PUBLIC NOTICE

US Army Corps
of Engineers ®
New England District
696 Virginia Road
Concord, MA 01742-2751

Comment Period Begins: October 18, 2011
Comment Period Ends: November 17, 2011
File Number: NAE-2005-1143
In Reply Refer To: Ruth M. Ladd
Phone: (978) 318-8818
E-mail: ruth.m.ladd@usace.army.mil

The District Engineer is soliciting comments on the 26 projects which have applied for funding through Maine's In Lieu Fee (ILF) program, the Maine Natural Resources Conservation Program (MNRCP). The sponsor for the program is the Maine Department of Environmental Protection. The program serves as an alternative form of compensation for impacts to aquatic resources authorized by the New England District Army Corps of Engineers (Corps) and/or the State of Maine Department of Environmental Protection. These projects were submitted in response to a Request for Proposals (RFP) issued in July 2011.

The RFP includes the criteria used to evaluate projects, the information required for a proposal, and other related information. The RFP, the current amount of funds available for release, and additional information can be found at the MNRCP website: http://www.maine.gov/dep/blwq/docstand/nrpa/ILF_and_NRCP/MNRCP/index.htm#action.

Any of the projects which involve restoration, enhancement, and/or creation and will require Corps, state, or local permits will be applying individually, not through this public notice.

Attached are the following:

- Summary sheet of projects and the bioregion in which they are located;
- Funds available and the aquatic resource types which have been authorized to be impacted; and
- Project descriptions and locus maps for the 26 projects.

The decision whether to approve funding for projects will be based on an evaluation of each proposed activity and how and where it will compensate for aquatic resources lost through authorizations issued under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act. The decision will reflect the national concern for no net loss of aquatic resources. The benefit which may reasonably accrue from each proposal must be balanced against its reasonably foreseeable detriments and/or its appropriateness considering the ecological needs of the bioregion in which it is located.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to determine the most appropriate projects to receive funding from the MNRCP. Any comments received will be provided to the Review Committee which makes recommendations to the Interagency Review Committee, including the Corps of Engineers, and will be considered in the evaluation of the projects and the determination of which will receive funding. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

ESSENTIAL FISH HABITAT

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires all federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH).

The District Engineer has made a preliminary determination that the site-specific adverse effect will not be substantial. Further consultation with the National Marine Fisheries Service regarding EFH conservation recommendations is being conducted and will be concluded prior to the final decision.

Based on his initial review, the District Engineer has determined that little likelihood exists for the proposed work to impinge upon properties with cultural or Native American significance, or listed in, or eligible for listing in, the National Register of Historic Places. Therefore, no further consideration of the requirements of Section 106 of the National Historic Preservation Act of 1966, as amended, is necessary. This determination is based upon one or more of the following:

a. The project area has been extensively modified by previous work.
b. The project area has been recently created.
c. The proposed activity is of limited nature and scope.
d. Review of the latest published version of the National Register shows that no presence of registered properties listed as being eligible for inclusion therein are in the permit area or general vicinity.
e. Coordination with the State Historic Preservation Officer and/or Tribal Historic Preservation Officer(s)

The New England District, Army Corps of Engineers, has reviewed the list of species protected under the Endangered Species Act of 1973, as amended, which might occur at the project sites. It is our preliminary determination that the proposed activity for which funding is being sought is designed, situated or will be

operated/used in such a manner that it is not likely to adversely affect any Federally listed endangered or threatened species or their designated critical habitat. By this Public Notice, we are requesting that the appropriate Federal Agency concur with our determination.

The State of Maine has an approved **Coastal Zone Management Program**. Although Coastal Zone Management consistency will be required for some of the individual proposals, by this public notice we are requesting the state provide any applicable comments at this time.

In order to properly evaluate the proposal, we are seeking public comment. Anyone wishing to comment is encouraged to do so. **Comments should be submitted in writing by the above date.** If you have any questions, please contact Ruth M. Ladd at (978) 318-8818, (800) 343-4789 or (800) 362-4367, if calling from within Massachusetts.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for a public hearing shall specifically state the reasons for holding a public hearing. The Corps holds public hearings for the purpose of obtaining public comments when that is the best means for understanding a wide variety of concerns from a diverse segment of the public.

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice. All comments will be considered a matter of public record.

THIS NOTICE IS <u>NOT</u> AN AUTHORIZATION TO DO ANY WORK.

JENNIFER L. MCCARTHY
Chief, Regulatory Division

If you would prefer not to continue receiving Public Notices, please contact Ms. Tina Chaisson at (978) 318-8058 or e-mail her at bettina.m.chaisson@usace.army.mil. You may also check here ( ) and return this portion of the Public Notice to: Bettina Chaisson, Regulatory Division, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751.

NAME: _____
ADDRESS: _____

PROPOSED PROJECTS BY BIOREGION

Aroostook Hill Bioregion

No funds available

Central and Eastern Lowlands Bioregion

1. Mattawamkeag River; Drew Plantation
   Preservation: approximately 2,347 acres
   Restoration/creation/enhancement: none
2. Varnum Farms; Sebec and Dover-Foxcroft
   Preservation: 1874 acres
   Restoration/creation/enhancement: restoration and enhancement of 87 acres of riparian buffer and enhancement of 25 acres of grassland bird habitat
3. West Branch Amazon Brook; GLS Plantation
   Preservation: none
   Restoration/creation/enhancement: 3.14 ac fish passage restoration

Central and Western Mountains Bioregion

1. Seven Mile Stream; Jay
   Preservation: 42 acres
   Restoration/creation/enhancement: none

Central Interior and Midcoast Bioregion

2. Hales Pond Access; Fayette
   Preservation: 20 acres
   Restoration/creation/enhancement: none
3. Head of Maquoit Stream; Brunswick
   Preservation: 22 acres
   Restoration/creation/enhancement: Restoration of 10.2 acres and enhancement of 3.25 acres through removal of a dam and reestablishment of a stream channel and wetlands
4. Jam Black Brook Culvert; Searsmont
   Preservation: none
   Restoration/creation/enhancement: Restoration/enhancement of a stream by removal of obstruction
5. Little Cobbossee; Winthrop
   Preservation: 90 acres
   Restoration/creation/enhancement: none
6. Oyster River Preserve; Thomaston
   Preservation: 120.24 acres
   Restoration/creation/enhancement: 0.253 acre restoration and 7.01 acre enhancement to address logging impacts
7. Pushaw Lake Fishway; Hudson
   Preservation: none
   Restoration/creation/enhancement: restoration of sea-run alewifes with a

fish ladder

8. Sebasticook River Acquisition; Burnham and Unity
   Preservation: 639 acres
   Restoration/creation/enhancement: "restoration via removal of inappropriate uses and increased buffers"
9. Spruce Mountain; Jay
   Preservation: 183 acres
   Restoration/creation/enhancement: restoration of 3 acres.
10. St. Georges River; Warren
    Preservation: 100 acres
    Restoration/creation/enhancement: none
11. Upper Cathance River; Topsham
    Preservation: 150 acres
    Restoration/creation/enhancement: none
12. Wallamatogus-Great Heath; Penobscot
    Preservation: 272 acres
    Restoration/creation/enhancement: 2 acres of restoration
13. Westport Island Initiative; Westport Island
    Preservation: 202 acres
    Restoration/creation/enhancement: 4.94 acres of enhancement

Downeast Bioregion

No funds available

Northwest Bioregion

No funds available

Southern Maine Bioregion

1. Biddeford Forest; Biddeford
   Preservation: 29 acres
   Restoration/creation/enhancement: enhancement of deer wintering area through timber management plan development
2. Boulter Pond Wetlands; York
   Preservation: 22.7 acres
   Restoration/creation/enhancement: none
3. Chadbourne Robie Meadow; Harrison
   Preservation: 81.3 acres
   Restoration/creation/enhancement: 1 acre upland (sand pit) restoration
4. McConkey Farm; Gray
   Preservation: 0.21 acre
   Restoration/creation/enhancement: enhancement/creation of 0.86 acre of wetland; enhancement of 0.45 ac upland riparian area
5. Merriland River – Highpine; Wells
   Preservation: 38 acres
   Restoration/creation/enhancement: none
6. Mt. Agamenticus Wetlands II; South Berwick
   Preservation: 83 acres
   Restoration/creation/enhancement: none

7. Saco River – Swans Falls; Fryeburg
   Preservation: none
   Restoration/creation/enhancement: restoration/stabilization of the banks of the Saco River
8. Sucker Brook West Shore; Stow and Lovell
   Preservation: 401 acres
   Restoration/creation/enhancement: none
9. Suckfish Brook Watershed; Falmouth
   Preservation: 87 acres
   Restoration/creation/enhancement: restoration of 1 acre

Maine Natural Resource Conservation Program
Funds Available

The table below lists the funds available for each MNRCP biophysical region as of September 19, 2011. Available funds may differ at the time of the awards. Also shown are the natural resources that have been prioritized for restoration, enhancement, preservation, and/or creation within each region.

MNRCP Region	Amount	Priority Resource Type
Aroostook Hills and Lowlands	$0	
Central and Eastern Lowlands	$215,759	Freshwater wetland Emergent; Freshwater wetland Scrub-Shrub; Inland waterfowl; Vernal pool critical terrestrial habitat
Central and Western Mountains	$262,111	Freshwater wetland Emergent; Freshwater wetland Forested; Freshwater wetland Scrub-Shrub; River/Stream; Vernal pool critical terrestrial habitat
Central Interior and Midcoast	$1,338,230	Estuarine intertidal; Estuarine subtidal; Freshwater wetland Emergent; Freshwater wetland Forested; Freshwater wetland Scrub-Shrub; Marine intertidal; Marine subtidal; River/Stream; Vernal pool; Vernal pool critical terrestrial habitat
Downeast Maine	$109,801	Freshwater wetland Emergent; Freshwater wetland Forested; Freshwater wetland Scrub-Shrub; Marine intertidal; Vernal pool critical terrestrial habitat
Northwest Maine	$0	
Southern Maine	$956,122	Estuarine intertidal; Freshwater wetland Emergent; Freshwater wetland Forested; Freshwater wetland Scrub-Shrub; Lake, Limnetic; Lake, Littoral; River/Stream; Vernal pool; Vernal pool critical terrestrial habitat
Total Amount Available:	$2,882,023	

Maine Natural Resource Conservation Program
Biddeford Forest Habitat Protection and Enhancement Project - Full Proposal
September 15, 2011

Executive Summary

- **Project Sponsor:**

  James Boyle, 25 Dundee Road, Gorham, ME 04038; (207) 756-2928; jboyle@boyleassociates.net

- **Project Location:**

  Biddeford, Map 2 Lots 14 & 17; east of Andrews Road, York County

- **Summary Project Description:**

  The Biddeford Forest Habitat Protection and Enhancement Project ("the project") includes two non-contiguous, undeveloped parcels located off Andrews Road in Biddeford, encompassing approximately 29 acres. The property is located in York County, the Gulf of Maine Coastal Lowlands Biophysical Region, and the Saco River South and Swan Pond Brook watersheds (HUC12). The property is situated on the eastern edge of approximately 12,000 acres of currently undeveloped lands. A 10-acre property owned by the Saco Valley Land Trust is situated between the two BFPP properties. The BFPP properties also abut the 125-acre Biddeford and Saco Water Company property. The combination of this project site with these two properties would create a nearly 165 acre tract of contiguous protected land. The BFPP site contains: 4.4 acres of PFO and PSS wetland [2.2 of which are Wetland of Special Significance (WOSS)], 3 Significant Vernal Pools totalling 0.8 acres of pool deperession, 3.2 acres of MDIF&W-mapped DWA (indeterminate value), 24.3 acres of upland buffer, 4.3 acres of land within a 100 year floodplain, and 300 linear feet of stream. Preservation of these parcels will protect over 10 acres of vernal pool habitat, and 3 acres of Maine Natural Areas Program (MNAP) mapped Red Maple Swamp (an S4 community). The plan for this site will also include enhancement of the deer wintering area by developing a timber harvesting plan that would be benificial to deer habitat while also protecting the critical cover for the vernal pool habitats.

- **Estimated Project Cost:**

Total Project Cost	$300,000
MNRCP Fund Request	$300,000

- **Resource Priority of Project Site:**
  - ***Within or adjacent to a Beginning with Habitat Focus Area:***

    The site is 2.6 miles from the BWH-designated *Biddeford/Kennebunk Vernal Pool Complex*, a Focus Area of Statewide Ecological Significance.

  - ***Within or immediately adjacent to existing public or private conservation lands:***
    - Saco Valley Land Trust parcels, Map 2, Lot 16
    - Biddeford and Saco Water Company parcel, Map 2, Lot 19
    - State of Maine lands, Map 2, Lots 37 and 39

  - ***Within or adjacent to other natural resource priority areas (name & brief description):***

    The property is included within an "undeveloped habitat block" as mapped by the Beginning with Habitat Program (BWH) as well as a Maine Natural Areas Program (MNAP)-mapped Forested Block (#1778). Further, the property is bounded by two parcels currently owned and managed by the Saco Valley Land Trust (SVLT). SVLT owns over 500 acres and holds conservation easements on an additional 200 acres in the Biddeford region. The property also contains a MDIFW-mapped Deer Wintering Area (000407) and portions of the FEMA-mapped 100-year Flood Zone (which connects eventually to Thatcher Brook). Finally, the property also contains a MNAP-mapped Red Maple/Sensitive Fern Swamp, an S-4 rated community.

  - ***Contains natural resources of significant value and/or rarity (*habitats, species*):***
    - Three (3) Significant Vernal Pools (mapped by Boyle Associates in 2009) on the property and two (2) additional pools mapped within 500-feet of the property (MDIF&W data)

- **Type of Conservation:**

Natural Resource Type	Preservation
Freshwater wetland, forested (PFO)	2.2 ac.
Freshwater wetland, shrub-scrub (PSS)	2.2 ac.
River, stream or brook	300 l.f.
Significant wildlife habitat, vernal pool (*indicate number of pools if necessary*)	3 SVPs (0.8 acre)
Significant wildlife habitat, vernal pool critical terrestrial habitat (250 feet)	5.5 ac.
Upland buffer (non wetland habitat)	18.3 ac.
Project Total	**29.0 ac.**

Potential to Meet MNRCP Goals

- **Original habitat types and current habitat conditions:**

  Uplands on the property contain oak-pine mixed woodland and coniferous forest cover types. The topography is rolling, and contains areas of shallow-to-bedrock soils with bedrock outcroppings interspersed with perched red maple swamps and seasonal pools.

- **The project will provide and/or enhance the following functional benefits:**

Freshwater Wetland Functions & Values	
Education/scientific value	Retention/storage of floodwater/surface water
Floodflow alterations	Shoreline/sediment stabilization
Fish & shellfish habitat	Retention of sediment/toxicants
Nutrient removal/transformation	Uniqueness/Heritage
Production export	Visual quality/aesthetics
Recreation	Wildlife habitat
Groundwater recharge	Recreation

- **Proposed future condition of the property and the functional lift:**

  The property will be managed to maximize the wildlife habitat function and the education/scientific value.

- **Describe the level and type of threats to resources on and adjacent to the property. Note that preservation projects must anticipate the threat of degradation to the site in the next 20 years.**

  The property is under threat of development. The property is located in a development corridor behind the commercial businesses along Route 111. The property was under option in 2002 and 2009 (two different buyers) and a purchase offer was made in 2010 by the proposed Biddeford Racino project developers (a racino project was approved by Biddeford voters in November 2010).

- **Describe the current and proposed buffers on the project site, and the degree to which they protect or support identified resource functions and ecological connectivity to other conservation areas or undeveloped large blocks of habitat.**

  The property is situated on the eastern edge of approximately 12,000 acres of undeveloped lands. A 10-acre property owned by the Saco Valley Land Trust is situated between the two project properties. The project properties also abut the 125-acre Biddeford and Saco Water Company property. The combination of this project site with these two properties would create a nearly 165 acre tract of contiguous protected and/or public-owned land. The project site contains: 4.4 acres of PFO and PSS wetland [2.2 of which are Wetland of Special Significance (WOSS)]; three (3) Significant Vernal Pools (including the entirety of each basin, or 0.8 acre of pool deperession); 3.2 acres of MDIF&W-mapped DWA (indeterminate value); 18.3 acres of upland buffer; 4.3 acres of land within a 100-year floodplain; and 300 linear feet of stream and riparian habitat.

- **Describe the current use of the property (e.g., any structures or improvements) and the land use activities in the area surrounding the property (e.g., residential, forest management, commercial, agriculture, etc.).**

  The property and surrounding lands are forested, with logging and granite quarrying the primary and most recent past uses. The immediate area is forested with light recreational trail use (presumably for hunting). West of the project there is a sporadically-active sand pit and there are several single-family homes on Andrews Road. To the south, the area along Route 111 is heavily commercialized. The Maine Turnpike is located east of the project.

- **Describe the proposed use of the property and any proposed management (e.g., describe in detail any proposal for "forestry management" or "wildlife management" and how this management will affect existing and proposed aquatic or other natural resources).**

  As part of the overall improvements for the project, the forest will be enhanced by developing a forest management plan. Concepts incorporated into the plan can include DWA habitat management which typically is comprised of a long-term management goal of contiguous, dense evergreen canopy (which affords deer easy movement in deep snow) surrounded by, or interspersed with, low level hardwood browse (proximal high value/energy food sources). Additionally, the plan will insure that the SVP critical terrestrial habitat remains intact and is monitored for impacts (*e.g.* vandalism or ATV use) or degradation. The existing SVLT trails will also be extended onto project parcel to enhance the recreational uses on the site. We will improve the recreation and educational aspects of the site by introducing interpretive signage and trail markings. In addition, a damaged culvert over the perennial stream on the project, placed many years ago to provide access for logging, will be replaced.

- **Describe the specific techniques and methods that will be used to conserve the habitat.**

  The area will be preserved by a conservation easement held by the SVLT in perpetuity. A draft conservation easement is attached.

- **Describe the level of support and involvement of other relevant agencies, organizations, and local community.**

  While we have not contacted local organizations other than the SVLT, the City of Biddeford has been strongly supporting conservation efforts throughout the City in recent years.

Landscape Context:

- **Describe the proximity / benefits to statewide focus areas for land conservation (Beginning with Habitat Focus Area) or habitat preservation identified by a state agency, or other regional or municipal plans.**

  The Beginning With Habitat maps show the deer wintering area (DWA) and Red Maple-Sensitive Fern Swamp (S4 Community) and the FEMA 100-year floodplain within and adjacent to the property.

- **Describe the adjacency / proximity to other public or private protected properties and how this project will enhance overall conservation (e.g., refuges, management areas, preservation, parks, conservation organization properties, mitigation banks, or other protected restoration sites).**

  This conservation easement will be held by and the property will be managed by the Saco Valley Land Trust (SVLT). SVLT owns an abutting parcel between the two project parcels. The SLVT parcel is forested with no development or structures, and it contains a network of trails. The proposed use of the project parcels will be consistent with the existing SVLT parcel, which will also remain forested with no development (save for passive recreational use improvements such as trail and interpretive signs and/or benches). When connected, the three properties will form one large, contiguous, protected forest. The deer wintering area, SVP habitats, and MNAP-mapped Red Maple-Sensitive Fern Swamp all extend onto the SVLT parcel. The combined properties will be managed as one block, focusing on preservation and enhancement of these features. The primary goal will be preservation of the undeveloped forest, including the upland/wetland complex SVP's and other noted natural resources. The preservation of the critical terrestrial habitat will benefit the vernal pool breeding amphibians throughout their life cycles. It will also benefit deer, small mammals, and the variety of migratory and resident birds that have been observed on the project.

- **Describe the proximity / benefits to important species in Maine such as habitat for wetland Rare, Threatened, Endangered Species, or Species of Special Concern; Habitat for Species of Greatest Conservation Need; S1 & S2 Wetland Natural Communities; and/or within or buffering brook trout, Atlantic sea-run salmon or other diadromous fish runs and habitats.**

  The project property contains wintering habitat for white-tailed deer and three Significant Vernal Pools. Additionally, the project contains 300 linear feet of a perennial stream that flows into Thatcher Brook. Thatcher Brook provides habitat for brown trout and has recently been added to the State's list of urban impaired streams (MDEP TMDL Summary). Thatcher Brook drains to the Saco River and downstream Saco Bay. Protection and improvment in upstream resources, such as the stream on the project parcel, will provide lasting benefits for water quality on these important downstream resources.

- **Describe any potential adverse impacts to any protected natural resource, such as upstream or downstream aquatic resources, ecologically sensitive areas and wildlife habitat and discuss any potential effect the mitigation project may have on any species listed as either federal or state threatened or endangered that may be found in the vicinity of the project. These impacts should be avoided to the greatest degree possible.**

  No adverse impacts are apparent at this time. Biddeford is home to several rare and threatened species that utilize vernal pools for habitat, including Blanding's and spotted turtles. Provided they migrate to or through the project vicinity, both species would benefit from protection of the vernal pools on the project site.

Project Readiness

- **Provide documentation of landowner willingness to participate in the proposed project, including conveying a conservation easement or fee title to the property (for projects not on existing conservation lands). Include landowner's name and address.**

  As the landowner, I, James Boyle, am willing to participate in the proposed project, including conveying a conservation easement to the property. The land value shown in the table below is based on the offer made on the property in 2011. The SVLT Board has agreed to be the long-term conservation partner. In addition, I spoke with Keith Fletcher of the Maine Coast Heritage Trust (MCHT). Keith suggested I partner with the SVLT, but said MCHT would be willing, should SVLT decline. We have been repeatedly approached to sell the property over the past ten years, but would prefer to see the property preserved through this program. My name and address are included above.

- **List permits needed (federal, state, and local) and which, if any, have already been secured. Describe the extent of legal access to the property.**

  No permits are needed (the only non-forestry specific work proposed is passive recreational improvements and the replacement of an existing, but washed out culvert). There is no deeded right-of-way, but we have verbal permission from the abutter to travel across their land to and from Andrews Road.

- **Outline tasks / steps to be taken in completing the project, including time schedule. Please also include key tasks / steps that have already been completed and the date of completion.**

  First, we would execute the conservation easement. Second, we would prepare the land management plan and work with the SVLT to ensure synergy with their overall land stewardship goals. Third we would install interpretive and trail signage and replace the damaged culvert. As a forester, wetland scientist and owner of environmental and land-use consulting business since 1996, I have the financial, administrative and technical capacity to successfully complete the project.

- **Specify tangible outputs (work products and deliverables), including time schedule. Please also include key outputs that have already been completed and the date of completion.**

  Mapping of natural resources has been completed. The main tangible output would be signage and trail imparovments, and that would be completed over the winter of 2011-2012 and spring of 2012. The management plan will be completed through the remainder of 2011 and the winter of 2011-2012. Follow up habitat surveys on the abutting, existing SVLT land holding will commence in the spring of 2011, most notably a vernal pool survey to ensure adequate mapping of all significant features on the site.

