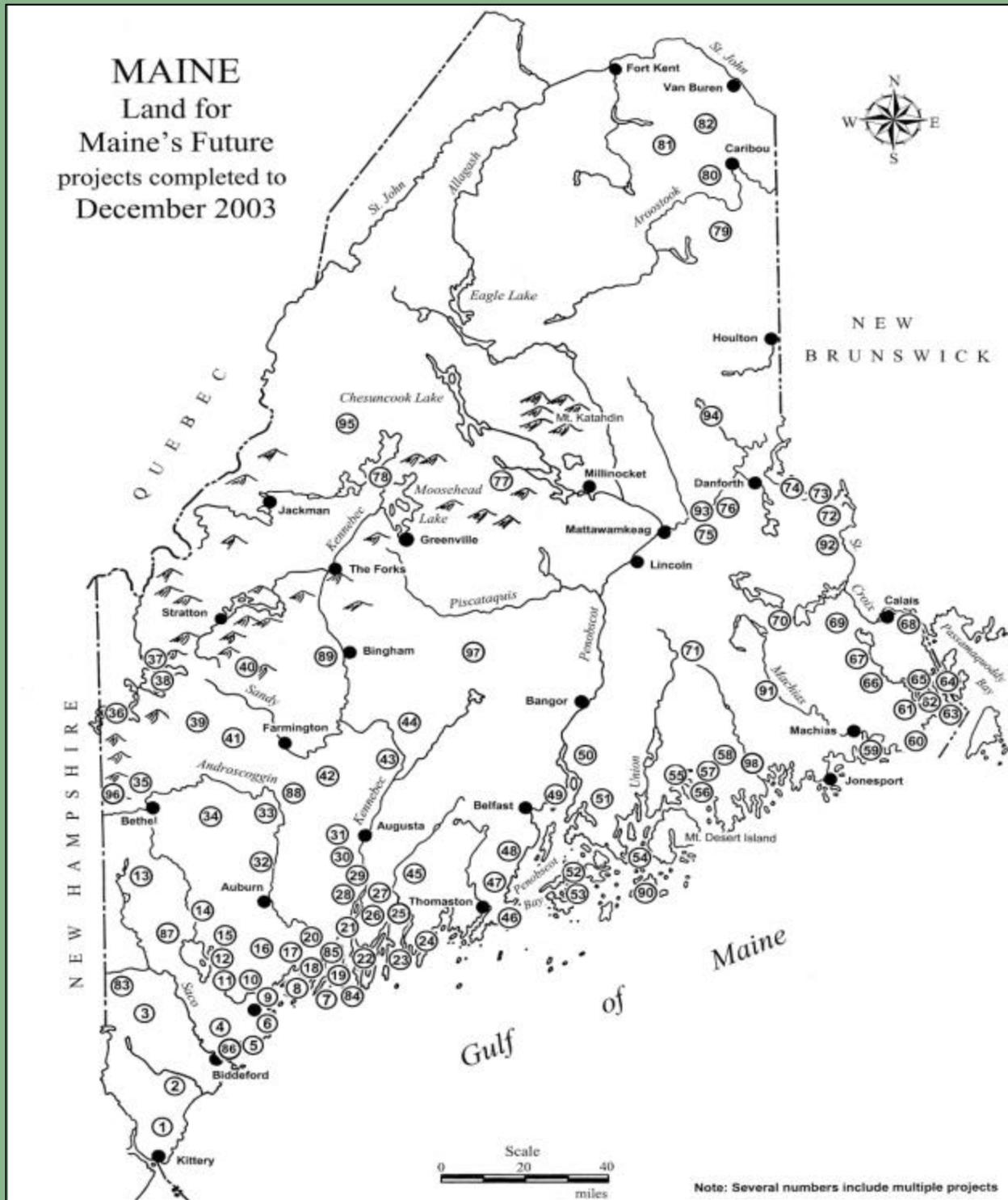
The following LMF projects provide locally significant open space to their host communities.