- **Outline the anticipated short-term monitoring plan for restoration, enhancement and creation projects. A five-year monitoring term is typical, with a potentially longer period for resources with slow development rates. Please note that if the project is approved for funding, a detailed monitoring plan with success criteria will need to be submitted prior to receipt of funding. Preservation projects do not require short-term monitoring plans.**

  Short-term monitoring will include site reconnaissance with the SVLT and be conducted during trail improvement and signage location and design work. The culvert replacement work will be designed and overseen by a person experienced and trained in such activities. The long term monitoring procedures will be included in the overall site management and forest management plan.

- **A long-term stewardship and monitoring plan must be developed for all projects prior to the award of MNRCP funds. Describe the anticipated process for developing the long-term stewardship plan for the project and provide information on who will maintain the property in perpetuity, general easement terms (if applicable), and who will conduct any monitoring. Describe anticipated costs in long-term maintenance of the project site and long-term monitoring of any easement conditions. Provide a detailed description of the financing mechanism (stewardship endowment, trust or other method) for funding the long-term stewardship of the project site.**

  Jim Boyle (the project sponsor and Professional Licensed Forester) will work with the SVLT to write the long-term stewardship and monitoring plan. SVLT will maintain the property in perpetuity, and SVLT will conduct monitoring. The proposal includes $15,000 stewardship endowment. Part of the endowment will ensure that SVLT may hire a professional to assist with long-term site and vegetation monitoring, trail maintenance (as needed) and sign upkeep and replacement.

Format for MNRCP Project Budget

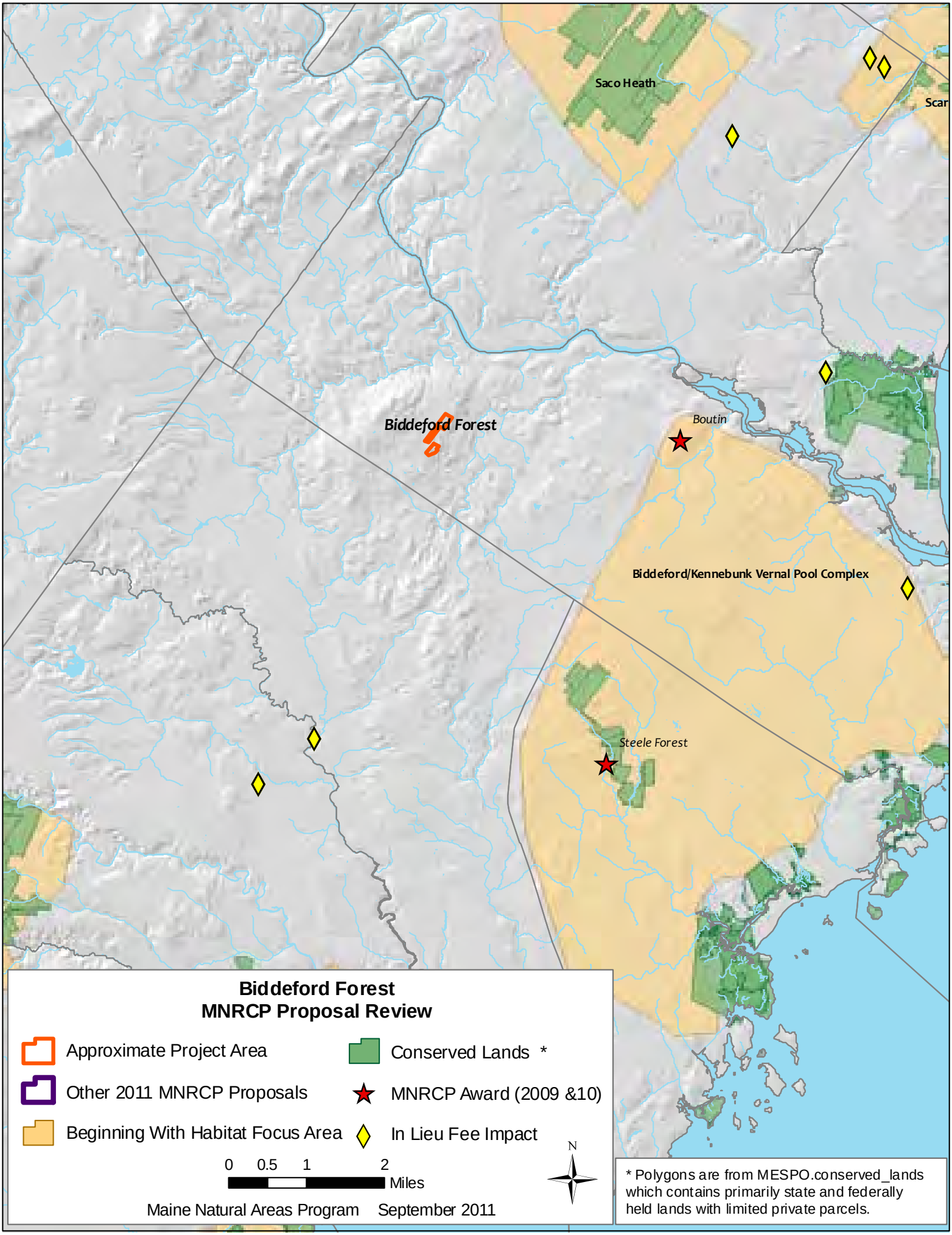
All costs below are estimated, based on my familiarity with similar projects as owner of Boyle Associates, an environmental/land-use consulting business.

Acquisition and Associated Costs	
Value of fee lands or conservation easements to be purchased	$250,000
Appraisal costs	$5,000
Title, legal and closing costs	$5,000
Land survey	$5,000
Environmental hazard survey	$5,000
Baseline documentation *(easement only)*	(included in survey)
Long-term management/stewardship planning	$2,000
Natural resource survey	$2000

Restoration, Enhancement, or Creation Costs	
Restoration planning	$6,000
Personnel	-
Site Work	$1,000
Contractual	-
Equipment	-
Supplies (signage/trailwork)	$4,000
Other	

Monitoring and Long-Term Management Costs	
Short-term monitoring costs	
Long-term management/stewardship costs	$15,000

Total Project Cost:	$300,000
Total Maine Natural Resource Conservation Program (MNRCP) Request:	$300,000
Other Funding Sources and Amounts:	


Saco Heath
Scar
Biddeford Forest
Boutin
Biddeford/Kennebunk Vernal Pool Complex
Steele Forest
Biddeford Forest
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
Beginning With Habitat Focus Area
Conserved Lands *
MNRCP Award (2009 &10)
In Lieu Fee Impact
0 0.5 1 2
Miles
N
Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

Boulter Pond Wetlands Acquisition Project Description

Executive Summary:

Project Sponsor: Doreen MacGillis, York Land Trust on behalf of the Mt. Agamenticus to the Sea Conservation Initiative, P.O. Box 1241, York Harbor, ME 03911, 207-363-7400, dmacgillis@yorklandtrust.org

Project Location: York, Maine, York County, 25 Linscott Road South, Tax Map 401, Lots 69, Lot 55 and Lot 56

Summary Project Description: Boulter Pond Wetlands includes three lots totaling 22.7 acres, of which 7.4 acres is a combination of forested and scrub-shrub wetlands. The property abuts conservation land owned by York Land Trust to the northwest and Kittery Water District to the east. The property is within the watershed of Boulter Pond and has two streams that drain into Boulter Pond, a drinking water supply. The property fringes a mixed Graminoid Shrub Marsh, with multiple standing dead snags that provide excellent habitat for cavity nesting birds. Four species of woodpeckers were observed during a recent visit by Maine Natural Areas Program (MNAP). A great blue heron rookery with 12 active nests occurs in this marsh (off property on opposite shore). Boulter Pond Wetlands is within the Mt. Agamenticus Focus Area of Statewide Ecological Significance; the acquisition boundary of the York River Division of Rachel Carson National Wildlife Refuge; and a 6,300-acre unfragmented forest block. The land is ranked High Value for ground water recharge/discharge, floodflow alteration, nutrient removal, production export and wildlife habitat (high vegetative diversity and food sources). An old woods road bisects the property but there has been no filling or other impact to the wetlands. As a result of the purchase of this property, York Land Trust will: 1) remove the imminent threat of development of an ecologically sensitive and biologically rich area and cut off access to additional lots to the north (the owner has subdivided the property and will sell for development if conservation does not occur, just as he sold adjacent lots along Linscott Road South that are developed); 2) manage it for wildlife habitat, low-impact recreation and nature observation; 3) expand existing conservation lands in the Mt. Agamenticus Region; and 4) protect drinking water for parts of Kittery, Eliot and York. The landowner is willing to sell the land to York Land Trust. An appraisal will be completed by mid-October. A survey is complete. If fully funded, project could close by August of 2012. Active project partners are the Mt. A to Sea Coalition Partners. York Land Trust is also discussing the project with Kittery Water District. Qualifications: York Land Trust has closed 26 projects over the past 10 years and will close on an MNRCP-funded project on August 16, 2011. The Trust has extensive experience in acquiring, stewarding and restoring lands and wetlands in the Mt. Agamenticus Region.

Estimated Project Cost:

- Total Project Cost: $259,500
- MNRCP Fund Request $259,500

Resource Priority of Project Site: The property is within The Beginning with Habitat (BwH) Mt. Agamenticus Focus Area of Statewide Ecological Significance and in very close proximity to the BwH York River Headwaters Focus Area. It is within the acquisition boundary of the York River Division of Rachel Carson National Wildlife Refuge and a 6,300-acre unfragmented forest block. York Land Trust owns 300 abutting acres to the northwest of the property and Kittery Water District owns more than 2,000 acres to the east. The property is located within the Mt. Agamenticus to the Sea Region, an area of conservation focus for a coalition of ten organizations.[1] The property is within the Town of York Watershed Protection Zone and Shoreland Protection District. The property fringes a mixed Graminoid Shrub Marsh. A great blue heron rookery with 12 active nests occurs in this marsh. The property provides Significant Habitat for Inland Waterfowl and Wading Birds as identified on BwH maps and is within an identified Deer Wintering Area.

[1] Members of the Mt. Agamenticus to the Sea Coalition include: Great Works Regional Land Trust, Kittery Land Trust, Maine Dept. of Inland Fisheries and Wildlife, Maine Coast Heritage Trust, U.S. Fish and Wildlife Service, The Wells National Estuarine Research Reserve, The Nature Conservancy, The Trust for Public Land, York Rivers Association, and York Land Trust.

Type of Conservation:

Natural Resource Type		Restored acres	Enhanced acres	Preserved acres	Created acres	Total acres
Freshwater Resources	Freshwater wetland, emergent (PEM)					
	Freshwater wetland, forested (PFO)			6.5		
	Freshwater wetland, shrub-scrub (PSS)			.9		
	River, stream or brook					
	Significant wildlife habitat, vernal pool					
	Significant wildlife habitat, vernal pool critical terrestrial habitat					
	Significant wildlife habitat, Inland Waterfowl and Wading Bird Habitat					
Coastal Resources	Coastal wetland, Marine subtidal (M1)					
	Coastal wetland, Marine intertidal (M2)					
	Coastal wetland, Estuarine subtidal (E1)					
	Coastal wetland, Estuarine intertidal (E2)					
	Significant wildlife habitat, Tidal Waterfowl and Wading Bird Habitat					
	Significant wildlife habitat, Shorebird Feeding & Staging Areas					
	Upland buffer (non wetland habitat)			15.3		
	Project Total			**22.7**		

Potential to Meet MNRCP Goals:

Current Habitat Conditions[2]: The Boulter Bond Wetlands property consists of three parcels totaling 22.7 acres and is located in a rural-residential area in the western portion of the town of York. About 7.4 acres are wetlands, mostly a mix of scrub-shrub and forested types. The eastern-most parcel abuts and contains some of the wetlands along a stream that flows into Boulter Pond, a drinking water supply. Along the edge of upper Boulter Pond, there is a Mixed Graminoid Shrub Marsh with many standing snags. A great blue heron rookery occurs directly across the main channel from this wetland with twelve active nests.

This emergent marsh fringes the parcel and is of variable width (30-100 feet) before it transitions to open water with emergent aquatic plant species. The marsh itself is dominated by sedges, with scattered shrubs especially along the upland border. Some typical species here include three-way sedge, cattail, bur reed, lake-bank sedge, tussock sedge, *Carex intumescens*, sensitive fern, marsh fern, swamp candles, and blue-flag iris. Common shrubs include maleberry, winterberry, and highbush blueberry. The damming of Boulter Pond has created this broad emergent marsh. The extensive zone of snags, which appear to be mostly red maple and white pine, provides diverse, excellent wildlife habitat for cavity nesting birds. Besides great blue heron, other birds observed include four species of woodpeckers. Old beaver chews were found around the perimeter of the pond but no recent activity was noted.

Much of the Boulter Pond Wetlands property consists of a mature, closed-canopy Oak - Northern Hardwoods Forest. But, within the uplands there are two streams which provide habitat diversity and affect community structure in immediately adjacent areas. The streams both run roughly northwest to southeast, feeding into the headwaters of Boulter Pond. The

[2] In July 2011, a site survey, wetlands assessment, natural resources inventory and evaluation of wetland restoration and enhancement opportunities on the property was conducted by Maine Natural Areas Program Ecologist Kristen Puryear and intern Nancy Olmstead.

stream which runs along the northern boundaries of the parcels has a striking hemlock ravine with several, large, healthy American Beech and one very large sugar maple.

The forest is growing on shallow, loamy, well-drained soil on rocky, gentle slopes between the two small streams. The canopy-dominant tree is red oak, although pockets of co-dominance with white oak occur. The white oak trees tend to be fairly large (50-60cm). Elsewhere, red oak is dominant with a mix of northern hardwoods (American beech, black birch, ash, maple) and a few white pines. There is a thin smattering of sapling-size shagbark hickory. The understory is fairly open, and is dominated by seedlings, saplings, and a sparse herb layer. Coarse woody debris is abundant. On scattered rocky knolls, the community changes to a slightly different species composition, with shorter trees and some red cedar, an uncommon species in Maine. In the hemlock ravine, there is a steeper slope with greater tree species diversity that includes basswood, beech, hemlock, sugar maple, black birch, and muscle wood. In the upland areas scarlet tanagers were observed and a barred owl was heard. Insects are abundant, providing a good food base for nesting birds.

Segments of old stone wall along the northern boundary of the property as well as scattered wolf trees (white pine) and the relatively even aged cohort of mature red oaks are all signs that the forest has been regenerating since being abandoned as pastureland. One softwood tree was cored and aged to be approximately 125 years old. There are some cut stumps along the old stone walls, but otherwise there is no sign of recent harvest. A few Japanese barberry were observed on the property but no other invasive plants were found. An old woods road cuts through the uplands towards the eastern/northeastern property boundary, where it crosses over a perennial stream. The crossing occurs at a point of natural bedrock ledge, therefore the impact to the stream is very minimal.

This project will provide several **functional benefits** and protect important values of the property. The property ranks High for groundwater recharge/discharge because it is within the watershed of a public drinking water supply. It ranks High Value for floodflow alteration. It receives overflow from Bell Marsh during peak periods and has a flat area for flood storage. It ranks High Value for nutrient removal as it traps sediments and excess nutrients before they reach the water supply. It ranks High Value for production export for its high vegetative diversity that provides many wildlife food sources and there is evidence of higher trophic level use. It ranks High Value for wildlife habitat, especially for cavity nesting birds with an abundance of insects present, a shallow marsh and intact uplands in close proximity.

The property also has educational/scientific/recreational value as there is easy access and existing trails for hiking, hunting and wildlife observation. The property is aesthetically beautiful with multiple wetland types and flowering plants visible.

The **future condition of the property** will be high value, forested wetlands with associated, upland buffers. York Land Trust will manage the property as habitat for wildlife and as a recreational/educational resource for the public. Permanent protection and stewardship of the property will provide a significant functional lift by ensuring the water quality of the wetlands and Boulter Pond remain unaltered by development as does the rich habitat for wildlife.

There is an imminent **threat of development.** The owner has surveyed and subdivided the property into three lots and will sell them for development within the next five years if conservation does not occur. He has sold adjacent lots along Linscott Road South that are now developed. Development of the property and an associated access road that would run between the three lots, threaten to make accessible other lots to the north that are privately owned by abutting landowners. Opening up a new area to development in a now remote region of the 6,300-acre, intact forest block will undermine ongoing conservation efforts and threaten critical natural resources. Protection of the Boulter Pond Wetlands property will prevent incursions into the forest block and make conservation on the abutting lots to the north more affordable.

The **upland buffers** provide a filtering system that helps protect the water quality of Boulter Pond Reservoir. They make a physical connection to surrounding conservation lands and provide rich, diverse habitat for wildlife and plants. The property is adjacent to a 300-acre property owned by York Land Trust and more than 2,000 acres owned by Kittery Water District and is within a 6,300-acre intact forest block. These undeveloped adjacent lands are themselves surrounded by an extensive network of conservation lands, protected through the Mt. A to the Sea Conservation Initiative.

There are no structures or improvements on the property other than an old woods road, a water main owned by Kittery Water District and a culvert embedded in a small cement barrier. A Right-of Way area managed by Kittery Water District

has been cleared of trees but is well-vegetated. Overflow water from Bell Marsh is sometimes released by Kittery Water District and flows through the water main and across the grassy strip where it continues into a small perennial stream, then into Boulter Pond.

The surrounding properties are a combination of residential house lots and forested conservation and water district lands.

York Land Trust's **method to conserve the habitat** on the property will be preservation through land acquisition. The Trust will purchase the property to remove the imminent threat of development, protect drinking water and expand existing conservation lands in the Mt. Agamenticus Region. No forestry or active wildlife management is planned. The existing woods road/trail on the property will be maintained for low impact recreation and nature observation.

The partners of the Mt. Agamenticus to the Sea Coalition are actively involved and supportive of the project. York Land Trust is also discussing the project with Kittery Water District and has discussed the project with the York Town Planner who feels that conservation of the property is the best outcome as it would prevent negative impacts to the sensitive wetlands on the property within the Town's watershed protection zone and shore land protection district. Given that the property is also within the acquisition boundary of the York River Division of the Rachel Carson National Wildlife Refuge, U.S. Fish and Wildlife Service supports the protection of this property.

Landscape Context:

The property is within The Beginning with Habitat (BwH) Mt. Agamenticus Focus Area of Statewide Ecological Significance and is in very close proximity to the BwH York River Headwaters Focus Area. It is within the acquisition boundary of the York River Division of Rachel Carson National Wildlife Refuge and a 6,300-acre unfragmented forest block. York Land Trust owns 300 acres abutting acres to the northwest of the property and Kittery Water District owns more than 2,000 acres to the east. The property is located within the Mt. Agamenticus to the Sea Region, an area of conservation focus for a coalition of ten organizations. The property is within the Town of York Watershed Protection Zone and Shoreland Protection District. The property fringes a mixed Graminoid Shrub Marsh. A great blue heron rookery with 12 active nests occurs in this marsh. The property provides Significant Habitat for Inland Waterfowl and Wading Birds as identified on BwH maps and is within an identified Deer Wintering Area.

Project Readiness:

YLT is a qualified organization with a proven track record and the ability to complete the Boulter Pond Wetlands Project YLT was awarded a $300,000 grant from MNRCP in 2010 to purchase a 50-acre tract near Bell Marsh in York (closing scheduled for 8/16/11). A wetlands restoration/habitat enhancement plan was created and will be implemented in 2012.

The landowners, Pat and Enid White of 1 Pine Island, York, are willing to sell the property to YLT, pending successful negotiations. A letter stating their willingness is attached. The legal access to the property is via 50 feet of frontage on Linscott Road South located on the south westernmost boundary of Lot 69. See property survey map attached.

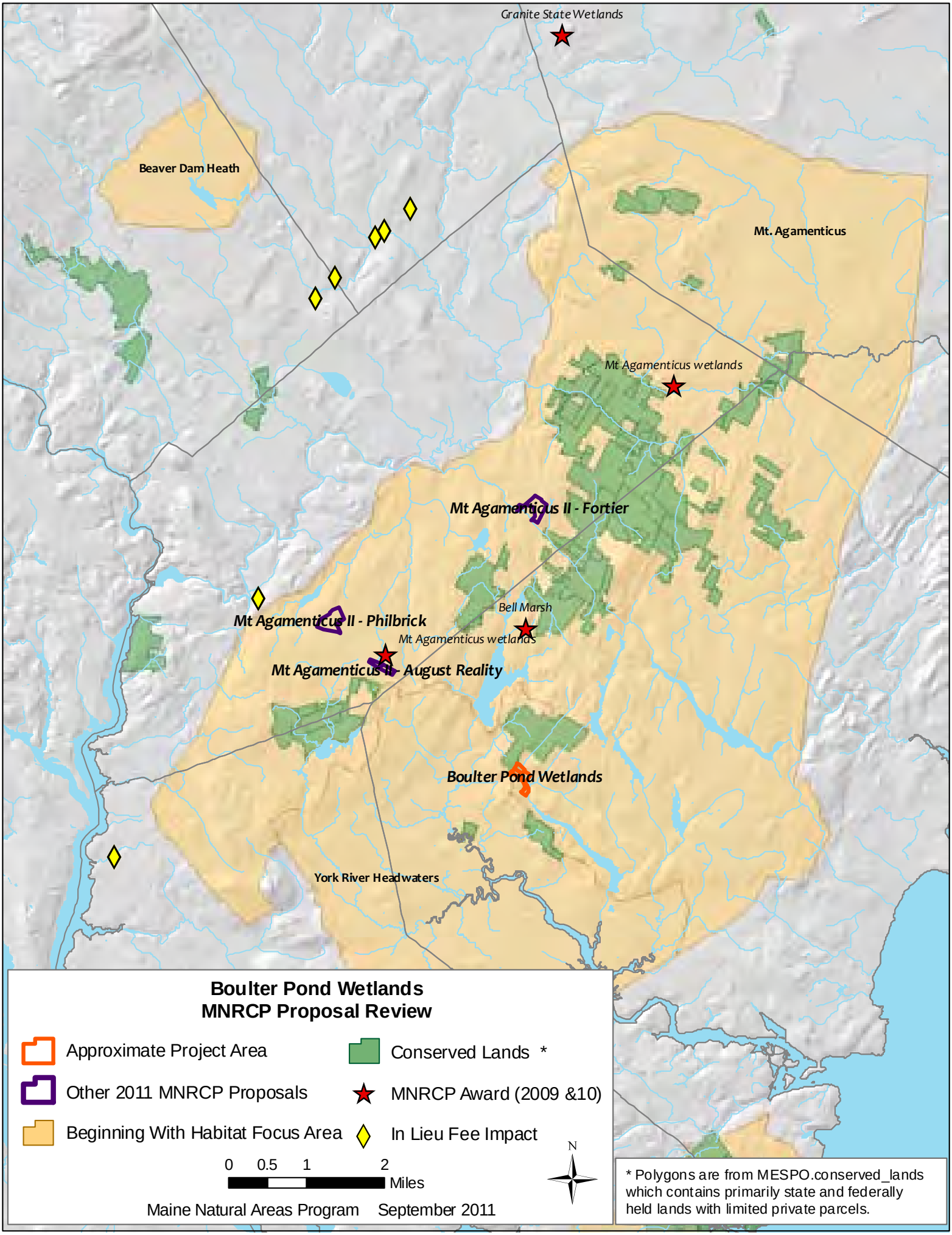
YLT's Stewardship Director will oversee the development of a plan that outlines goals, management and monitoring activities for long-term stewardship of the property. With assistance from stewardship volunteers, YLT will maintain and monitor the property in perpetuity, including maintaining trails. Costs associated with the long-term maintenance of the property include trail maintenance, monitoring, signage and property taxes the total of which is estimated to be about $1,100 annually. Twenty-five thousand dollars will be placed in a stewardship endowment at Maine Community Foundation. Yearly distributions from the endowment will cover costs associated with stewarding the property.