Open Space Projects	Farmland Projects with Open Space Component
(conserved since 2000)	
Black Brook Preserve	Bowden
Blackstrap Hill	Hanson's Ridge South (pending)
Boothbay Harbor Wetlands	Hiatt
Bradbury-Pineland Corridor (ongoing)	Lakeside Orchards
Brunswick to the Ocean Trail	Sunrise Farm (pending)
Florida Lake	
Fuller Farm	
Hancock Lands Project (ongoing)	
Lower Kennebec Estuary (ongoing)	
Mt. Agamenticus (ongoing)	
Presumpscot River Preserve	
Presumpscot River boat launch	
Presumpscot Falls	
Robinson Woods	
Scarborough Beach	
Sebago Headwaters Preserve (ongoing)	
Skolfield Farm	
Thorne Head	
Turfant-Summerton Long Reach	

List of LMF Projects Keyed to the Map

1. Mount Agamenticus
2. Kennebunk Plains
3. Little Ossipee River
4. Fuller Farm
5. Scarborough Beach
6. Robinson Woods
7. Mark Island
8. Whaleboat Island
9. Presumpscot River
10. Wilshire Farm/Blackstrap Hill
11. Black Brook Preserve
12. Sebago Lake Beach
13. Sabattus Mountain
14. Jugtown Plains
15. Morgan Meadow
16. Bradbury/Pineland Corridor
17. Florida Lake
18. Mere Point
19. Long Reach Forest
20. Brunswick to Ocean Trail
21. Thorne Head
22. Back River
23. Boothbay Harbor Wetlands
24. Crooked Farm
25. Dodge Point
26. Choice View Farm
27. Hiatt Farm
28. Alice Wheeler Farm
29. Kennebec River Access-Gardiner
30. Jamies Pond
31. Lakeside Orchards
32. Androscoggin River
33. The Pines
34. Little Concord Pond
35. Bear River Rips
36. Rapid River
37. Rangeley River
38. Bald Mountain
39. Tumbledown Mountain
40. Mount Abraham
41. Mount Blue
42. Kennebec Highlands
43. Kennebec River Access-Shawmut
44. Lake George
45. Clary Lake
46. Birch Point Beach
47. Beech Hill
48. Ducktrap River
49. Sandy Point Beach
50. Jacob Buck Pond
51. Bowden Farm
52. Burnt Island
53. Sheep Island
54. Tinker Island
55. Tidal Falls
56. Egypt Bay
57. Little Pond
58. Spring River Lake
59. Pettegrow Beach
60. Cutler Coast
61. Tide Mill Farm/Commissary Point
62. Morong Cove
63. South Lubec Sandbar
64. Shackford Head
65. Horan Head
66. East Ridge
67. Dennys River
68. Devils Head
69. Pocomoonshine Lake
70. Grand Lake Stream/Big Falls
71. Nicatous/West Lakes
72. Spednic Lake
73. Birch Island
74. Forest City
75. Mattagodus Stream
76. Mattawamkeag River
77. Nahmakanta Lake
78. Mount Kineo
79. Aroostook State Park
80. Aroostook Valley RoW
81. Salmon Brook Lake Bog
82. Bangor and Aroostook RoW
83. Leavitt Plantation
84. Flag Island
85. Skolfield Farm
86. Salt Bay Farm
87. Bass Falls
88. Jay to Farmington RoW
89. Tibbets Pond
90. Mill Pond Park
91. Machias River
92. St. Croix River
93. Page Farm
94. Mattawamkeag Lake
95. West Branch Penobscot River
96. Frenchmans Hole
97. Newport to Dover-Foxcroft Rail Trail
98. Little Falls - Narraguagus River



Map by Richard D. Kelly, Jr., Maine State Planning Office

Map Key - Inside Back Cover

Land for Maine's Future Program

<http://www.maine.gov/spo/lmf>

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