Steps to Complete Project:
1. A site survey, wetlands assessment, natural resources inventory was conducted by MNAP in July 2011.
2. A survey of the property has been completed by the landowner.
3. An appraisal of the property will be completed by October 15, 2011.
4. If funded by MNRCP, YLT will acquire a purchase option agreement on the property by December 31, 2011.
5. York Land Trust will complete a Project Agreement with MNRCP by May 2012.
6. Title work and an environmental hazards assessment will be completed by July 2012.
7. A management plan which includes long-term stewardship and monitoring plan will be completed by July 2012.
8. York Land Trust will close on the property by September 2012 and establish an endowment for the property.

MNRCP Project Budget:

Acquisition and Associated Costs	
Value of fee lands or conservation easements to be purchased	$225,000*
Appraisal costs	$3,500**
Title, legal and closing costs	$4,000**
Land survey	Donated by landowner
Environmental hazard survey	$2,000**
Baseline documentation *(easement only)*	
Long-term management/stewardship planning	YLT to donate
Natural resource survey	Donated by MNAP
Restoration, Enhancement, or Creation Costs	
Restoration planning	
Personnel	
Site Work	
Contractual	
Equipment	
Supplies	
Other	
Monitoring and Long-Term Management Costs	
Short-term monitoring costs	
Long-term management/stewardship costs	$25,000 (10% of purchase price for endowment)
Total Project Cost:	$259,500
Total Maine Natural Resource Conservation Program (MNRCP) Request:	$259,500
Other Funding Sources and Amounts:	

* Estimated based on past projects, comparative market analysis and discussions with Town Planner.
** Estimated based on past projects.


Granite State Wetlands
Beaver Dam Heath
Mt. Agamenticus
Mt Agamenticus wetlands
Mt Agamenticus II - Fortier
Bell Marsh
Mt Agamenticus II - Philbrick
Mt Agamenticus wetlands
Mt Agamenticus II - August Reality
Boulter Pond Wetlands
York River Headwaters
Boulter Pond Wetlands
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
Beginning With Habitat Focus Area
Conserved Lands *
MNRCP Award (2009 &10)
In Lieu Fee Impact
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Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

Crooked River Conservation Corridor : Chadbourne Sand Pit and Robie Meadow

Executive Summary:

- Project Sponsor Western Foothills Land Trust, PO Box 107 Norway ME 04268
  207 739 2124, wflt@megalink.net

- Project Location Scribners Mills Road, Harrison, ME 04040

  Chadbourne Parcel: Harrison Map 16 Lot 10, 26 acres

  25 upland acres, 1 acre wetlands, 1,300' of Crooked River shoreline

  Robie Meadow: Harrison Map 15, Lot 5, 56 acres

  21.1 upland acres, 35.2 wetland acres, 2,549' Russell Brook

- Summary Project Description
  This request is part of a larger Crooked River Conservation Corridor project (see exhibit A) to permanently protect over 2000 acres and 9 miles of shoreline along the upper river in Waterford, Harrison and Otisfield. WFLT proposes to purchase the fee simple on two parcels, Robie Meadow (56 acres) and Chadbourne (26 acres). Both parcels are contiguous to the 690-acre Watkins parcel (CE completed 2011). Purchase of Robie Meadow will provide protection for a 35 acre wetlands and 2,500' of Russell Brook. Purchase of the Chadbourne parcel will protect 1,200' of Crooked River shoreline and will retire a sand pit that is potentially harmful to the drinking water quality of the river.

- Estimated Project Cost:
  - Total Project Cost $220,000
  - MNRCP Fund Request $220,000

- Resource Priority of Project Sites:
  - Adjacent to 690-acre private conservation lands (John and Mary Watkins- 2011)
    Part of anticipated 2000 acre protected corridor to be completed by 2014.
  - Within Crooked River Watershed – high priority for Maine Forest Service, MDIFW, Portland Water District, priority focus of Upland Headwaters Alliance
- Type of Conservation (*complete the following table*):

Natural Resource Type		**Restored acres**	**Enhanced acres**	**Preserved acres**	**Created acres**	**Total acres**
Freshwater Resources	Freshwater wetland, emergent (PEM)			1.29		1.29
	Freshwater wetland, forested (PFO)			20.81		20.81
	Freshwater wetland, shrub-scrub (PSS)	1		14		15
	River, stream or brook					
	Significant wildlife habitat, vernal pool (*indicate number of pools if necessary*)					
	Significant wildlife habitat, vernal pool critical terrestrial habitat					
	Significant wildlife habitat, Inland Waterfowl and Wading Bird Habitat					
	Upland buffer (non wetland habitat)			45.2		45.2
	Project Total	**1**		**81.3**		**82.3**

Potential to Meet MNRCP Goals:

- Describe the original habitat type and the current habitat conditions on the property with a determination of protected natural resources based on either aerial photo interpretation or, if available and applicable, a wetland delineation conducted in accordance with the Corps of Engineers 1987 Delineation Manual or subsequent USACE-approved method.
- Assess the functional benefits the project will provide using the following list as a guide:

Freshwater & Coastal Functions	
Education/scientific value	Retention/storage of floodwater/surface water
Floodflow alterations	Shoreline/sediment stabilization
Fish & shellfish habitat	Retention of sediment/toxicants
Nutrient removal/transformation	Uniqueness/Heritage
Production export	Visual quality/asesthetics
Recreation	Wildlife habitat
Groundwater recharge/discharge (*Freshwater*)	

- "*Functional lift" the project proposes*: The filtration functions of Chadbourne parcel once the forest is restored at the retired pit will assist the functions of the parcels wetlands as well as the river. By most significant functional lift will be provided by protecting the parcel from future sand extraction which will negatively impact the functions of the river. Future recreational benefits of continuing the 1,200'non-motorized trail along the shoreline – which will connect to a 7000 foot stretch on CLT lands by 2014. Viewscapes from and along the Crooked River as well as fishing access will be provided by the Chadbourne purchase. Between Robie and Chadbourne parcels, 3,700' of riparian habitat will be protected.
- *Level and type of threats to resources:* The immediate threat to the Chadbourne parcel is an anxious seller and a motivated non-conservation buyer who wants to extract the lands sand resources.
- *Current use of the property*: no improvements on either parcel. Surrounding land use is in forest management (Robie Meadow) and forest management and seasonal residential with Chadbourne.
- *Proposed use of the properties:* Our overall purpose in the Crooked River watershed is to support the retention and conservation of working forestlands in the watershed (currently at the 80% forested threshold). The Chadbourne parcel would be retained as working forestland. Monies derived from selective cutting and harvesting will provide the maintenance costs for the parcel. WFLT will contract with Integrated Forest Management to create a FMP for the parcel. The Trust will partner with the local snowmobile club to continue to allow winter trail passage along the river trail. ATVs will not be allowed on the trails; non-motorized recreation will be supported year-round .
  The Robie Meadow parcel's woodlands will be managed to support the Russell Brook resource and wetlands habitat.
- *Techniques and methods that will be used to conserve the habitat.*
  - To retire the existing sand pit on the Chadbourne parcel, WFLT will work with Integrated Forestry management to replant with white pine seedlings.
- *Collaborative Work within the Crooked River Watershed:*
  Since 2006 WFLT has been collaborating with 3 land trusts (Loon Echo, Greater Lovell, and Mahoosuc) and the Portland Water District on the Crooked River Initiative. Recognizing that the Crooked River is a primary drinking water source, supplying 40% of Sebago Lake's surface water, and is also the sole spawning ground for Sebago Lake's famous Landlocked Atlantic Salmon, the initiative seeks to promote awareness, provide conservation options for landowners, and conserve natural resources in the watershed. The Maine Community Foundation provided the Alliance with seed money to initiate community meetings throughout the watershed. Maine Rivers, Maine Natural Resource Council, Casco Bay Estuary Project, Otisfield, Casco and Naples Conservation Committees, Trout

Unlimited, MDIFW, and the Maine Forest Service have all been active and excellent partners with the Alliance in this initiative.

In 2008 a $500,000, 3-year USDA Conservation Initiative Grant was awarded to the American Forest Foundation, Manomet Center for Conservation Sciences, WFLT, Hubbard Brook Research Institute, and the White Water Partnership. This initiative will utilize market mechanisms to incentivize private forest landowners to restore, enhance, and protect aquatic resources in two critical watersheds in the Northern Forest region: the Upper Connecticut River watershed in Vermont and New Hampshire, and the Crooked River watershed in Maine. Both areas provide vital watershed services, many of which face an array of pressures from exurban sprawl, climate change, nonpoint water pollution, proposed dam construction, non-native invasive species, and other threats. The project will focus initially on water purification, flood control and abatement, recreational and scenic resources, and habitats for threatened and endangered wildlife. The Crooked River Watershed was selected for this project not only because of the value of its fishery, but because of its extraordinary significance as a public drinking water source.

Collaborating with the Upland Headwater's Alliance, Trout Unlimited, MDIFW, and the OCSWCD, The Cumberland County Soil and Water Conservation District (CCSWCD) has completed a 319-grant supported survey of stream crossings and riparian borders..

TPL and Loon Echo Land Trust have recently completed a greenprint for LELT's service area, the Crooked River is sited repeatedly for its significance to the area's drinking water, historic, and recreational resources.

Landscape Context:

Fisheries Resource:

The Crooked River supports one of only 4 indigenous populations of landlocked Atlantic salmon in Maine, as well as a population of wild population of brook trout. The section of the Crooked River adjacent to the Watkins Property provides spawning and nursery habitat for landlocked Atlantic salmon. This section of the Crooked River was also recently reclassified and upgraded by the Maine Legislature to a Class AA (the highest possible state water quality classification) in recognition of the high values associated with this river. Salmon nursery habitat is present in Russell Brook as well, in addition to spawning and nursery habitat for wild brook trout.

Many other species of fish reside in the Crooked River, including brook trout, cusk, blacknose dace, brown bullhead, pumkinseed sunfish, common shiner, fallfish, smallmouth bass, largemouth bass, chain pickerel, white sucker, yellow perch, American eel, rainbow smelt (seasonally), creek chub, and creek chubsucker, which is listed as a species of special concern. Several of these fish reside as adults in Sebago Lake and undertake spawning migrations up the Crooked River, including landlocked Atlantic salmon, brook trout, creek chubsucker, and white sucker. Resident fisheries of greatest concern to MDIFW include the landlocked Atlantic salmon, brook trout, creek chubsucker, and white sucker.

The Crooked not only supports a genetically unique and indigenous salmon population, but the river's relatively undeveloped and unspoiled shoreline in heavily developing southern Maine creates an attractive destination for anglers, and other water-based outdoor enthusiasts. The Crooked also provides the closest opportunity for anglers in Maine's most populated region of the state to fish for wild landlocked Atlantic salmon in a river setting. The Crooked River is the "crown jewel" of riverine salmon and trout fishing in southern Maine, and other than two sections of the Saco River is the only other Class AA river in rapidly developing southern Maine. (Francis Brautigam, MDIFW)

Drinking Water Resource:

The Crooked River watershed plays a significant role within southern Maine as it provides 39% of the surface water flow into Sebago Lake which in turn serves as the drinking water reservoir for over 200,000 people: 1/6th of Maine. The recent "Forest to Faucet" study completed by the U.S. Forestry Service and UMass Amherst, illustrating the relationship between forests and water quality, determined that the Presumpscot

Reservoir Watershed (i.e. Crooked River and Sebago watersheds) was the most vulnerable public drinking water watershed in the USFS's 20 state northeastern quadrant. The findings were based upon the predominance of privately owned, unprotected lands within the watershed. Recognizing that PWD cannot afford to purchase the entire watershed, the District is very supportive of regional land trusts and of the potential of easement purchases (and potential watershed services compensation.)

Adjacency to Other Conserved Lands in the Upper Watershed

- *Hague 350 acres:* WFLT holds the 350-acre Hague easement protecting 1.5 miles of Crooked River shoreline in Waterford, 6 miles north of the Chadbourne and Robie Meadow parcels.
- *Jugtown Plains 3,280 acres:* 3 miles south of the project parcel is a Beginning with Habitat Focus Area: the Jugtown Plains pitch-pine/heath barren, where a conservation easement protecting 3,280 acres is held by the Maine Bureau of Parks and Lands.
- *Watkins 690 acres:* donated CE to be completed by Dec 2011. Robie Meadow is an inholding of Watkins and Chadbourne is contiguous to the south across the Scribners Mills Road.
- *CLT Co 1,000 acres:* Loon Echo and Western Foothills Land Trusts are working with CLT Co to purchase the CLT forested holdings in the Crooked River watershed; seven parcels comprising over 1,000 acres and 22,000 feet of Crooked River shoreline. CLT is currently in the process of having all its lands cruised and appraised for the Trusts. The CLT Intervale parcel (which has 7,000' of river shoreline is contiguous with Chadbourne. The intent of the two land trusts is to retain all parcels as working forests, two as potential community forests managed with the towns of Otisfield and Harrison.

Benefits to Important Species

- **The Chadbourne Property** is located along the Crooked River in Harrison, Maine. A recent GIS analysis completed by the U.S. Fish and Wildlife Service's (USFWS) Gulf of Maine Coastal Program for the U.S. portion of the Gulf of Maine watershed documents that forest, habitat contained in the parcel are high value (within the top 50%), based on their value for rare or declining species of birds and fish. The analysis also predicts that the property provides important habitat for 15 of 91 USFWS priority trust species included in the analysis. Moreover, the property provides particularly high value habitat, in comparison with the rest of the Gulf of Maine watershed, for 9 of those 15 species, including: Northern Goshawk, Killdeer, Blackburnian Warbler, Canada Warbler, Northern Flicker, Olive-sided Flycatcher and Prairie Warbler, Osprey, and Bald Eagle. (
- **The Chadbourne Property** also contains approximately 2 acres of wetlands and vernal pool habitats as surveyed by Boyle Associates this summer.
- **Robie Meadow:** the 56.3 acre Robie Meadow lot includes 2,549' of Russell Brook. Contiguous downstream protection for the resource will be provided by the Watkins easement and the MNRCP-funded restoration of the Russell Brook Stream crossing. Francis Brautigam of the MDIWF in support of this project stated that: "purchase, easement and restoration efforts are considered meaningful steps in enhancing the Crooked River fishery. Furthermore, planned conservation proposals are consistent with and support MDIFW's recently developed fisheries management plan for Sebago Lake and the Crooked River, which focuses on enhancing the salmon fishery. Fishery management efforts on Sebago Lake and the Crooked River are considered a regional priority for MDIFW, and as such I whole-heartedly support your conservation proposal!" The Robie Meadow also includes 35.2 acres of wetlands, primarily Palustrine forested and shrub.

Potential Adverse Impacts

- **The Chadbourne Property** includes an historic .47 acre sand pit. The current owner has a non-conservation buyer who wants to reopen the pit. As part of our larger Crooked River work with Manomet, we had a GIS analysis/conservation prioritization done of all the sand and gravel resources in the watershed. The pit located on the Chadbourne parcel raised immediate concerns as the pit is close to the river, high above the river with steep slopes, and is located where the aquifer is shallow. The threat

this pit, if reopened, presents to the river's water quality is a key driver for the parcel's purchase and protection.

Project Readiness

- *landowner willingness:*

  MOU with Ted Chadbourne 50 Stockhomn Dr. , Cumberland ME 04021

  Purchase Option w/ Bob Carlson, CLT, Co. 381 Maple Ridge Road, Harrison, ME 04040

- *List permits needed*: None

- *Outline tasks needed to complete the project*

  Chadbourne:
  - Complete appraisal
  - Sign P&S
  - Create legal description- enhance existing survey as needed for MNRCP
  - Title search
  - Forest restoration project:
    - plant white pine seedlings with Integrated Forest Management

  Robie Meadow:
  - Sign P&S
  - Survey underway currently
  - Title search

- *Tangible Outcomes*: forest restored on .47 acres of historic Chadbourne sand pit.
  The purchase of the Robie Meadow parcel will extend protection to 2,500' of Russell Brook. The preservation of both Robie Meadow and Chadbourne parcels will add 76 acres to the protected 690acre Watkins CE.

- *Anticipated <u>short-term monitoring plan</u> for forest restoration:*

  WFLT will partner with Integrated Forest Management to monitor the reforestation project twice a year for the next 5 years. Replant seedlings as needed.

- *A <u>long-term stewardship and monitoring plan</u>* The Chadbourne parcel would be retained as working forestland. Monies derived from selective cutting and harvesting will provide the maintenance costs for the parcel. WFLT will contract with Integrated Forest Management to create a FMP for the parcel. The Trust will partner with the local snowmobile club to continue to allow winter trail passage along the river trail. ATVs will not be allowed on the trails. The Robie Meadow parcel's woodlands will be managed to support the Russell Brook resource and wetlands habitat.

Chadbourne and Robie Meadow Budget

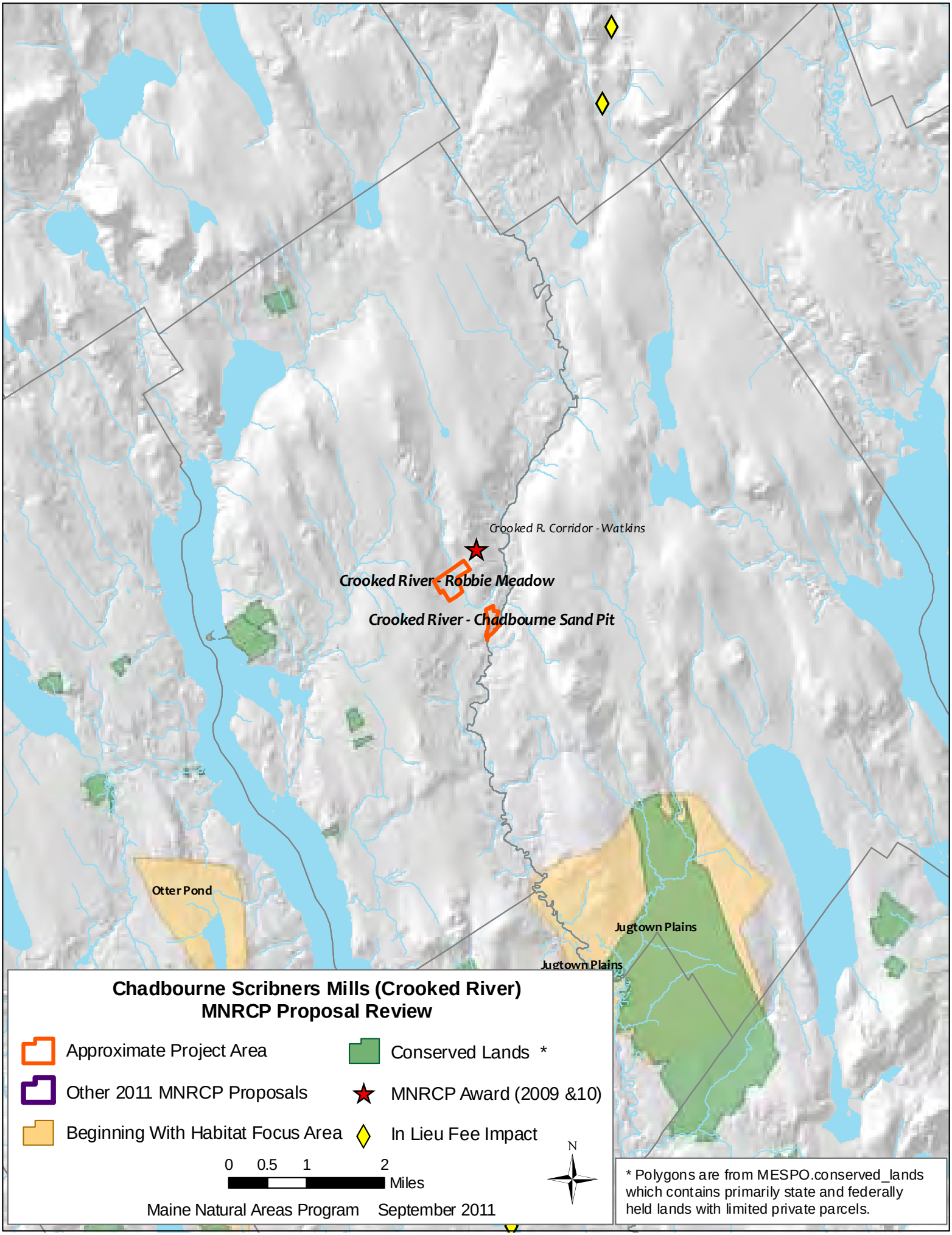
Identify costs as actual incurred or estimated. Describe the basis for any estimated costs.

Acquisition and Associated Costs for both parcels- cost are estimated	
Value of fee lands to be purchased-based on opinion of value*	170,000
Appraisal costs –actual Chadbourne, estimate Robie	10,000
Title, legal and closing costs- estimate	5,000
Land survey- upgrade for both parcels	20,000
Environmental hazard survey- both parcels	3,000
Baseline documentation *(easement only)*	
Long-term management/stewardship planning	4,000
Natural resource survey- actual cost	3,000
Restoration, Enhancement, or Creation Costs	
Restoration planning	
Personnel	
Site Work	
Contractual (tree planting)	3,000
Equipment	
Supplies	
Other	
Monitoring and Long-Term Management Costs	
Short-term monitoring costs†	2,000
Long-term management/stewardship costs‡	
Total Project Cost:	220,000
Total Maine Natural Resource Conservation Program (MNRCP) Request:	220,000
Other Funding Sources and Amounts:	

* Land Acquisition or Conservation Easement Costs must based on an Appraisal completed within the past two years, in accordance with the Uniform Standards of Professional Appraisal Practice (USPAP). A copy of the final appraisal must be provided and consist of a complete appraisal and a self contained appraisal report.

† For restoration, enhancement or creation, a five-year monitoring term is typical, with a potentially longer period for resources with slow development rates. Preservation projects do not require short-term monitoring.

‡ Funded projects are expected to protect priority resources "in perpetuity," which requires an entity with the resources and expertise to ensure long-term management and stewardship. A financing mechanism (e.g., endowment, trust, or long-term financing plan) is required to ensure adequate funding is available over time, though all the funds needed for establishment do not need to be included in MNRCP request.


Crooked R. Corridor - Watkins
Crooked River - Robbie Meadow
Crooked River - Chadbourne Sand Pit
Otter Pond
Jugtown Plains
Jugtown Plains
Chadbourne Scribners Mills (Crooked River)
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
Beginning With Habitat Focus Area
Conserved Lands *
MNRCP Award (2009 &10)
In Lieu Fee Impact
0 0.5 1 2
Miles
N
Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

Outline for MNRCP Project Description

Completely describe the proposed project. Make sure to clearly cover the following, as appropriate, depending on whether the project includes restoration, enhancement, preservation or creation. Use headings as outlined below.

Executive Summary:

- Project Sponsor: The lead partner for this proposal is the Town of Fayette working in partnership with the Maine Department of Inland Fisheries and Wildlife and the Kennebec Land Trust. Contact is Mark Robinson, Town Manager, 2589 Main Street, Fayette, ME 04349, Tel. 207-685-4373. Email at fayette@myfairpoint.net

- Project Location (*town, county, physical address*) Town of Fayette, Kennebec County, 120 Young Road , a public easement.

- Summary Project Description (*project context, goals, type of conservation, method*)

  The Hales Pond Access Project entails the acquisition of 20 ac. of wooded lands and bordering wetlands on Hales Pond and outlet stream by the Maine Department of Inland Fisheries and Wildlife to be held for hand carry water access and conservation of wildlife habitat, open space and land for outdoor recreation. The project includes clean-up of existing residential structures, equipment , parts, and materials along the access road, all of which lies adjacent to some bedrock controlled vernal pools of unknown significance. The land will be purchased with state and federal funding; including an LMF Water Access Fund contribution (The LMF Board has approved $80,000 for land acquisition and a 5% access improvement grant). The property will be managed by the Town under a management agreement with IF&W to maintain public access and use of the property for water access, recreational and conservation purposes. Additional funding is needed to complete the preservation effort, including site clean-up and the successful relocation of the sellers. Funding from the MNRCP will help assure the successful completion of the acquisition effort. Funding will support the clean-up of the property and thereby enhance protection of the adjacent vernal pool and related upland habitat areas. Grant funds will be channeled through a newly voter approved management reserve account and used to support the sellers relocation efforts. Project partners are working on a relocation effort with the sellers, public funding for the land acquisition has been committed, a purchase and sale agreement is needed and the site needs to be cleaned-up before the State can finish the acquisition.

  Fayette Town Manager, Mark Robinson, is the key facilitator between the Owners and all others concerning this possible acquisition.

  The owners are David L. Manter and Roberta J. Manter, Kennebec County Registry of Deeds, Book 1562 Page 254 and Book 2790 Page 196. Shown on the Town's Tax Map R-2, Lot 12

  The southerly and northerly boundary lines are marked. Owner indicates that southern and northern abutters have boundary line surveys. The easterly boundary line is the easterly sideline of the Young Road. Vehicle access is from the Richmond Mill Road, northerly along the Young Road. Young Road is a public easement.

The Manter Parcel is currently developed with a modest dwelling/ mobile home and utility buildings located adjacent to and west of the Young Road, midpoint along the Young Road (see dashed line box on tax map), where the Manters live. Also, located near the dwelling/ mobile home is a livestock stable. Additionally, there is a substantial collection of farm implements and other items that extends along the entire length of the westerly sideline of the Young Road and in adjacent areas.

Public funding for MDIFW's acquisition is approved to be from the Land for Maine's Future Water Access Fund and U.S. Fish and Wildlife Service's Sport Fish Restoration programs funds.

Prior to MDIFW's closing to acquire the Manter Parcel, the collection of farm implements and other items will need to be removed from the property and a "clean" environmental hazard assessment will need to be obtained for the entire property.

MDIFW would acquire the Manter Parcel under a proposed conditional purchase and sale agreement between MDIFW and the Manters. As a portion of this conditional purchase and sale agreement, the removal of the collection of farm implements and other items would be required along with an environmental hazard assessment satisfactory to MDIFW prior to the acceptance of title to the property and payment to the Manters.

- Estimated Project Cost:
  - Total Project Cost $35,000
  - MNRCP Fund Request $35,000
- Resource Priority of Project Site:
  - Within or adjacent to a Beginning with Habitat Focus Area *(Androscoggin Lake)*
  - Within or adjacent to existing public or private conservation lands *(Kennebec Land Trust)*
  - Within or adjacent to other natural resource priority areas *(Wetlands of Special Significance: Significant wildlife habitat, vernal pool critical terrestrial habitat)*
    - Contains natural resources of significant value and/or rarity *(Significant wildlife habitat, vernal pool critical terrestrial habitat)*
- Type of Conservation (*complete the following table*):

Natural Resource Type		Restored acres	Enhanced acres	Preserved acres	Created acres	Total acres
Freshwater Resources	Freshwater wetland, emergent (PEM)			2		2
	Freshwater wetland, forested (PFO)			2		2
	Freshwater wetland, shrub-scrub (PSS)					
	River, stream or brook			2		2
	Significant wildlife habitat, vernal pool (*indicate number of pools if necessary*)			2		2
	Significant wildlife habitat, vernal pool critical terrestrial habitat			2		2
	Significant wildlife habitat, Inland Waterfowl and Wading Bird Habitat			2		2
Coastal	Coastal wetland, Marine subtidal (M1)					
	Coastal wetland, Marine intertidal (M2)					

	Coastal wetland, Estuarine subtidal (E1)					
	Coastal wetland, Estuarine intertidal (E2)					
	Significant wildlife habitat, Tidal Waterfowl and Wading Bird Habitat					
	Significant wildlife habitat, Shorebird Feeding & Staging Areas					
	Upland buffer (non wetland habitat)			8		8
	Project Total			**20**		**20**

Potential to Meet MNRCP Goals:

- Describe the original habitat type and the current habitat conditions on the property with a determination of protected natural resources based on either aerial photo interpretation or, if available and applicable, a wetland delineation conducted in accordance with the Corps of Engineers 1987 Delineation Manual or subsequent USACE-approved method.

  Please see the accompanying delineation maps in the application.

- Assess the functional benefits the project will provide using the following list as a guide:

Freshwater & Coastal Functions	
Education/scientific value	Retention/storage of floodwater/surface water
Floodflow alterations	Shoreline/sediment stabilization
Fish & shellfish habitat	Retention of sediment/toxicants
Nutrient removal/transformation	Uniqueness/Heritage
Production export	Visual quality/aesthetics
Recreation-	Wildlife habitat
Groundwater recharge/discharge (*Freshwater Wetland and Lake*/PFO)	

- Describe the proposed future condition of the property and the "functional lift" the project proposes to provide (e.g., proposed change in habitat quality, contribution to functioning biological systems, water quality, level of degradation, etc.).

  The project includes clean-up of existing residential structures, equipment, automotive parts, and materials along the access road, all of which lies adjacent to some bedrock controlled vernal pools of unknown significance and fresh water wetlands and outlet stream of Hales Pond.

- Describe the level and type of threats to resources on and adjacent to the property. Note that preservation projects must anticipate the threat of degradation to the site in the next 20 years.

  The abutting properties to North and South have preexisting waterfront cottages with no anticipated future development. The Town of Fayette acknowledges this increase in residential development, particularly shorefront development, which poses a significant detrimental impact on water quality, plant and wildlife habitat along the protective riparian buffer of the shoreline.

  This 20-acre parcel includes nearly ½ mile of shoreline. Despite recent development pressures to the area, the lake has maintained an acceptable water quality

- Describe the current and proposed buffers on the project site, and the degree to which they protect or support identified resource functions and ecological connectivity to other conservation areas or undeveloped large blocks of habitat. The bedrock controlled vernal pools of unknown significance serve as a current buffer to the undesired impact of the debris the remains on the property (see photos) a riparian corridor still exists in spite of debris that exists 1000 feet from the shoreline of Hales Pond and the confluence of Hales Brook.
- Describe the current use of the property (e.g., any structures or improvements) and the land use activities in the area surrounding the property (e.g., residential, forest management, commercial, agriculture, etc.). Additional funding is needed to complete the preservation effort, including site clean-up to facilitate the successful relocation of the sellers. Funding from the MNRCP will help assure the successful completion of the acquisition effort by MDIFW. Funding will support the clean-up of the property and thereby enhance protection of the adjacent vernal pool and related upland habitat areas.

- Describe the proposed use of the property and any proposed management (e.g., describe in detail any proposal for "forestry management" or "wildlife management" and how this management will affect existing and proposed aquatic or other natural resources).

  Project entails the acquisition of 20 acres of wooded lands and bordering wetlands on Hales Pond and outlet stream by the Maine Department of Inland Fisheries and Wildlife to be held for hand carry water access and conservation of wildlife habitat, open space and land for outdoor recreation.

- Describe the specific techniques and methods that will be used to conserve the habitat.

  The project includes clean-up of existing residential structures, equipment, automotive parts, and materials along the access road, all of which lies adjacent to some bedrock controlled vernal pools of unknown significance. The land will be purchased with state and federal funds; including an LMF Water Access Fund contribution (The LMF Board has approved $80,000 for land acquisition and a 5% access improvement grant). The property will be managed by the Town under a management agreement with IF&W to maintain public access and use of the property for water access, recreational and conservation purposes.
- Describe the level of support and involvement of other relevant agencies, organizations, and local community.

  The lead partner for this proposal is the Town of Fayette working in partnership with the Maine Department of Inland Fisheries and Wildlife and the Kennebec Land Trust. Contact is Mark Robinson, Town Manager, 2589 Main Street, Fayette, ME 04349, Tel. 207-685-4373. Email at [illegible]

Landscape Context:

- Describe the proximity / benefits to statewide focus areas for land conservation (Beginning with Habitat Focus Area) or habitat preservation identified by a state agency, or other regional or municipal plans. The field testimony from both the fisheries and wildlife biologists of MDIFW emphasize the regional importance of this site to the Department. Fayette can be characterized as a lakes community, a rural and seasonal community with over a dozen ponds and lakes including, Echo Lake, Parker Pond, David

Pond, Tilton Pond, Lovejoy, Hales Pond and six other ponds within its 29 square miles. However, only a small percentage of these areas are protected from development pressures and available for public enjoyment.

- Describe the adjacency / proximity to other public or private protected properties and how this project will enhance overall conservation (e.g., refuges, management areas, preservation, parks, conservation organization properties, mitigation banks, or other protected restoration sites). There are no known contiguous sites or parks abutting the Manter parcel.

- Describe the proximity / benefits to important species in Maine such as habitat for wetland Rare, Threatened, Endangered Species, or Species of Special Concern; Habitat for Species of Greatest Conservation Need; S1 & S2 Wetland Natural Communities; and/or within or buffering brook trout, Atlantic sea-run salmon or other diadromous fish runs and habitats. There are no known documented Rare, Threatened, Endangered Plant Species, or Plant Species of Special Concern. However there are Rare, Threatened, Endangered Animal Species: Bald Eagle (*Haliaeetus leucocephalus*) and Scarlet Bluet (*Enallagma pictum*)*Please see the attached MNAP list of highlighted species that have been observed by the owners at the property.*

- Describe any potential adverse impacts to any protected natural resource, such as upstream or downstream aquatic resources, ecologically sensitive areas and wildlife habitat and discuss any potential effect the mitigation project may have on any species listed as either federal or state threatened or endangered that may be found in the vicinity of the project. These impacts should be avoided to the greatest degree possible. The greatest negative impact to the project area will be in the form of equipment operation to remove debris and minor soil removal that may be necessary due to contamination from automobile fluids that have leaked from vehicles left on the property.

Project Readiness

- **New requirement:** Provide documentation of landowner willingness to participate in the proposed project, including conveying a conservation easement or fee title to the property (for projects not on existing conservation lands). Include landowner's name and address.

  David E. Manter and Roberta J. Manter, Owner 120 Young Road, Fayette, Maine 04349 Phone: 207-685-9846. The Manter's have signed a letter of support acknowledging the intent to sign a purchase and sale agreement to sell their property to the State of Maine contingent upon the $35,000 approval. Prior to MDIFW's closing to acquire the Manter Parcel, the collection of farm implements and other items will need to be removed from the property and a "clean" environmental hazard assessment will need to be obtained for the entire property.

- List permits needed (federal, state, and local) and which, if any, have already been secured. Describe the extent of legal access to the property. There are no permits required for the debris removal project. Vehicle access is from the Richmond Mill Road a paved road northerly along the Young Road, a gravel public easement.

- Outline tasks / steps to be taken in completing the project, including time schedule. Please also include key tasks / steps that have already been completed and the date of

completion. The services of the Kennebec Soil and Conservation service have been procured to conduct the post operation environmental assessment. At its Annual Town Meeting the towns people of the Town of Fayette established the Hales Pond Preserve fund and delegated its administration to the Board of Selectmen as it deems fit.

- Specify tangible outputs (work products and deliverables), including time schedule. Please also include key outputs that have already been completed and the date of completion. Complete removal of all debris will take 3 weeks with 5 person crew. Debris removal will commence following receipt of a signed purchase and sale agreement.

- Outline the anticipated short-term monitoring plan for restoration, enhancement and creation projects. A five-year monitoring term is typical, with a potentially longer period for resources with slow development rates. Please note that if the project is approved for funding, a detailed monitoring plan with success criteria will need to be submitted prior to receipt of funding. Preservation projects do not require short-term monitoring plans. This is a preservation project.

- **New requirement**: A long-term stewardship and monitoring plan must be developed for all projects prior to the award of MNRCP funds. Describe the anticipated process for developing the long-term stewardship plan for the project and provide information on who will maintain the property in perpetuity, general easement terms (if applicable), and who will conduct any monitoring. Describe anticipated costs in long-term maintenance of the project site and long-term monitoring of any easement conditions. Provide a detailed description of the financing mechanism (stewardship endowment, trust or other method) for funding the long-term stewardship of the project site.

  The Town of Fayette and Kennebec Land Trust have been working cooperatively with MDIFW to acquire the Manter parcel. This purchase will serve as a carry-in boating and fishing access site. A small parking area to accommodate 4-6 vehicles will be constructed along with 1-2 picnic tables, and a walking trail will permeate throughout the 20-acre parcel.

Format for MNRCP Project Budget

Identify costs as actual incurred or estimated. Describe the basis for any estimated costs.

Acquisition and Associated Costs	
Value of fee lands or conservation easements to be purchased*	-
Appraisal costs	-
Title, legal and closing costs	-
Land survey	-
Environmental hazard survey	-
Baseline documentation *(easement only)*	-
Long-term management/stewardship planning	-
Natural resource survey	-

PROVIDED BY MAINE

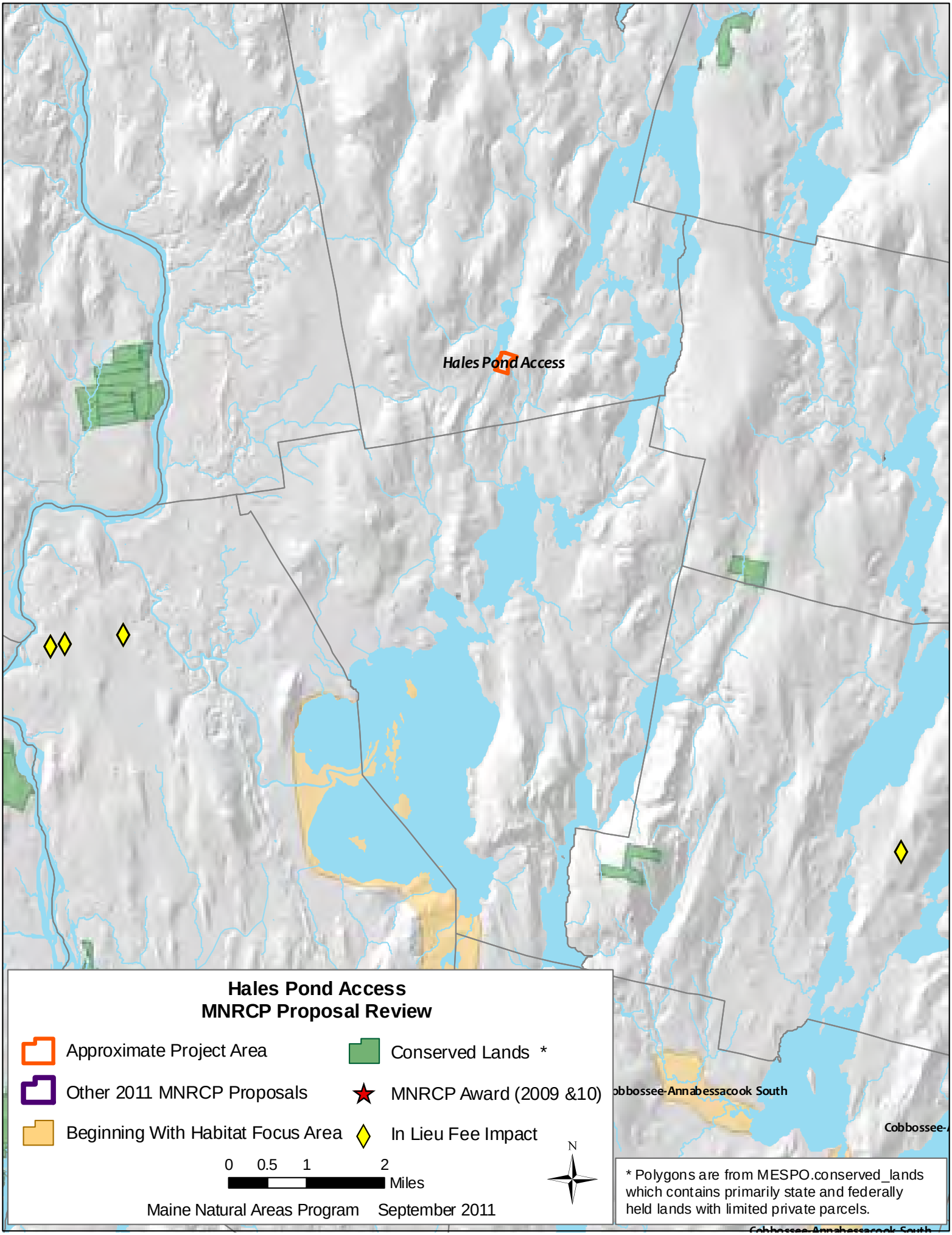
Restoration, Enhancement, or Creation Costs	
Restoration planning Gravel, Loam, Seed , Hay	$1,000
Personnel 5 x 40hrs x 3 weeks x $18/hour	$10,800
Site Work	$1,000
Contractual-	$7,400
Equipment- Excavator $4,500 per week for 3 weeks	$13,500
Supplies	$1,300
Other	

Monitoring and Long-Term Management Costs	
Short-term monitoring costs†	n/a
Long-term management/stewardship costs‡	Provided by Town Forces
Total Project Cost:	$35,000
Total Maine Natural Resource Conservation Program (MNRCP) Request:	$35,000

* Land Acquisition or Conservation Easement Costs must based on an Appraisal completed within the past two years, in accordance with the Uniform Standards of Professional Appraisal Practice (USPAP). A copy of the final appraisal must be provided and consist of a complete appraisal and a self contained appraisal report.

† For restoration, enhancement or creation, a five-year monitoring term is typical, with a potentially longer period for resources with slow development rates. Preservation projects do not require short-term monitoring.

‡ Funded projects are expected to protect priority resources "in perpetuity," which requires an entity with the resources and expertise to ensure long-term management and stewardship. A financing mechanism (e.g., endowment, trust, or long-term financing plan) is required to ensure adequate funding is available over time, though all the funds needed for establishment do not need to be included in MNRCP request.


Hales Pond Access
Hales Pond Access
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
Beginning With Habitat Focus Area
Conserved Lands *
MNRCP Award (2009 &10)
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Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.
obbossee-Annabessacook South
Cobbossee-

MNRCP Project Description
Head of Maquoit Restoration Project

Executive Summary:

- *Project Sponsor*: Steve Walker, Maine Dept. of Inland Fisheries and Wildlife, 284 State Street, Augusta, ME 04333-0041, 207-287-5254, steve.walker@maine.gov
- *Project Location*: Town of Brunswick, Cumberland County, Rossmore Road (Tax Map 25 Lot 20)
- *Summary Project Description*: This project consists of acquiring a 35-acre parcel on Rossmore Road in Brunswick that includes, in its entirety, a 150-foot earthen dam originally constructed in the 1940's. We intend to breach the dam thereby restoring a stream corridor with bottom width of 30 to 40 feet at the breach to re-establish a channel bed and broad emergent vegetation shelves upstream of the existing dam site. Side slopes will be graded at a 3:1 slope to meet natural topography. Approximately 10 acres of impoundment would be restored to natural wetland conditions and downstream tidal wetlands will be enhanced through water quality improvement. Additionally, more than 6,000 feet of stream habitat will be reconnected to the tidal waters of Maquoit Bay.
- *Estimated Project Cost*:
  - Total Project Cost: $550,000
  - MNRCP Fund Request: $425,000
- *Resource Priority of Project Site*:
  - Within or adjacent to a Beginning with Habitat Focus Area: The project area is entirely within the Maquoit and Middle Bay Focus Area of Statewide Ecological Significance.
  - Within or adjacent to existing public or private conservation lands: The project abuts a private conservation easement, and is across Rossmore Road from MDIF&W protected land.
  - Within or adjacent to other natural resource priority areas: The project lies within the Brunswick-Topsham Land Trust's Head of Maquoit Forest Block focus area, and within a priority unfragmented forest block identified in the town's Rural Brunswick Smart Growth strategy.
  - Contains natural resources of significant value and/or rarity: The project area includes mapped Significant Shorebird Habitat, Significant Tidal Wadingbird and Waterfowl Habitat, and mapped habitat for saltmarsh sparrow (a State Special Concern species).

- Type of Conservation (*complete the following table*):

Natural Resource Type		Restored acres	Enhanced acres	Preserved acres	Created acres	Total acres
Freshwater Resources	Freshwater wetland, emergent (PEM)	6.5				
	Freshwater wetland, forested (PFO)	.5		2.5		
	Freshwater wetland, shrub-scrub (PSS)	3				
	River, stream or brook	.20	.75			
	Significant wildlife habitat, vernal pool (*indicate number of pools if necessary*)					
	Significant wildlife habitat, vernal pool critical terrestrial habitat					
	Significant wildlife habitat, Inland Waterfowl and Wading Bird Habitat					
Coastal Resources	Coastal wetland, Marine subtidal (M1)					
	Coastal wetland, Marine intertidal (M2)					
	Coastal wetland, Estuarine subtidal (E1)					
	Coastal wetland, Estuarine intertidal (E2)		2.5			
	Significant wildlife habitat, Tidal Waterfowl and Wading Bird Habitat			2.5		
	Significant wildlife habitat, Shorebird Feeding & Staging Areas					
	Upland buffer (non wetland habitat)			18		
	Project Total	**10.2**	**3.25**	**22**		**35.45**
Please note: numbers are based on best estimate, no formal wetland delineations completed to date.						

Potential to Meet MNRCP Goals:

- Describe the original habitat type and the current habitat conditions on the property with a determination of protected natural resources based on either aerial photo interpretation or, if available and applicable, a wetland delineation conducted in accordance with the Corps of Engineers 1987 Delineation Manual or subsequent USACE-approved method: Prior to impoundment in the 1940's, this wetland was likely consisted of freshwater emergent, scrub-shrub, and forested wetland conditions listed in order of most dominant to least dominant. The current land owner conveyed anecdotal information that on flood tides, prior to the dam, the area would be inundated. Currently, the system, above the dam, is primarily palustrine open water with aquatic bed and emergent communities limited to upstream margins.

- Assess the functional benefits the project will provide using the following list as a guide:

Freshwater & Coastal Functions	
Education/scientific value	Retention/storage of floodwater/surface water
Floodflow alterations	Shoreline/sediment stabilization
Fish & shellfish habitat	Retention of sediment/toxicants
Nutrient removal/transformation	Uniqueness/Heritage
Production export	Visual quality/asesthetics
Recreation	Wildlife habitat
Groundwater recharge/discharge (*Freshwater*)	

- Describe the proposed future condition of the property and the "functional lift" the project proposes to provide (e.g., proposed change in habitat quality, contribution to functioning biological systems, water quality, level of degradation, etc.):

By breaching the dam and restoring more natural wetland conditions, the project will result in the following 'functional benefits':

1) *Education/scientific* value will increase as the property will be publicly accessible, located ¾ of a mile from Brunswick High School, and provide an opportunity to view a gradient of wetland community types from salt-hay salt marsh to brackish marsh, freshwater emergent marsh and continuing in hydrologic regime to forested wetland.
2) *Floodflow alterations*: The project will restore naturally occurring floodplain wetlands associated with the unnamed stream that drains to Maquoit Bay.
3) *Fish & shellfish habitat*: The restoration will restore habitat for diadromous fish (eels and smelt primarily).
4) *Nutrient removal/transformation*: The restoration of emergent floodplains will allow for greater attenuation of excess nutrients flowing into the system from upstream upland areas.
5) *Production export*: Breaching of the existing dam will allow for the downstream export of organic materials thereby more effectively supplying nutrients to saltmarsh and intertidal mudflat communities of Maquoit Bay.
6) *Recreation*: The site will be publicly accessible and restoration will likely enhance local fisheries.
7) *Groundwater recharge/discharge*: Likely little change given location in watershed.
8) *Retention/storage of floodwater/surface water*: The project will restore natural vegetated floodplains, but net gain in flood storage capacity is likely insignificant given current status as impoundment.
9) *Shoreline/sediment stabilization*: Restoration will result in increased floodplain vegetation densities capable of slowing floodflow and trapping suspended particles.
10) *Retention of sediment/toxicants*: Restoration will result in increased floodplain vegetation densities capable of slowing floodflow and trapping suspended particles.
11) *Uniqueness/Heritage*: Restoration will enhance habitat for a species of special concern and will replace common artificial wetland types to enhance rare and declining wetland types.
12) *Visual quality/asesthetics*: There is some local concern that visual quality will be diminished with the loss of a pond.
13) *Wildlife habitat*: The proposed restoration will significantly improve habitat for several Species of Greatest Conservation Need as identified in the Maine Wildlife Action Plan.

- Describe the level and type of threats to resources on and adjacent to the property. Note that preservation projects must anticipate the threat of degradation to the site in the next 20 years: The property is currently on the real estate market and has been investigated for subdivision potential several times. Sea level rise will threaten existing salt marsh

communities downstream of the dam. A primary consideration for breaching the dam is to enable salt marsh communities to migrate upstream with rising saline conditions. In 2002 a developer submitted a long-term master plan for the large forest block that form the headwaters to this system. Lands immediately adjacent to the project were, at that time, slated to be open space in the master plan.

- Describe the current and proposed buffers on the project site, and the degree to which they protect or support identified resource functions and ecological connectivity to other conservation areas or undeveloped large blocks of habitat: The project site is 35 acres in size, of which approximately 20 forested acres will buffer the proposed emergent and scrub-shrub wetlands in the east, west, and north. Existing salt marshes on site connect with conserved land to the east and south. Given these buffers as well as what is known of initial plans for development to the north of the project site, and local development regulations that incentivize habitat connectivity through the Rural Brunswick Smart Growth approach, the restoration and preservation efforts will remain well connected.
- Describe the current use of the property (e.g., any structures or improvements) and the land use activities in the area surrounding the property (e.g., residential, forest management, commercial, agriculture, etc.): The surrounding land use is primarily rural residential in character and no structures other than the dam are on-site. Limited commercial forestry on adjacent undeveloped parcels.
- Describe the proposed use of the property and any proposed management (e.g., describe in detail any proposal for "forestry management" or "wildlife management" and how this management will affect existing and proposed aquatic or other natural resources): The Department has no plans for active forest management on this property. The site was selectively cut approximately 8 years ago. MDIF&W will be allowing public access and likely including a boardwalk crossing across the proposed restored outlet stream.
- Describe the specific techniques and methods that will be used to conserve the habitat: The property will be owned in fee by the Maine Dept. of Inland Fisheries and Wildlife. Hydrology to support the intended restoration is evident given the existing pond, contributing forested groundwater seepage wetlands, elevation proximate to existing salt marsh, and historic aerial photographs.
- Describe the level of support and involvement of other relevant agencies, organizations, and local community: Casco Bay Estuary Partnership, the USFWS Gulf of Maine program, and Brunswick-Topsham Land Trust are all active project partners.

Landscape Context:

- Describe the proximity / benefits to statewide focus areas for land conservation (Beginning with Habitat Focus Area) or habitat preservation identified by a state agency, or other regional or municipal plans: The project area lies entirely within the Maquoit and Middle Bay Focus Area of Statewide Ecological Significance; The project also lies within the Brunswick-Topsham Land Trust's Head of Maquoit Forest Block focus area: and the project includes portions of a priority unfragmented forest block as identified in the town's Rural Brunswick Smart Growth strategy.
- Describe the adjacency / proximity to other public or private protected properties and how this project will enhance overall conservation (e.g., refuges, management areas, preservation, parks, conservation organization properties, mitigation banks, or other protected restoration sites): MDIF&W currently holds an easement along tidal portions of the outlet stream below Rossmore Road. This proposed project will advance Department

efforts to protect the ecological integrity of Maquoit Bay. MDIF&W has been involved in the protection of approximately 600 acres on the bay to date.

- Describe the proximity / benefits to important species in Maine such as habitat for wetland Rare, Threatened, Endangered Species, or Species of Special Concern; Habitat for Species of Greatest Conservation Need; S1 & S2 Wetland Natural Communities; and/or within or buffering brook trout, Atlantic sea-run salmon or other diadromous fish runs and habitats: Saltmarsh sparrows are known to occur in the tidal marsh communities immediately downstream of this project. A primary goal of the restoration effort is to enable future marsh migration with sea level rise so that Spartina dominated marsh communities persist in the area. Additionally, American eel and rainbow smelt are known to utilize this drainage. Their upstream passage is entirely blocked by the existing dam.
- Describe any potential adverse impacts to any protected natural resource, such as upstream or downstream aquatic resources, ecologically sensitive areas and wildlife habitat and discuss any potential effect the mitigation project may have on any species listed as either federal or state threatened or endangered that may be found in the vicinity of the project. These impacts should be avoided to the greatest degree possible: Completion of the project will result in the loss of shallow open water habitat upstream of the existing dam. This loss will impact warm water fish populations and commonly occurring pond species. Artificial pond habitat conditions are relatively common throughout the state. Completion of this project will benefit declining species by restoring coastal natural communities that are less common and able to support a greater diversity of Maine Species of Greatest Conservation Need.

Project Readiness

- **New requirement:** Provide documentation of landowner willingness to participate in the proposed project, including conveying a conservation easement or fee title to the property (for projects not on existing conservation lands). Include landowner's name and address: The current landowner, Michael Fiori, has provided a letter (attached) stating his willingness to participate in the proposed project.
- List permits needed (federal, state, and local) and which, if any, have already been secured. Describe the extent of legal access to the property: Completion of this restoration project will require a Maine Department of Environmental Protection Permit-by-Rule for habitat creation or enhancement and water quality improvement activities. The project will also require US Army Corps notification. To date, MDIF&W has not started the permitting process.
- Outline tasks / steps to be taken in completing the project, including time schedule. Please also include key tasks / steps that have already been completed and the date of completion: 1) Feasibility study and initial construction estimate (*June/July 2011*); 1) appraisal (*October/November 2011*); 2) execute purchase and sale agreement (*January 2012*); 3) environmental assessment (*February 2012*); 4) property closing (*February/March 2012*); 5) final breach design and preparation of contractor bid documents (*February/March 2012*); 6) permit preparation and submission (*March 2012*); 7) conduct wetland community baseline assessment (*June 2012*); 8) on-site restoration work (*July/August 2012*); 9) complete initial monitoring event (*June 2013*).

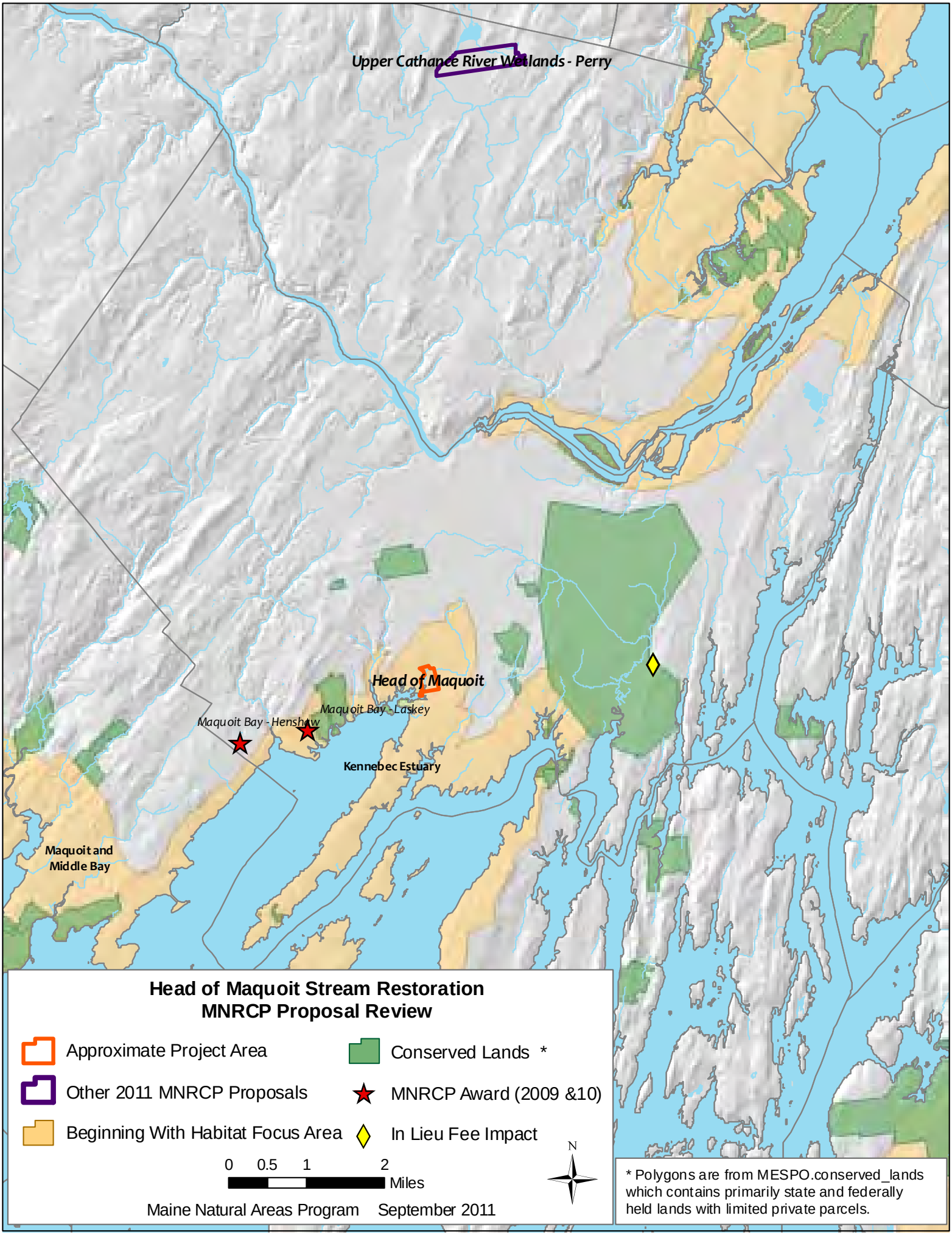
- Specify tangible outputs (work products and deliverables), including time schedule. Please also include key outputs that have already been completed and the date of completion: Assessment of baseline wetland characteristics including existing conditions photographs from monitoring points (June 2012); construction as-built report (September 2012).
- Outline the anticipated short-term monitoring plan for restoration, enhancement and creation projects. A five-year monitoring term is typical, with a potentially longer period for resources with slow development rates. Please note that if the project is approved for funding, a detailed monitoring plan with success criteria will need to be submitted prior to receipt of funding. Preservation projects do not require short-term monitoring plans: 1) monitoring points will be identified in June 2012 and stakes will be installed for ease of identification throughout the long-term monitoring cycle; 2) existing conditions photographs will be taken at each monitoring point and the vegetation community will be documented using plot samples to record species presence and stem densities. Additionally, and wildlife observations will be noted; 3) follow-up annual monitoring events will occur each year in June to record wetland community establishment following restoration work. Follow-up visits will also monitor for the presence of invasive species and initiate plans for invasive species removal.
- **New requirement**: A long-term stewardship and monitoring plan must be developed for all projects prior to the award of MNRCP funds. Describe the anticipated process for developing the long-term stewardship plan for the project and provide information on who will maintain the property in perpetuity, general easement terms (if applicable), and who will conduct any monitoring. Describe anticipated costs in long-term maintenance of the project site and long-term monitoring of any easement conditions. Provide a detailed description of the financing mechanism (stewardship endowment, trust or other method) for funding the long-term stewardship of the project site: The Maine Department of Inland Fisheries and Wildlife will be partnering with the Brunswick-Topsham Land Trust (BTLT) for assistance in coordinating long-term monitoring efforts for this project. MDIF&W will work with MNRCP in developing the final approach to site monitoring and will oversee monitoring activities carried out by BTLT. Prior to submission of monitoring reports to MNRCP, MDIF&W will review on-site findings and address any noted problems including presence of invasive species, erosion, or inappropriate use of the property. MDIF&W will work with BTLT to establish a stewardship endowment for the property that can adequately cover monitoring expenses.

Format for MNRCP Project Budget

Identify costs as actual incurred or estimated. Describe the basis for any estimated costs.

Acquisition and Associated Costs	
Value of fee lands or conservation easements to be purchased	429,000*
Appraisal costs	2,500
Title, legal and closing costs	1,000
Land survey	3,800
Environmental hazard survey	500
Baseline documentation *(easement only)*	
Long-term management/stewardship planning	(MDIF&W)
Natural resource survey	(MDIF&W)
Restoration, Enhancement, or Creation Costs	
Restoration planning	7,000
Personnel	(MDIF&W)
Site Work	125,000
Contractual	
Equipment	
Supplies	
Other	
Monitoring and Long-Term Management Costs	
Short-term monitoring costs	(MDIF&W)
Long-term management/stewardship costs	5,400
Total Project Cost:	574,200
Total Maine Natural Resource Conservation Program (MNRCP) Request:	425,000
Other Funding Sources and Amounts: USFWS, CBEP, private donations	150,000

* Appraisal has not yet been completed. Value based on current asking price as listed with Morton Realty.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Head of Maquoit
Maquoit Bay - Laskey
Maquoit Bay - Henshaw
Kennebec Estuary
Maquoit and Middle Bay
Head of Maquoit Stream Restoration
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
Beginning With Habitat Focus Area
Conserved Lands *
MNRCP Award (2009 &10)
In Lieu Fee Impact
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Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

Application for Maine Natural Resources Conservation Program

Jam Black Brook Culvert Replacement

Searsmont, Maine

Applicant: Trout Unlimited
Dan Daly, Georges River Chapter
23 Limerock Street
Camden, ME 04843
207 236-8843
maineart@roadrunner.com

Alternative Contact:
Jeff Reardon, Maine Brook Trout Project Director
8 Union Street
Hallowell, ME 04347
207 6715 9200
jreardon@tu.org

Partners: Town of Searsmont; US Fish and Wildlife Service: Natural Resources Conservation Service; Maine Department of Inland Fisheries and Wildlife; Robbins Lumber; George's River Land Trust; Eastern Brook Trout Joint Venture; Davis Foundation; Maine Outdoor Heritage Fund.

Project Location:
Searsmont, Waldo County, Maine. The site is the culvert where the Magog Road crosses Jam Black Brook, approximately ½ mile upstream of the confluence of Jam Black Brook with the St. George River.

Summary Project Description:

Jam Black Brook is a tributary to the St. George River in Searsmont, Maine, that provides spawning, nursery, and thermal refuge habitat for eastern brook trout and Atlantic salmon. A pair of slip-lined, 10-foot-wide hung culverts at the Magog Road crossing approximately 2,000 feet upstream of the confluence of Jam Black Brook and the St. George River obstruct fish passage into 9.8 miles of Jam Black Brook and its tributaries. The road right of way is controlled by the town of Searsmont, and adjacent lands are owned by Robbins Lumber Company.

The Georges River Chapter of Trout Unlimited (TU), the town of Searsmont, and state and federal agency partners propose to replace the hung culverts with a properly-sized and installed bottomless aluminum arch culvert to restore year-round passage for brook trout and other species.

The hanging culverts were identified as a potential fish passage obstruction by a TU volunteer in 2006, and lack of passage was subsequently confirmed through electrofishing surveys by the Maine Department of Inland Fisheries and Wildlife (MDIFW, Bobby Van Riper). Since 2007, TU has been working with the town, MDIFW, the Maine Department of Marine Resources (MDMR), and the US Fish and Wildlife Service (US FWS) and the Natural Resources Conservation Service (NRCS) to identify, fund, and implement an appropriate road crossing at the site that will allow for year round migration of brook trout, Atlantic salmon and other aquatic life.

Jam Black Brook provides important habitat for eastern brook trout, Atlantic salmon, and other aquatic life. In particular, Jam Black Brook provides critical thermal refuge and spawning and rearing habitat for brook trout and salmon. Jam Black Brook is the only tributary to the middle section of the St. George River to support a wild brook trout population, and the reach of the St. George River proximal to the mouth of Jam Black Brook is the only mainstem river reach in which MDIFW surveys have found wild brook trout. Lack of passage at the Magog Road culvert on Jam Black Brook restricts upstream migrants to the lowermost 2,000 feet of Jam Black Brook, and blocks access to nearly 10 miles of Jam Black Brook and its tributaries above the road crossing. The culvert also backwaters in high flows (see inlet photo), which disrupts sediment transport through the crossing site and, in at least one recent high flow event, resulted in accumulation of a significant amount of large woody debris above the culvert.

The goals of the project are: (1) To remove an obstruction to upstream fish passage for brook trout, Atlantic salmon and other resident and migratory fish. (2) To restore access to 9.8 miles of stream habitat upstream of the obstruction. (3) To restore natural sediment and woody debris transport through the crossing site. (4) To improve flood capacity at the Magog Road crossing, reducing the risk of debris jams or overtopping the road. (5) To provide a demonstration site in mid-coast Maine for an appropriate stream crossing developed in cooperation with the municipality.

Estimated Project Cost:

- Total Project Cost: $215,700
- MNRCP Fund Request: $69,700

Resource Priority and Landscape Context of Project Site

The St. George River is a uniquely valuable resource in midcoast Maine. The St. George supports one of the largest commercially harvested river herring runs in the state and has been designated as Critical Habitat for federally endangered Atlantic salmon. It is nearly unique among rivers in midcoast Maine for having no mainstem barrier to free passage of native fish. In 2002, Trout Unlimited worked with state and federal agencies and other partners to remove the Sennebec Dam—the only remaining fish passage obstruction on the St. George River mainstem. The St. George River watershed is also noted for a high density of significant wetlands, and is one of only a few sites in Maine to support every native species of freshwater mussel, including three species listed as threatened by the state of Maine.

Two sections of the St. George River watershed adjacent to the project site have been identified as Beginning With Habitat Focus Areas. Upstream of the project site along the St. George River and approximately 1.5 miles to the west is the Appleton Bog/Pettingill Swamp/Witcher Swamp Focus Area. Downstream of the project area and approximately ½ mile to the south of the project site is the St. George River and Ponds Focus Area.

The St. George watershed has been the focus of land conservation efforts by the Georges River Land Trust (GRLT). GRLT has more than 50 properties totaling over 2,600 acres under permanent fee or easement protection. Three fee preserves and four conservation easements are within a 5 mile radius of the project site, including the 124 acre Appleton Preserve approximately one half mile to the south. (See map below.) In addition, the MDIFW maintains multiple public access sites to the river, and owns and manages the 600 acre Ruffingham Meadow Wildlife Management area approximately 3 miles north of the project site.

A recent statewide stream survey effort identified Jam Black Brook as the only direct tributary to the mainstem St. George River to support an intact population of brook trout (Merry Gallagher, MDIFW, personal communication.) Jam Black Brook has been identified as a priority sub-watershed for protection and enhancement of the existing brook trout population. Jam Black provides important spawning, rearing and adult habitat for brook trout. Most importantly, it provides a critical thermal refuge within the St. George River watershed, much of which becomes too warm to support brook trout or Atlantic salmon during periods of high temperature and low flow. Restoration of passage at this site will address regional and state Habitat Objectives under of the Eastern Brook Trout Joint Venture to strengthen brook trout populations, re-establish habitat connectivity and identify and restore access to critical spawning, nursery, thermal, and winter refuge areas.

The project site is located within Designated Critical Habitat for Atlantic salmon (NOAA 2009). The St. George River supports three species of state-threatened freshwater mussels—yellow lampmussel, tidewater mucket, and brook floater. Although Jam Black Brook has not been surveyed by Maine DIFW, it provides suitable habitat for yellow lampmussel and particularly for brook floater. Brook floater (upstream and downstream) and yellow lampmussel (downstream only) have been identified at survey sites on the St. George River proximal to the mouth of Jam Black Brook. The project would improve habitat for all freshwater mussel species by improving connectivity and increasing populations of migratory host fish species.

Type of Conservation

Because this is a fish passage restoration project, the table included in the RFP is not applicable. The project that will restore access to 9.8 stream miles of high value stream habitat. Assuming a width of 25 feet (calculated bankful width at the project site), the project would enhance approximately 30 acres of freshwater river stream or brook habitat.

Potential to Meet MNRCP Goals

Jam Black Brook was originally and remains a freshwater stream. It provides very high value fisheries habitat, as evidenced by the presence of wild brook trout in stream reaches that are currently accessible. The only identified source of degradation is lack of fish passage at the project site. The surrounding watershed supports a mix of forestry, agricultural and residential land use. The majority of the watershed is forested, and a significant portion is owned by Robbins Lumber and managed for forestry. The stream provides fish and other aquatic life habitat, including habitat for Atlantic salmon and brook trout; associated recreation (fishing); alters flood flows; provides groundwater recharge; and is unique in the area in supporting wild brook trout.

The proposed project will increase the value of this habitat by providing access to it from the mainstem St. George River. This will lead to increased use of high value upstream habitat, and may allow for expansion of the wild brook trout population to adjacent sections of the St. George River. There will likely be limited use by river herring (observed downstream of the project site in June, 2011), as well as increased opportunities for recreational angling. In addition to habit benefits, the replacement structure will more efficiently pass water, sediment, and large woody debris than the existing culverts, restoring more natural water and sediment transport, and reducing the frequency and cost of periodic maintenance work at the road crossing by the town of Searsmont.

The project has broad support in the local community and the from state and federal agencies, with active participation by a national conservation organization; two local conservation organizations; the town of Searsmont; two federal agencies; a state agency; and several private funders. (See list of partners.)

Project Readiness

TU and other partners have been working on the project since 2006. (See Attachment 4.) Design plans are complete; the project partners have obtained landowner permission from the town of Searsmont, which controls the road right-of-way and from Robbins Lumber which owns the surrounding property. (See Attachments 5 and 6.)

Prior to construction, the project will require a permit from the Maine Department of Environmental Protection under the Natural Resources Protection Act (NRPA). The NRPA allows for permit by rule for fisheries restoration projects sponsored by a state agency, and the MDIFW has agreed to be the project sponsor. The project will also require a permit from the US Army Corps of Engineers. Culvert replacement projects in Maine are Tier 1 projects if they meet fish passage and other criteria, and the project has been designed to meet those criteria. Finally, the project will require consultation under the federal Endangered Species Act. The US FWS (Scott Craig) has an existing Section 10 permit that covers restoration activities, and as a project partner have agreed to cover this project under that authority. Permit applications are anticipated in October, 2011.

The Me DIFW, NRCS and US FWS will work with volunteers from Georges River TU on a detailed monitoring plan, including a minimum of two years of post-construction data, including:

- Pre- and post-construction photopoints upstream and downstream of the project.
- Pre- and post-construction electrofishing surveys. Pre-construction surveys have already been completed and will be repeated prior to construction; post construction monitoring will occur both upstream and downstream of the project site and will include a minimum of two years of post-project data.

- Pre- and post-construction longitudinal profiles and channel cross sections.
- Pre- and post- temperature dataloggers
- Time lapse camera before/during/after construction

Because this project is limited to replacement of the culvert and is entirely within the road right-of-way, there is no detailed stewardship and monitoring plan. However, the town of Searsmont has agreed to inspect and maintain the structure after construction, and to consult with project partners regarding fish passage needs in the event that the structure requires repair or replacement. In addition, Army Corps permitting requirements will ensure that any replacement structure must either (1) be on the same footprint as the structure we will install, and provide equal fish passage; or (2) demonstrate that the replacement structure will meet fish passage criteria. This is a considerable improvement over the current crossing, which could be replaced in-kind without a culvert. The towns commitment and the Corps' requirements should ensure the long-term maintenance of fish passage at the site.

Budget

- **Acquisition and Associated Costs** Not Applicable

- **Restoration Enhancement or Creation Costs**

	Cost	Basis for Cost
Restoration Planning	$22,000	NRCS engineering; USFWS permitting; TU staff and volunteer time to date;
Personnel	$8,500	Estimated staff time on permitting, bidding, project management
Site Work	$90,000	NRCS estimate of installation costs
Contractual	$110,700	Cost estimate for fabrication of Arch Culvert—see Attachment 7
Equipment		
Supplies	$5,000	Estimated value of donated gravel from Robbins Lumber

- Monitoring and Long-Term Management Costs

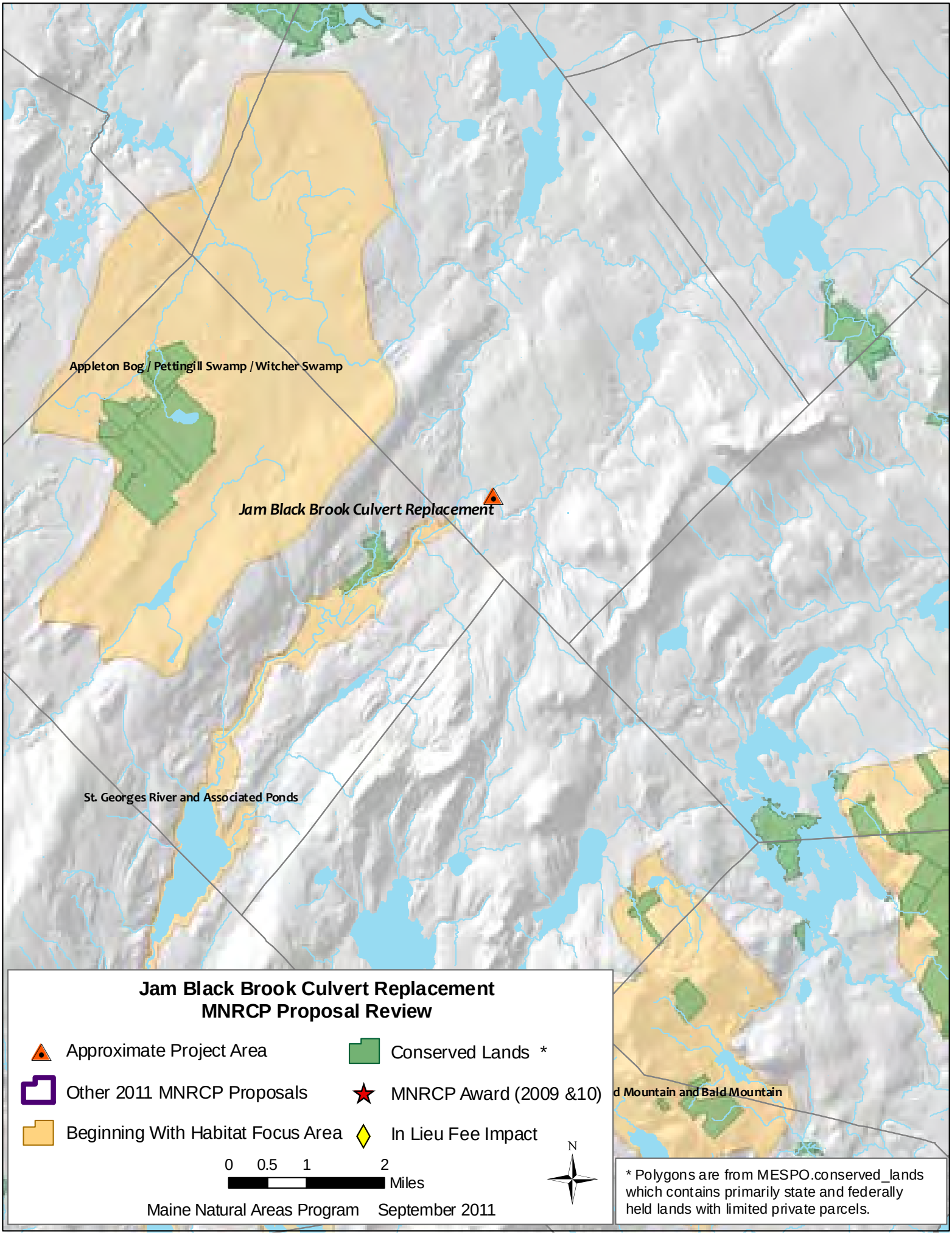
	Cost	Basis for Cost
Short Term Monitoring Costs	$7,000	MDIFW estimate
Long Term Management/Stewardship Costs	NA	See full proposal

Total Project Cost: **$243,200**
Total MNRCP Request: **$69,700**

Other Funding Sources and Amounts: **$173,500**

Partner Name	In kind	Cash	Status

Trout Unlimited	$7,000	$15,000	In hand
Robbins Lumber	$5,000		Gravel Donation
NRCS , US Dept of Agriculture	$10,000 (engineering)	$56,000 (construction)	Engineering completed; construction funds dedicated
US Fish and Wildlife Service, Maine Fisheries Office	$5,000		Committed (ESA permitting, Outreach)
Maine Department of Inland Fisheries and Wildlife	$5,000 (Monitoring)	$9,000 (Construction—Maine Outdoor Heritage Fund Grant)	In hand
Davis Family Foundation		$20,000	In hand
Georges River Land Trust	$1,000		Committed
Eastern Brook Trout Joint Venture		$40,500	Requested
Total	**$33,000**	**$140,500**	


Appleton Bog / Pettingill Swamp / Witcher Swamp
Jam Black Brook Culvert Replacement
St. Georges River and Associated Ponds
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Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

Little Cobbossee
Maine Natural Resource Conservation Program Proposal
Submitted by the Kennebec Land Trust

Executive Summary

1. Project Sponsor

Kennebec Land Trust
Theresa Kerchner, Executive Director; tkerchner@tklt.org
134 Main Street
Winthrop, Maine 04364
207-377-2848; www.tklt.org

Lead contact for this project: Robert Marvinney, KLT Board of Directors;
Member, KLT Lands Committee tworocks@myfairpoint.net,
(w) 207-287-2804, (h) 207-685-3787

2. Project Location

Winthrop, Maine. Winthrop Tax Map 12, Lots 33 and 34. Owned by Mary Oatway, 30 Fairway Lane, Winthrop. The Oatway home is on the southeasternmost corner of Lot 34. The home and an area around it not to exceed 5 acres will be held out from the remainder of Lot 34.

3. Summary Project description

This proposal is for fee acquisition of two lots that comprise the northern shoreline and most of the eastern shoreline of Little Cobbosseecontee Lake ("Little Cobbossee"). Lot 33 is 26 acres. Lot 34 is 68.85 acres, of which about 64 acres will be part of the project. About half the acreage is wetland (a mix of emergent, scrub-shrub, and forested), the remainder being buffering uplands. There is significant development in the area – a golf course, condominiums, and subdivisions, and there is great potential for the uplands to be converted to these uses in the next 20 years, if not protected. Phosphorus loading is a concern on this lake and additional development may adversely impact water quality. Little Cobbossee is situated at the terminous of a small watershed that drains from Shed Pond southward to Cobbosseecontee Lake. Conserved lands in this area include substantial acreage around Shed Pond, the lands now managed by the Small Woodlot Owners Association of Maine (SWOAM), and land under conservation easement at Lakeside Orchards. Winthrop's Comprehensive Plan identifies Little Cobbossee, its surrounding shorelines, and the wetlands on the north side as high priority for wetland protection. The Plan also recognizes the scenic value of the undeveloped shoreline as viewed from nearby Rte. 202.

4. Estimated project cost

Total Project Cost: $268,500
MNRCP Fund Request: $175,000

5. Resource Priority of Project Site:

- Existing public and private conservation lands:

- Adjacent to Lakeside Orchards – this area is under conservation easement that prohibits conversion from agricultural land.
- In close proximity to lands managed by SWOAM. Sustainable forestry will be practiced on these lands, and other development prohibited.
- At the head of the Little Cobbossee watershed is Shed Pond, owned by the Kennebec Land Trust, and adjacent lands owned by the New England Forestry Foundation.
- Collectively with the proposed Little Cobbossee project, these protected lands form a nearly continuous greenway from Shed Pond to Lake Cobbosseecontee.

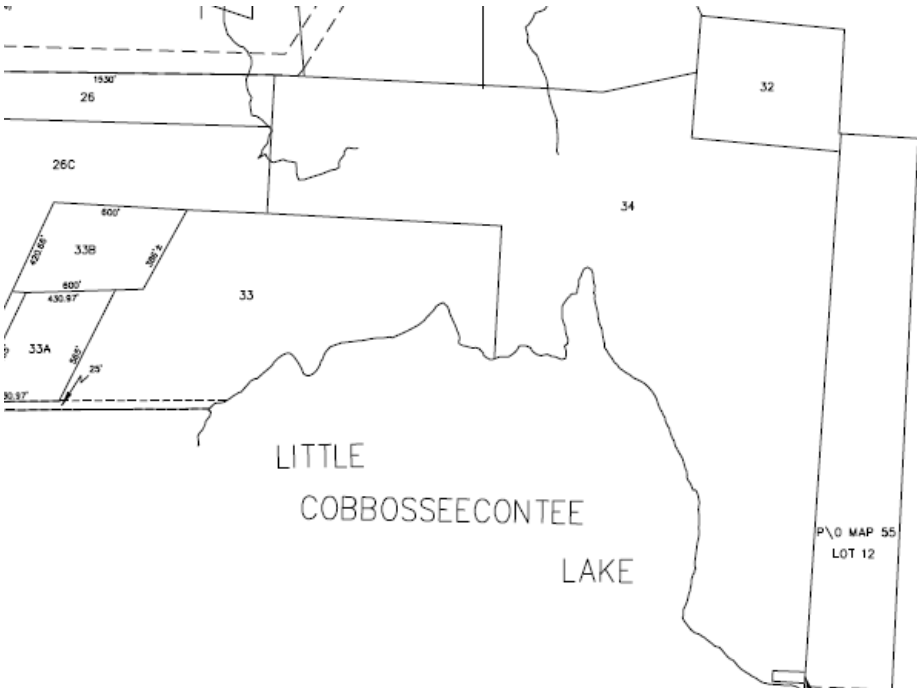
6. Type of Conservation - estimates based on air-photo interpretation

Natural Resource Type		**Restored acres**	**Enhanced acres**	**Preserved acres**	**Created acres**	**Total acres**
Freshwater Resources	Freshwater wetland, emergent (PEM)			11		11
	Freshwater wetland, forested (PFO)			23		23
	Freshwater wetland, shrub-scrub (PSS)					
	River, stream or brook					
	Significant wildlife habitat, vernal pool (*indicate number of pools if necessary*)					
	Significant wildlife habitat, vernal pool critical terrestrial habitat					
	Significant wildlife habitat, Inland Waterfowl and Wading Bird Habitat			10*		10*
Coastal Resources	Coastal wetland, Marine subtidal (M1)					
	Coastal wetland, Marine intertidal (M2)					
	Coastal wetland, Estuarine subtidal (E1)					
	Coastal wetland, Estuarine intertidal (E2)					
	Significant wildlife habitat, Tidal Waterfowl and Wading Bird Habitat					
	Significant wildlife habitat, Shorebird Feeding & Staging Areas					
	Upland buffer (non wetland habitat)			46		46
	Project Total			**90**		**90**

* Waterfowl habitat overlaps emergent wetlands.

Introduction

This project proposes the fee acquisition of two lots in Winthrop, Maine, on Little Cobbossee Lake. Tax Map 12, Lot 33 measures 26 acres and Tax Map 12, Lot 34 measures 68.85 acres. A portion of the southeastern corner of Lot 34, not to exceed 5 acres around the owner's home, will be held out. Preliminary landscape-scale analysis by the Kennebec Land Trust (KLT) identifies the area of the project and the watershed to the north as areas with high conservation values. The Board of Directors of the Kennebec Land Trust voted on September 14, 2011 to accept the property if the project is funded.



Portion of Winthrop Tax Map 12 showing lots 33 and 34. Little Cobbossee Lake is about ½ mile in diameter.

Potential to Meet MNRCP Goals:

Original habitat type and current habitat conditions: Lot 33 (26 acres) is about half wooded uplands and half wetlands. The uplands are mixed deciduous and conifer forest. The wetlands are a mixture of emergent, shrub-scrub, and forested wetlands. The wetlands are identified by the Maine Department of Inland Fisheries and Wildlife as inland waterfowl/wading bird habitat. This habitat has been relatively unaffected by development and human activities since there is no motorized boat access to the lake. The wetlands include a population of a state listed species, *Sagittaria rigida.* This site is recognized as an important non-coastal habitat for this species. The uplands on lot 33 include areas identified by MDIFW as deer wintering areas. Nearby homes have fragmented this area to some degree. Forest management has focused on mature growth stands; the last timber harvest was over thirty years ago.

Lot 34 (~ 64 acres in the project) is about 2/3 uplands and 1/3 wetlands. The wetlands are contiguous with those of lot 33 and are a mixture of emergent, shrub-scrub, and

forested wetlands. This is also mapped MDIFW waterfowl/wading bird habitat. As with lot 33, this habitat has been relatively unaffected by human activities.

The uplands are mostly mixed conifer forest dominated by mature white pine. Much of the uplands are identified as a deer wintering area by the Maine Department of Inland Fisheries and Wildlife (MIFW).

Functional benefits of the project. This is a preservation project, the primary functional benefit being to prevent the degradation of habitat.

Wetlands: According to a wetlands characterization modeling project done by the State Planning Office and the Maine Natural Areas Program (MNAP) in 2005, the wetlands that intersect the project area support five of the six functions and values they analyzed. The modeling used available digital information characterizing slope, proximity to aquifers, National Wetlands Inventory (NWI) maps, and FEMA flood zone maps. The results of this analysis were reviewed by MNAP staff for this proposal and are the following:

- Floodflow alteration: Wetlands contained within a FEMA flood zone and within 100 feet of a surface watercourse or waterbody and with an average slope equal to or less than 3%.
- Sediment retention: Wetlands with an average slope equal to or less than 3% and with emergent vegetation and within 100 feet of a surface watercourse or waterbody.
- Plant and animal habitat: Wetlands containing open water or emergent vegetation which support rare, threatened, and endangered plants and animals, exemplary natural communities, and significant and essential wildlife habitats.
- Finfish habitat: Specific NWI wetland types that support finfish.
- Cultural/educational values: Wetlands within 1/4 mile of a boat ramp, school or library, which make this locality a likely candidate for use as an educational resource.

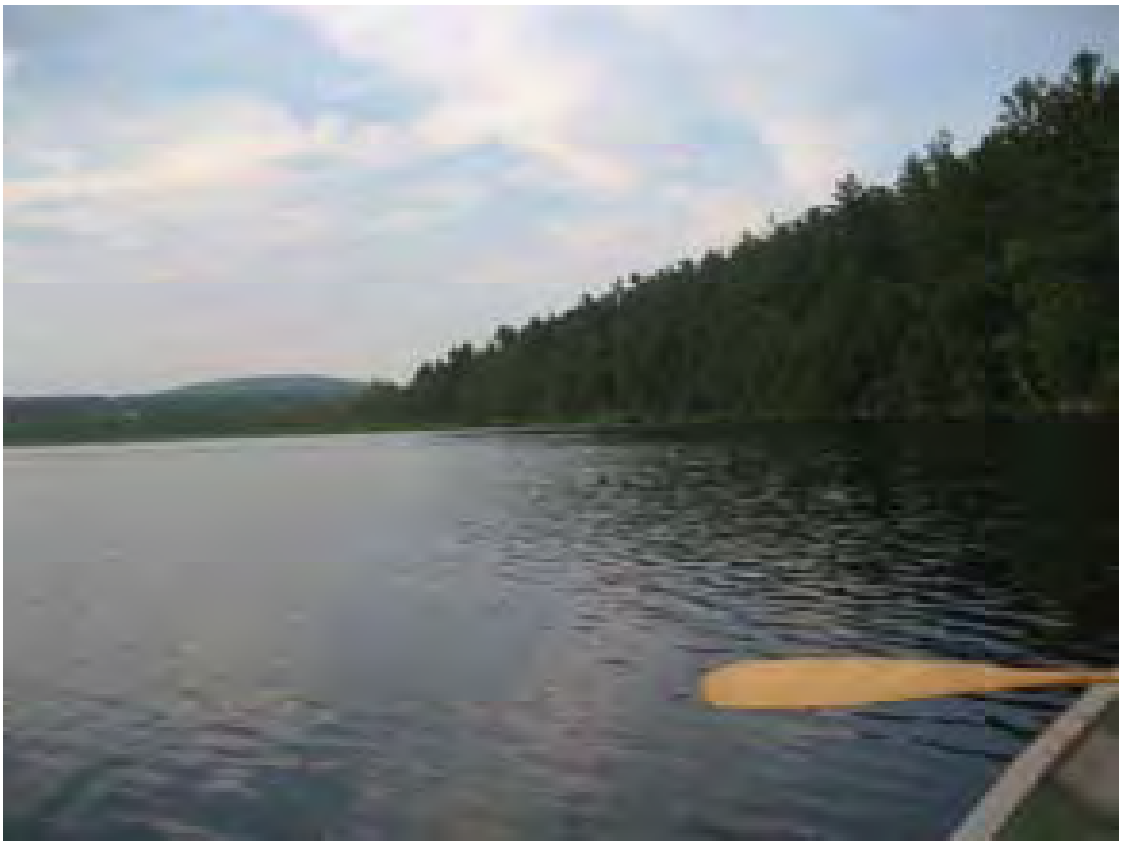
This assessment was done using remote (GIS) resources so did not analyze all thirteen of the potential wetland functions and values recognized by the Army Corps (a field survey is needed to determine the remainder).

Habitat: The project area is identified by the MDIFW as inland waterfowl/wading bird habitat. A significant portion of the uplands of Lot 34 is identified as a deer wintering area.

The property includes a locality for the rare plant *Sagittaria rigida.* See Appendix B for details about this rare plant.

Recreation: Little Cobbossee has high potential for recreation. There is informal carry-in boat access directly off Route 202 where the narrow southern outlet of the lake approaches the road, affording paddlers access to the entire lake. At certain lake levels, there are small sandy beaches on the eastern shore which will afford paddlers convenient resting and wildlife viewing places. This boat access is highlighted in Winthrop's Comprehensive Plan. Large motorized watercraft are impractical on this lake.

Visual quality/aesthetics: The undeveloped Lots 33 and 34, with their mature white pine and mixed hardwoods, provide an unbroken backdrop of forest behind the lake. Paddlers on the lake experience almost unbroken natural landscapes, except for a few year-round residences on the southern shore. Travelers on Route 202 are greeted with a pleasing vista across the lake, particularly in autumn when the sparse maples are red and gold. This view is noted in the Winthrop Comprehensive Plan as a noteworthy scenic vista.



A paddler's view of the northeastern corner of Little Cobbossee. The entire shoreline visible here is part of the project.

Potential threats: Lots 33 and 34 are undeveloped, except for the Oatway residence in the extreme southeastern corner of Lot 34. There are no other improvements. Little Cobbossee is bordered on the east and south by highly developed areas. This includes the Augusta Country Club golf course bordering the properties on the east, developed residential areas to the south, and commercial/retail areas along Route 202 to the south. The Oatway family has

owned these two lots for more than fifty years and have striven to preserve most of the land in its natural form during that time. As an elderly owner, Mrs. Oatway is concerned about the future potential for development on these lots. While Lot 34 provides a 500-foot buffer between the golf course and Little Cobbossee, a 250-foot wide strip along the golf course pitches gently and faces high potential for development, perhaps with condominiums as is found along the northeastern boundary of the golf course. The Maine Department of Environmental Protection reviewed the water quality of Little Cobbossee, giving it a poor rating due to phosphorous loading from developed and farm land higher in the watershed. The DEP report notes the highly sensitive nature of Little Cobbossee to additional phosphorous loading. While current development regulations limit phosphorous-laden run-off from new development, such run-off cannot be entirely eliminated. It is likely that additional development along the margin of the golf course and in unsuitable areas of lot 33 on the western side of the lake will contribute additional phosphorous to the lake and further degrade water quality. Limiting the potential for future development in these buffering upland areas is essential to maintaining water quality.

Google Earth image (2008) of Little Cobbossee with the approximate outlines of Lots 33 and 34 in red. Note proximity of golf course bordering Lot 34 on the east, and residential and commercial areas along Route 202/11 to the south. Forested and agricultural lands border the lots to the north.

Proposed uses of the property: The primary purpose of this project is to protect the lake, shoreline, and habitats from further degradation by development in surrounding uplands.

The Kennebec Land Trust management plan for this property would not include timber management or active wildlife management. A management plan will be developed for this property to simultaneously preserve the property in its natural condition in perpetuity, and to accommodate reasonable public access.

Public access will be permitted to the shoreline areas via boat, with a landing for paddlers to pull ashore on the eastern side of the lake. On the western side of the lake, there is the potential for a walking trail to allow exploration of the mixed forest and appreciation of the margins of the wetland. The ecological sensitivity of aquatic habitats will inform all areas of management planing and allowable uses. We include an example of a recently completed Management Plan for a similar property in Appendix C.

Support: Winthrop's Comprehensive Plan identifies the shore of Little Cobbossee and the view across the lake as a significant scenic resource; the Comprehensive Planning Committee supports this proposal. The Cobbossee Watershed District has devoted considerable resources to water quality efforts in the watershed of which Little Cobbossee is a part.

Landscape Context

1) Proximity to Focus Areas: The closest Beginning with Habitat Focus Area is Cobbossee – Annabessicook South, which includes southern portions of Cobbossee Lake to the south of the project area. In that the waters of Little Cobbossee Lake flow directly into Cobbossee Lake, this project can help maintain water quality in the Focus Area.

2) Proximity to other conservation lands: Lots 33 and 34 are well positioned between KLT and other conservation lands to the north and south. In the headwaters of this watershed, the shorelines and slopes of Shed Pond are owned by KLT and the New England Forestry Foundation. Just to the northwest is a parcel of approximately 260 acres owned by the Small Woodlot Owners Association of Maine, which will be managed for sustainable forestry and habitat. Immediately adjacent on the north is Lakeside Orchards, protected with a conservation easement through the Land for Maine's Future program, which ensures that the property will remain as productive agricultural land. Together, these lands form nearly a continuous corridor from the headwaters at Shed Pond to Cobbossee Lake.

   To the south in Cobbossee Lake are islands preserved by KLT. To the east in Manchester are large undeveloped tracts of the Jamies Pond Wildlife Management Area, to which KLT has added adjacent properties over the years.

3) Wetland rare species: The rare plant stiff arrow-head (*Sagittaria rigida*) occurs on the property. The state rank is S2 – imperiled in Maine because of rarity or vulnerability to extirpation. This locale is reportedly the first non-coastal discovery of this species in the state. Maine is at the edge of the range for this species and it is vulnerable to human activities.

4) Adverse impacts of the proposed project: None. This is a preservation project that does not include major management activities beyond potential walking trails on the west side of the lake and a place for paddlers to stop on the east side of the lake.

Project Readiness

The Kennebec Land Trust has a strong working relationship with Mary Oatway who has owned these lots for more than 50 years. KLT has been working with Mrs. Oatway for several years on conservation options for her property. A letter indicating her willingness to participate in the project is attached as Appendix A.

Necessary permits: None required for this preservation project.

Project timeline:

January 2012 – Announcement of pending award by MNRCP.

February 2012 – update property appraisal done in 2008. Title review.

March-April 2012 – survey portion of property that will be held out around the Oatway home (note – not to exceed 5 acres in the southeastern corner of Lot 34).

April 2012 – Environmental hazard survey

May-August 2012 – Long term management plan development, stewardship planning

July-August 2012 – negotiate purchase and sale agreement with owner

September 2012 – closing on property.

Long-term stewardship and monitoring plan: The Kennebec Land Trust operates throughout Kennebec County and currently conserves over 4,000 acres, including pristine islands, miles of shoreline, outstanding headlands, productive forest and farmland, and wildlife habitat. More than 2,700 acres is owned in fee, the remainder under conservation easement. The KLT has one full-time Executive Director and two part-time staff, an active Board of Directors, and scores of volunteers.

1) Stewardship. The Board of Directors formally approved a resolution to adopt and follow the Land Trust Alliance's (LTA) Standards and Practices for land trusts, including practices related to land stewardship responsibilities. The KLT has a Stewardship committee that together with KLT staff inventories, manages and develops stewardship plans for KLT lands and coordinates the work of volunteer property stewards. KLT trains volunteers to serve as stewards to oversee protected properties. An annual training and workshop is held each year in January. As of 2011, 55 volunteers are actively involved with stewardship of KLT fee and easement properties.

   Each KLT property has at least one volunteer steward, and some have two. Conservation parcels that are especially large in acreage, or have unique or complex management needs, have additional volunteers who assist the lead steward with trail maintenance, annual monitoring or public access projects. KLT stewards are encouraged to visit their respective properties as time allows, inform the public about KLT, and promote respectful and responsible ("leave no trace") enjoyment of property.

   KLT stewards communicate directly with KLT's Executive Director and the Board Stewardship Committee about property projects and management decisions. Volunteer land steward's responsibilities may include some or all of the following.

Stewards walk the property at least once per year and more often if possible, in order to:

- Check on usage and condition of land – note areas where plants or habitats may be at risk from human activity; note boundary encroachments.
- Note observations of wildlife, unique features, or ecological changes.
- Make sure KLT signs and registration boxes are in good condition and visitor sign-in forms and brochures are stocked.
- Complete monitoring check list annually and use KLT records to compare the property's condition to prior years. Submit monitoring reports by December 15 of each calendar year. Annual monitoring is critically important for conservation easements; KLT staff work directly with volunteer stewards for easement monitoring.
- Communicate with and seek guidance from KLT's Executive Director and Stewardship Committee about use or maintenance issues, including problems with overuse, trail maintenance needs, vandalism, motorized vehicles, erosion.
- Optional: Participate in volunteer projects in coordination with KLT staff and Board, such as field trips, work sessions to control invasives, or trail building and maintenance projects.

Stewardship costs: KLT solicits stewardship donations for a designated fund that supports stewardship activities and annual taxes on the property. The property owner has made a major commitment of funds to this effort.

2) Management plan: KLT develops management plans for each property it holds. These are developed in collaboration with stakeholders. For the Little Cobbossee properties, the stakeholders will include the Town of Winthrop, the Cobbossee Watershed District, and the Friends of Cobbossee. The purpose of the Management Plan document is to describe a plan to simultaneously preserve the property in its natural condition in perpetuity, and to accommodate reasonable public access.

   A typical management plan includes:

   - Property description and history
   - Vision for the property
   - Stewardship goals and objectives
   - Natural Resources
   - Management actions and stewardship tasks
   - Environmental and landuse regulations
   - Management rights and responsibilities
   - Property monitoring and stewardship procedures
   - Stewardship costs

   An example of a management plan for a comparable KLT property is provided in Appendix C.

Project Budget

Acquisition and Associated costs	
Value of fee lands to be purchased	$248,000[1]
Appraisal costs	$5,000[2]
Title, legal, closing costs	$1,000[3]
Land survey	$1,000[2]
Environmental hazard survey	$1,500[3]
Long-term management/stewardship planning	$2,000[3]

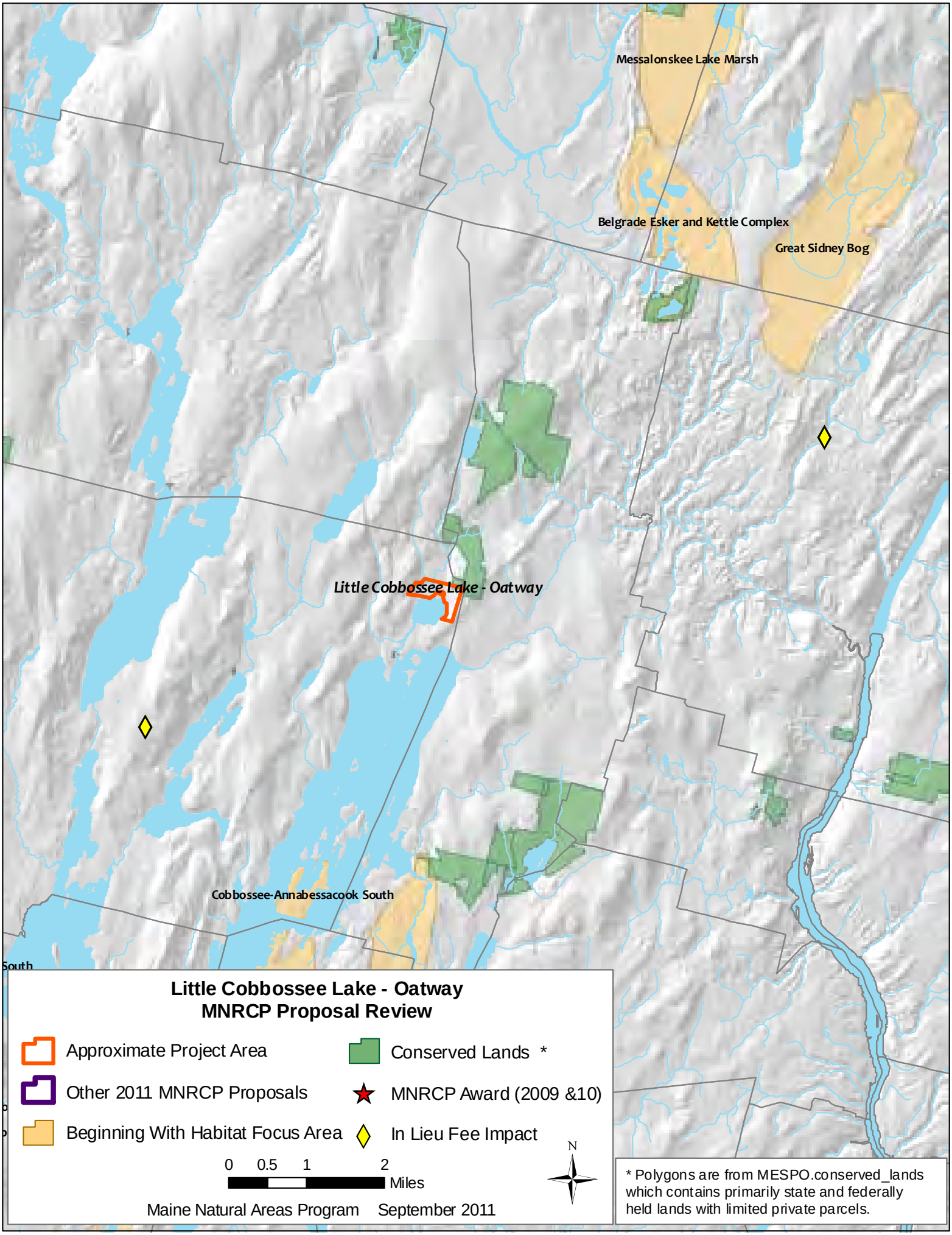
Restoration, Enhancement, or Creation Costs	
None anticipated	

Monitoring and Long-term Management Costs	
Long-term management/stewardship costs (endowment)	$10,000[4]

Total Project Cost	$268,500
Total MNRCP Request	**$175,000**
Other funding sources and amounts:	
Landowner appraised value discount	$73,000
Landowner contribution to stewardship fund	$5,000
KLT contributions of services and funds	$15,500

Notes

1. Appraisal value in 2008 for both lots, minus ~ 10 acres around the home.
2. Estimate of cash expense.
3. Estimate of in-kind contribution by KLT staff and volunteers.
4. Includes $5,000 stewardship contribution from landowner. Remainder will be raised by KLT.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Belgrade Esker and Kettle Complex
Great Sidney Bog
Little Cobbossee Lake - Oatway
Cobbossee-Annabessacook South
South
Little Cobbossee Lake - Oatway
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
Beginning With Habitat Focus Area
Conserved Lands *
MNRCP Award (2009 &10)
In Lieu Fee Impact
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N
Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

Maine Natural Resource Conservation Program
Request for Full Proposal

Mattawamkeag River/Eagle Pond Project

Executive Summary

Project Sponsor: Maine Department of Inland Fisheries and Wildlife, John Pratte, 284 State Street, Augusta, Me 04333; 592-5050; John.pratte@maine.gov

Project Location: Drew Plt, Penobscot County

Summary Project Description:

The project began as a partnership between Maine Department of Inland Fisheries and Wildlife (MDIFW) and The Nature Conservancy (TNC) in an effort to protect and expand existing investments in the Mattawamkeag River Wildlife Management Area (WMA) which comprises 4,043 acres in size and is managed for a variety of recreational uses and habitat types. TNC has an interest in seeing the natural resources on the parcel preserved and protected from incompatible uses that would impact the wetlands and river system. MaineDOT has now partnered with MDIFW and TNC as compensatory mitigation for unavoidable impacts from a road project. Acquisition of this parcel is of highest priorty for MDIFW as it will allow us to own and appropriately manage a 6,400 acres contiguous block of land identified in the Department's Wildlife Action Plan as containing resources of state-wide ecological significance.

The property, known as the Haynes Parcel, is immediately adjacent to the Mattawamkeag River System Wildlife Management Area and contains approximately 2,004 acres of freshwater wetlands providing wildlife habitat, groundwater discharge, and floodflow functions and also has uniqueness and recreational values. The property is located approximately 4 miles east of Kingman in Drew Plantation in Penobscot County (please refer to the Haynes ROW map). The parcel is bounded to the east, west, and south by land owned by MDIFW known as the Mattawamkeag River WMA. The parcel's northern boundary is the Eastern Maine Railway.

The soils on the site are primarily poorly-drained peat consisting of swamp, marsh, and bog deposits. Alluvial soils are present along the river and glacial till soils characterize upland areas along the railroad. Topography of the site slopes gradually from a high point at elevation 350 feet in the northwest portion of the site to the south and west towards the Mattawamkeag River. The property is bordered to the northeast by Meadow Brook and also includes a 46-acre pond (Eagle Pond) in the southwestern portion of the site, there are two small, unnamed streams associated with the pond.

The wetlands on the Haynes parcel are part of an Unpatterned Fen Ecosystem which has been documented by the Maine Natural Areas Program (MNAP) as the largest example currently mapped in Maine. It is currently in excellent condition and includes two rare plant populations, and overall high ecological diversity.

The Haynes Parcel also contains portions of four moderate value Inland Waterfowl and Wading Bird Habitats (IWWHs) totaling 1,021.3 acres that extend south to the Mattawamkeag River

(refer to IWWHs Map). This acquisition would represent about 25% of the total combined area of these four IWWHs of approximately 4110.1 acres. MDIFW has noted high waterfowl use on this portion of the Mattawamkeag River.

Estimated Project Cost:

Total Project Cost:	$439,000
MNRCP Fund Request:	$130,000
Other Funding Sources:	
ME Department of Transportation – committed	$309,000

Resource Priority of Project Site:

The Haynes parcel is located within the Mattawamkeag River Bogs and Fens Focus Area (please refer to Focus Area Map). Acquisition of the Haynes parcel combined with the Mattawamkeag River WMA would place a large portion of the focus area in conservation ownership, achieving an important goal identified in our State Wildlife Action Plan

The Haynes parcel is adjacent to the 4,043 acre Mattawamkeag River System WMA managed by MDIFW (please refer to Mattawamkeag River System WMA map). This parcel would serve to connect two isolated portions of the WMA on the north side of the Mattawamkeag River bringing the total acreage of the area up to approximately 6,400 acres.

There are several other natural resource priority areas in this section of northeastern Maine. Other Focus Areas idenified by Beginning with Habitat include: Macwahoc Stream Bog and Thompson Deadwater, Dwinal Flowage, and Baskahegan Stream uplands and Wetlands (refer to Area Natural Resource Priorities).

The Maine Natural Areas Program has idenified an Unpatterned Fen Ecosytem, an exemplary natural community, on the Mattawamkeag River System WMA which extends into the Haynes parcel and is documented on approximately 1,576 of the 2,004 acres of the proposed acquisition. Fens are peatlands fed by groundwater or surface water from adjacent uplands. Because plants in these areas are exposed to more nutrients than bog systems, the vegetation is typically different and more diverse than that of bogs. The peat is moderately- to well-decomposed and of variable thickness and vegetation typically consists sedges, grasses, reeds, and Sphagnum mosses. The Unpatterned Fen Ecosystem documented on the property represents the largest example currently mapped in Maine and is currently in excellent condition.

Other natural communities within the WMA include: a Northern White Cedar Woodland Fen, a Hardwood River Terrace Forest and a Silver Maple Floodplain Forest (refer to the Mattawamkeag_EOs_Map).

MDIFW has documented occurences of Brook Floater mussels and Yellow lampmussels in the Mattawamkeag River north and south of the Haynes parcel, both these mussel species are listed as Threatened in Maine. In addition, MDIFW has identified Creeper mussels in the Mattawamkeag River just to the north of the Haynes parcel, the Creeper mussel is listed as a

Special Concern Species in Maine. While there are no records of these mussel species occurring in the 7-mile stretch of the Mattawamkeag River that borders the Haynes property, it is highly likely that these species are present there.

The Tomah Mayfly, a Threatened species in Maine, has been documented in the Mattawamkeag River just south of the Haynes parcel. The 7-mile stretch that borders the parcel has not been surveyed for Tomah mayflys, but future surveys may yield additional occurences.

A population of Clayton's Copper butterflies, a subspecies of the more widely distributed Dorcas copper has been documented in the Mattagodus Stream area of the Mattawamkeag River WMA. Clayton's copper butterflies are currently known to occur in only eleven sites worldwide – nine in Maine and just two sites in New Brunswick. Clayton's copper is found only in association with its sole larval host plant, the shrubby cinquefoil that grows in open areas usually along the edge of calcareous wetlands. While there are no known stands of shrubby cinquefoil or Clayton's copper populations documented on the Haynes parcel, the proximity of the Mattagodus population warrents futher investigation of the property.

The property includes approximately 7 miles of frontage along the Mattawamkeag River. This section of river is designated in the Natural Resources Protection Act (38 M.R.S.A. Section 480-P) as an Outstanding River Segment. In addition, it is within the federally-designated Atlantic Gulf of Maine Atlantic Salmon Distinct Population Segment (DPS) and is located within the designated Critical Habitat for the species.

Meadow Brook, which borders the Haynes parcel to the northeast, supports a wild brook trout population and fishery.

Finally, MDIFW has documented a Bald eagle nesting territory near the most southern portion of the Haynes parcel. Nest territory BE350 has been active since 2002 with good productivity and is the only known nest in the territory.

Location information for all of the above rare resources can be viewed on the Rare and Significant Value Resources Map.

Eagle Pond

Type of Conservation:

Natural Resource Type		Restored acres	Enhanced acres	Preserved acres	Created acres	Total acres
Freshwater Resources	Freshwater wetland, emergent (PEM)					
	Freshwater wetland, forested (PFO)			1369		
	Freshwater wetland, shrub-scrub (PSS)			635		
	River, stream or brook			200		
	Significant wildlife habitat, vernal pool (*indicate number of pools if necessary*)					
	Significant wildlife habitat, vernal pool critical terrestrial habitat					
	Significant wildlife habitat, Inland Waterfowl and Wading Bird Habitat			1021.3		
Coastal Resources	Coastal wetland, Marine subtidal (M1)					
	Coastal wetland, Marine intertidal (M2)					
	Coastal wetland, Estuarine subtidal (E1)					
	Coastal wetland, Estuarine intertidal (E2)					
	Significant wildlife habitat, Tidal Waterfowl and Wading Bird Habitat					
	Significant wildlife habitat, Shorebird Feeding & Staging Areas					
	Upland buffer (non wetland habitat)			350		
	Project Total					

Potential to Meet MNRCP Goals

The Haynes parcel is part of a larger complex of wetlands surrounding the Mattawamkeag River. A large portion of the property is identified as an Unpatterned Fen Ecosytem, most likely little has changed over the years with this habitat given the wetness of the soils largely precluding them from agriculture, intensive timber management and development. The upland portions of the parcel have been intesively harvested over the years and the forest stage has been changed from mature to an early successional stage and forest composistion may have changed slightly from softwood dominated to a mixed forest type. Protected natural resources have been previously described.

Function/Value	PFO (forested wetlands throughout parcel)	PSS (bog)
Groundwater Recharge/Discharge	Y	Y
Floodflow Alteration	Y	Y
Fish and Shellfish Habitat	N	N
Sediment/Toxicant Retention	Y	Y
Nutrient Removal	Y	Y
Production Export	Y	Y
Sediment/Shoreline Stabilization	Y	Y
Wildlife Habitat	Y	Y

Recreation	Y	Y
Educational/Scientific Value	Y	Y
Uniqueness/Heritage	Y	Y
Visual Quality/Aesthetics	Y	Y
Endangered Species Habitat	N	N
MNAP Natural Community type	**Unpatterned Fen**	
Acreage (not based on field delineation)	**1369**	**635**

One of the primary threats for this area would be shoreline development of the Mattawamkeag River. Shoreline development has the potential to impact plant communities, wildlife habitats, water quality and the natural hydrology of the area. This acquisition would prevent potential development on the north side of the river and the problems associated with it, the south side is currently under state ownership as part of the Mattawamkeag River System WMA managed by MDIFW. The effects of intensive timber harvesting, habitat fragmentation, erosion, degradation of water quality and further impacts to wetlands would also be reduced. Any future habitat management planned by MDIFW would take into consideration all rare plants, natural communities, wildlife and wildlife habitats. Overall, the preservation portion of the project will aid in protection of unique ecological communities and habitats for rare wildlife species described earlier.

While presevation of this parcel will be important to ensuring the long-term conservation ownership and management, the parcel also has restoration needs which we hope to address through this grant opportunity. The 350 acres of upland habitat has been subject to intensive timber harvesting and the timber management roads from these harvests either have no culverts or culverts of insufficient size and number to pass water resulting in altered water movement and water quality in the area. Installation of new culverts or rock fords, water bars and the discontinuing of some roads will help to re-establish the natural water movement and improve water quality by reducing erosion. There will be only minor areas of soil disturbance in the locations where new culverts, rock fords and water bars will be placed. The type of water passage technique employed will be determined by the existing road materials in place, the anticipated types of road use and the amount of use the road may receive. Roads that are “closed-out” for vehicular use will be allowed to revegetate with naturally occurring species, no additional seeding will be necessary. Kristen Puryear of MNAP conducted a site visit on 9/6/11 and prepared a map of some of the locations with restoration potential (please refer to Mattawamkeag_rest-enhance opps_Map).

Current uses in this area include timber harvesting and outdoor recreational activities (hunting, fishing, ATV riding etc.). There is a private camp near the Mattawamkeag River; the owner has access through the Haynes parcel via the main timber harvesting road. Uses in the surrounding areas are timber harvesting, outdoor recreation and the Eastern Maine Railroad that borders the property to the northwest.

The Haynes parcel would be incorporated into the Mattawamkeag River System WMA. The primary objective for each Department-owned wildlife management area is to maintain or create the highest quality upland or wetland wildlife habitats possible. This is accomplished by employing management techniques that are designed to utilize existing habitat types either to benefit the greatest variety of wildlife or to provide an important habitat for a specific or "featured" species. Since this area is a very young forest, the only opportunity for timber

management in the foreseeable future would be to maintain some areas in early successional habitat. Other timber management practices will not be an option for quite some time.

Wildlife management areas are also used by the public as recreational areas. It has been the policy of the Department to allow public access and recreational activities on wildlife management areas when it does not conflict with wildlife management objectives. Public recreational activities consist of "consumptive" wildlife uses such as hunting, trapping and fishing and numerous "non-consumptive" uses. Intensive recreational facilities and opportunities, such as overnight camping, are generally not available or permitted activities on the wildlife management areas.

Finally, the wildlife management areas serve as demonstration areas where the public can see and be instructed about wildlife management techniques and practices, which might be incorporated on their own lands.

Landscape Context

The Haynes parcel is within the Beginning with Habitat Mattawamkeag River Bogs and Fen Focus Area that has been identified as an area of statewide ecological significance in MDIFW's Wildlife Action Plan.

The Maine Department of Inland Fisheries and Wildlife has targeted this area for acquisition as part of the Mattawamkeag River System WMA. Protection of riparian areas along the Mattawamkeag River would result in improved water quality for aquatic inhabitants. There are two state threatened species of mussels known to occur in the river, the yellow lampmussel and the brook floater. The yellow lampmussel is designated as a highest priority species and the brook floater is designated a high priority species of Species with the Greatest Conservation Need in Maine's Comprehensive Wildlife Conservation Strategy. The creeper mussel also occurs in the Mattawamkeag and is listed as special concern.

The Mattawamkeag River is within the federally-designated Atlantic Gulf of Maine Atlantic Salmon Distinct Population Segment (DPS) and is located within the designated Critical Habitat for the species. The Atlantic salmon is designated as a highest priority species of Species with the Greatest Conservation Need.

A wild brook trout population occurs in Meadow Brook. The Brook trout is designated as a high priority species of Species with the Greatest Conservation Need.

A bald eagle nesting territory would be protected by reducing potential disturbances from human activities. Bald eagles are a special concern species in Maine.

Although there are no documented occurrences of Tomah mayflies specifically on the Haynes parcel, records at nearby locations along the Mattawamkeag River and Mattagodus Stream warrant further investigation of this area and could yield new locations for this species. Tomah mayflies are listed as threatened in Maine and are designated as a highest priority species of Species with the Greatest Conservation Need.

Clayton's copper butterflies occur in close proximity to the Haynes parcel on Mattagodus Stream, this population along with other small populations in the area are globally significant due to the limited geographic distribution. Clayton's copper butterflies are listed as an Endangered Species in Maine. The Clayton's Copper is designated as a highest priority species of Species with the Greatest Conservation Need.

No adverse impacts are anticipated from the planned restoration activities. The restoration activities should only serve to benefit the natural resources in the area.

Project Readiness

The Maine Department of inland Fisheries and Wildlife's primary mission is to conserve, protect, and enhance the fish and wildlife resources of Maine and to provide for reasonable public access for the use and enjoyment of these resources. MDIFW currently owns and manages 100,000+ acres of land for the State of Maine. These lands contain a wide variety of wildlife habitat and provide a multitude of opportunities for public recreational and educational values. Included are wildlife habitats associated with large upland parcels, freshwater and saltwater marshes, riparian areas along major river systems and great ponds, seabird nesting islands, and shorebird feeding and roosting areas. Key habitats required by endangered and threatened species and Species of Greatest Conservation Need are found on each WMA. The primary management objective for each parcel is to conserve, maintain, restore, or create the highest quality upland or wetland wildlife habitat possible.

The State has signed a Purchase and Sale Agreement with the landowner: Lakeville Shores, Inc located in Winn, Maine. This agreement includes a right of way for all purposes originating at State Route 170 and following existing logging roads which are in good repair.

An appraisal by J.W. Sewall has been completed and a value of $420,000 assigned. An environmental assessment performed by MDOT's Groundwater & Hazardous Waste Division found no issues. The MDOT Property Office has also completed the title work.

MDOT is proposing to fund $300,000 toward the purchase. This amount will be used to deposit 1751 acres or 71% of the parcel in the Maine Umbrella Mitigation Banking Instrument (MUMBI) for future wetland compensation needs. The entire parcel will be owned by the State of Maine and managed by MDIF&W. As such, all partners are committed to following through with this project and at this point securing the remaining $130,000 funding for a closing to take place on or before December 9, 2011.

Mattawamkeag River/Eagle Pond Project Budget

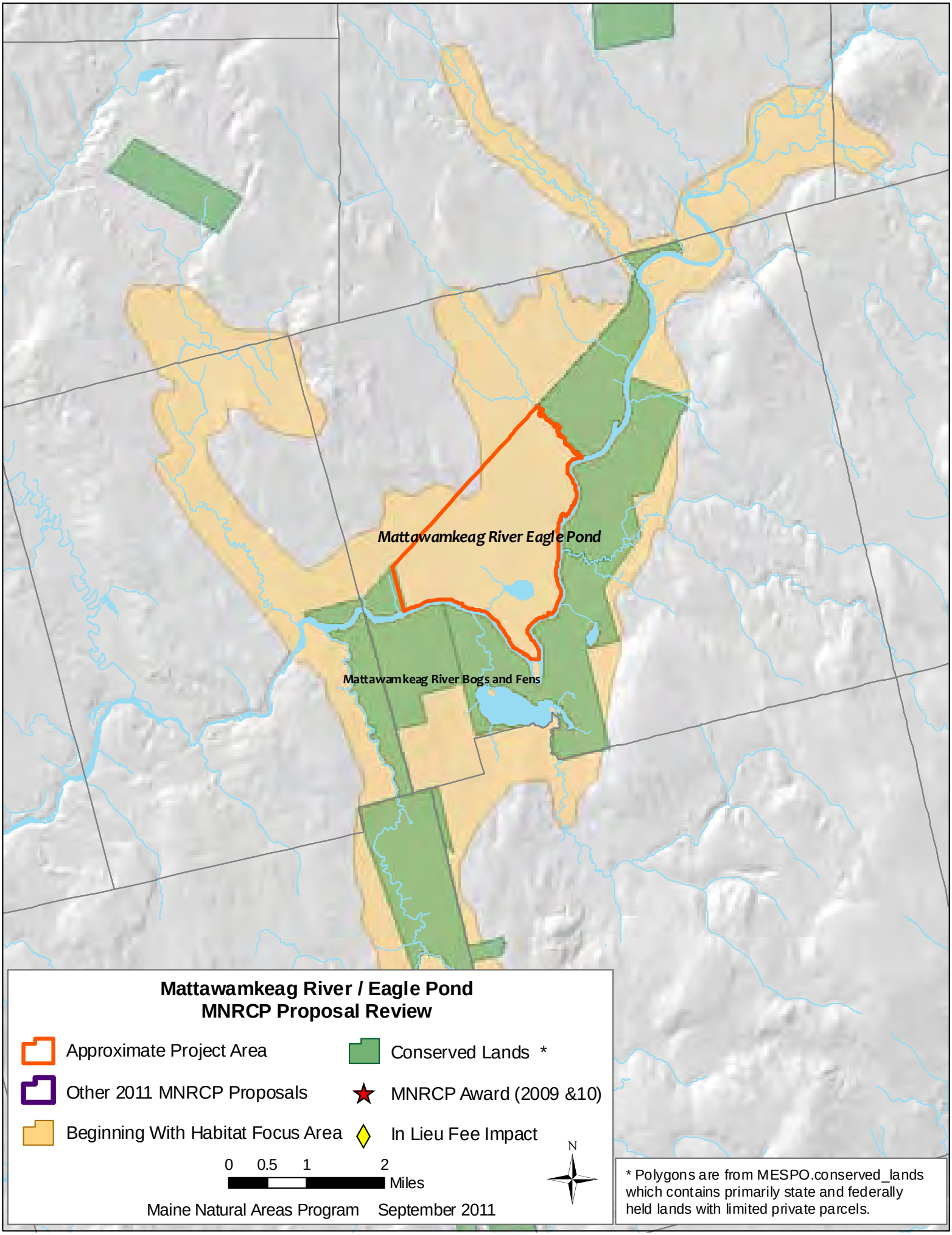
Identify costs as actual incurred or estimated. Describe the basis for any estimated costs.

Acquisition and Associated Costs	
Value of fee lands or conservation easements to be purchased	$420,000
Appraisal costs, title, legal and closing costs, environmental hazard survey	$9,000
Land survey	Not needed
Baseline documentation *(easement only)*	
Long-term management/stewardship planning	
Natural resource survey	

Restoration, Enhancement, or Creation Costs	
Restoration planning	
Personnel	
Site Work	$10,000
Contractual	
Equipment	
Supplies	
Other	

Monitoring and Long-Term Management Costs	
Short-term monitoring costs	
Long-term management/stewardship costs	

Total Project Cost:	$439,000
Total Maine Natural Resource Conservation Program (MNRCP) Request:	$130,000
Other Funding Sources and Amounts: ME DOT	$309,000


Mattawamkeag River Eagle Pond
Mattawamkeag River Bogs and Fens
Mattawamkeag River / Eagle Pond
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
Beginning With Habitat Focus Area
Conserved Lands *
MNRCP Award (2009 &10)
In Lieu Fee Impact
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Miles
N
Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

Proposal of McConkey Farm, LLC

Executive Summary:

- **Project Sponsor** - McConkey Farm LLC, PO Box 799, Gray, ME 04039, Attn: Al Palmer, apalmer@gorrillpalmer.com

- **Project Location** - Gray, Cumberland County, McConkey Road and Route 202, Tax Map 19, Lot 4, as shown on Attached USGS Map (Attachment 1)

- **Summary Project Description** - This project would restore riparian habitat along a 375 foot section of Thayer Brook in Gray. Thayer Brook is located in the uppper region of the Pleasant River watershed, a tributary of the Presumpscot River. The Cumberland County Soil & Water Conservation District has recently published a Watershed Management Plan for the Pleasant River which includes Thayer Brook. The Management Plan is provided as Attachment 2. The project site is located between a deer wintering area to the north, and a rare/threatened/endangered species habitat (New England Cottontail Rabbit) to the south (See Resource Map, Attachment 3). The project site is located within a 215 acre farm that has been in existence within 1 family since at least 1847. Portions of the westerly border of the farm abut Thayer Brook with hay field and grazing located within 5 feet of Thayer Brook. In 2005 McConkey Farm LLC contracted with MaineDOT to create a wetland mitigation plan to compensate for the wetland fills associated with the construction of the Route 26A Bypass. Working with Gorrill-Palmer Consulting Engineers, Boyle Associates and RJ Grondin & Sons Construction, the riparian habitat along 450 feet of the Brook was restored, creating/restoring/enhancing in excess of 0.65 acres of PSS wetland within a 1 acre conservation easement held by MaineDOT. The 2005 Compensation Plan is enclosed as Attachment 4. Having completed the 5th year of monitoring, the 2005 project met the parameters outlined in the original mitigation plan, and based on a recent delineation of that project site, successfully created the requisite area of wetlands. MDEP and ACOE have signed off on that wetland indicating that the project is considered complete and no further action by McConkey Farm is required. The proposed compensation plan for the MNRCP program would create/enhance/restore 0.86 acres of PSS wetland adjacent to the Brook, preservation of 0.21 acres of existing wetland and restoration/enhancement of an additional 0.45 acres of upland riparian buffer that would be located within a 1.52 acre conservation easement. (See Drawing 1A, 1B, 2 and 3 – Attachment 5). The current proposal is shown as Compensation Area #1 on the Drawing 1A, with additional future compensation shown as Area #2. Due to proximity to I-95, the project site has been under pressure from development as the Gray Comprehensive Plan has designated it as a "Growth Area" for commercial/industrial development. Implementation of the Concept Plan could easily be completed in the 2012 as the area has already been surveyed and a wetland delination completed. The Landowner (McConkey Farm Land Holdings, LLC) is ready and willing to proceed with this project including execution of a Conservation Easement in a form similar to the 2005 MaineDOT easement (Attachment 6)

- **Estimated Project Cost:**
  - Total Project Cost $199,794
  - MNRCP Fund Request $199,794

- **Resource Priority of Project Site:**
  - Within or adjacent to a Beginning with Habitat Focus Area (*focus area name*) - No

- Within or adjacent to existing public or private conservation lands - Adjacent to existing 0.97 acres of Private Conservation Easement (MaineDOT currently holds easement).
- Within or adjacent to other natural resource priority areas – Mapped Deer Wintering area located to north of Project Site, and New England Cottontail Rabbit Habitat area located to the south of Project Site.
- Contains natural resources of significant value and/or rarity (*habitats, species*) – None

- **Type of Conservation**:

Natural Resource Type		**Restored acres**	**Enhanced acres**	**Preserved acres**	**Created acres**	**Total acres**
Freshwater Resources	Freshwater wetland, shrub-scrub (PSS)		0.18	0.21	0.68	1.07
	River, stream or brook					
Upland buffer (non wetland habitat)			0.45			0.45
Project Total			**0.63**	**0.21**	**0.68**	**1.52**

Potential to Meet MNRCP Goals:

Describe the original habitat type and the current habitat conditions on the property with a determination of protected natural resources based on either aerial photo interpretation or, if available and applicable, a wetland delineation conducted in accordance with the Corps of Engineers 1987 Delineation Manual or subsequent USACE-approved method. – The majority of the project site is currently a hay field/pasture in support of leased farming operations. A wetland delineation was conducted by Boyle Associates in accordance with the Corps Manual which is shown on Drawings 2 and 3. The wetland on the project site is comprised of Thayer Brook and its associated floodplain and feeder drains, and includes the drainage swales and wet meadow areas of the adjacent pasture. Using the U.S. Fish and Wildlife Service's Cowardin *et al* classification technique, the stream portion of this wetland is classified as a riverine, lower perennial stream, (R2). The immediate floodplain is mainly comprised of wetland shrub species, and can be described as a palustrine scrub/shrub, broad-leaved deciduous, seasonally flooded/saturated wetland (PSS1E). The pasture portions of the wetland are described as a farmed, palustrine emergent wetland (PEM1Ef).

- **Assess the functional benefits the project will provide using the following list as a guide:**

Freshwater & Coastal Functions	
Education/scientific value	Retention/storage of floodwater/surface water
Floodflow alterations	Shoreline/sediment stabilization
Fish & shellfish habitat	Retention of sediment/toxicants
Nutrient removal/transformation	Uniqueness/Heritage
Production export	Visual quality/asesthetics
Recreation	Wildlife habitat
Groundwater recharge/discharge (*Freshwater*)	

Principal functions and values to be served by the mitigation site will include wildlife habitat, floodflow alteration, groundwater discharge, and nutrient removal. The installation of wetland shrub and herb species throughout the creation and enhancement/restoration areas

will increase the habitat for birds and small and large mammals, and the installation of organic-rich topsoil will increase the water holding capacity of the overall area, thus reducing downstream flooding hazards. The design of the wetland creation portion of the project will support groundwater discharge at the upper limits east of Thayer Brook into the created and enhanced wetland areas. Additionally, improvements to the upland riparian buffer of Thayer Brook will increase the habitat value of the stream itself for fish and shellfish.

In addition to wetland functions and values and, perhaps more importantly, the proposed site will provide a significant increase in the vegetated buffer between the active pasture fields and Thayer Brook. Thayer Brook was identified by the Maine DEP in 1998 as a non-attainment waterbody due to its low concentrations of dissolved oxygen (DO). Low DO concentrations are generally a result of non-point sources of excess nutrients that provide sustenance to algal blooms. Also known as eutrophication, the algal blooms eventually die off providing food for bacteria and detritivores that use up the stream's dissolved oxygen. An important contributing factor is the lack of shade along the brook causing increased water temperatures and increased light available for photosynthesis. Over time it is anticipated that increased shading from the planted and volunteer trees and shrubs will lower water temperatures and improve water quality. The wetlands enhanced and created to the east of the stream will provide sediment and toxicant retention functions and will help to filter out potential pollutants and excess nutrients before they reach the stream.

The proposed project is consistent with many of the Action Plan items of the Pleasant River Watershed Management Plan, including; Establishing vegetated buffer to reduce direct flow of runoff to waterbody, Extend buffers to a minimum of 75 feet on all streams, Plant native trees, shrubs and ground covers to stabilize soil and reduce runoff, Create a vegetated buffer between agricultural lands and waterbody to filter runoff, and Install Alternative drinking sources/watering ponds for livestock to access instead of waterbody.

- **Describe the proposed future condition of the property and the "functional lift" the project proposes to provide (e.g., proposed change in habitat quality, contribution to functioning biological systems, water quality, level of degradation, etc.). –** Refer to the item above.

- **Describe the level and type of threats to resources on and adjacent to the property. Note that preservation projects must anticipate the threat of degradation to the site in the next 20 years. –** Proximity to I-95 and the Town of Grays desire to expand its commercial tax base is the greatest threat to resources in the vicinity of the project site. The project site is the single largest undeveloped property within an area shown as "Area 3" of the Town Comprehensive Plan (2003) that called for expanded commercial/industrial development. As recent as March 2011, the Town Council proposed to spend $150,000 to prepare a Master Development Plan for Area 3 which would serve as the basis for rezoning the property as well as an additional $50,000 to develop and implement a marketing plan for the area. Due to efforts of McConkey Farm, and two abutting property owners of adjacent farms the measures were defeated at a Special Town meeting as each of the three property owners indicated that they have no current plans to develop their respective property, and did not want a development study conducted of their property. Even though the measures were defeated at the Town Meeting, the Town Council has continued to take steps to facilitate development of the area. McConkey Farm Land Holdings, LLC is currently in the process of evaluating long term options for preserving the majority of the field portion of the property

for farming, which may include the use of wetland compensation/conservation easements as well as potentially implementation of agricultural easements.

- **Describe the current and proposed buffers on the project site, and the degree to which they protect or support identified resource functions and ecological connectivity to other conservation areas or undeveloped large blocks of habitat. –** The project as designed includes a knoll to provide an island of upland vegetation adjacent to the existing compensation site (2005) as well as a portion of the proposed compensation area. The existing hay fields/pasture provide a link between the existing and proposed compensation areas and the large block of undeveloped forested habitat to the north. As shown on Drawing #1, the long term conservation goals for the property include future wetland compensation areas (labeled as Areas #2 and #3) adjacent to Thayer Brook as well as an unnamed brook that bisects a portion of the pasture. The future compensation areas will serve to strengthen the connectivity to the adjacent habitat.

- **Describe the current use of the property (e.g., any structures or improvements) and the land use activities in the area surrounding the property (e.g., residential, forest management, commercial, agriculture, etc.). –** The current use of the property is hay field/pasture in support of leased farming operations. The surrounding area is hay field/pasture also. It is noted that the existing water source for the pasture use is located within the corner of the proposed compensation area. A new water source for future pasturing will be developed on the adjacent property using an existing spring on adjacent property of McConkey Farm Land Holdings, LLC.

- **Describe the proposed use of the property and any proposed management (e.g., describe in detail any proposal for "forestry management" or "wildlife management" and how this management will affect existing and proposed aquatic or other natural resources). –** Section 4 - Prohibited Uses, of the Conservation Easement executed as part of the 2005 Compensation Plan will serve as the framework of the proposed conservation easement with respect to the proposed use of the 1.52 acres. The intent is to allow the area to develop as a natural buffer for Thayer Brook with minimal human intrusion. Public access was specifically omitted from the 2005 Easement as the intent is to maintain a working farm adjacent to the conservation land.

- **Describe the specific techniques and methods that will be used to conserve the habitat. -** In accordance with the DEP Chapter 310 Wetland Protection Rules and the latest version of the Corps' Mitigation Plan Guidance document, the 1.52 acre mitigation area will be protected from development by a permanent conservation easement. A copy of the easement document executed in 2005 for the adjacent area is provided as Attachment 6. This easement will serve as a draft document for the proposed easement.

  Following acquisition, McConkey Farm LLC will implement limited measures, such as posting boundary signs, to discourage unauthorized access to and use of the site. Other measures, such as posting additional signs, and installing additional fencing or barrier boulders will be implemented as necessary to restrict ATV and other unauthorized off-road vehicle access to the property. Use of the site by the general public is not anticipated.

- **If restoration, enhancement or creation is proposed, an assessment of the local hydrology must be done including demonstration that the local hydrology will be sufficient to support the project and an assessment of likely project-related changes to**

the hydrology in the area. Include the type and location of all soil disturbing activities and structures; a construction schedule; and a planting plan that includes a list of non-invasive, native species to be used; planting density; planting methods and schedule; and planting plan success criteria. - A delineation of the wetlands in the project site has been accomplished. Several man-made and natural drainage swales are located on or adjacent to the project site. Each of these swales carries meltwater and stormwater from the surrounding upland fields and forest through the pasture and down to Thayer Brook. Wetland characteristics can be found in these drains and begin to dominate at an elevation of approximately 225 to 226 feet. The wetland creation portion of the project will be graded down to an elevation of approximately 226 to 227 feet, in order to mimic the elevation characteristics of the wetlands already present on the site (Thayer Brook runs at an approximate elevation of 224 feet). The source of water for the wetland creation portion of this project will be runoff from the above-mentioned drains, from periodic groundwater discharge at the elevation of the current wetland areas, and from occasional flooding of Thayer Brook. A Preliminary Design for the Grading of the Conservation Area is shown on Drawing #3. The proposed grading at elevation 226 to 227 feet (wetland creation area) is based on our familiarity with the project site and maintaining the fields, our experience in developing the hydrology of the 2005 mitigation project as well the data contained with the Flood Insurance Rate Maps (FIRM) for this section of Thayer Brook. The proposed planting is shown on Drawing #3. The density in the creation area is 600 plants per acre. Within the enhancement area, the proposed density is 300 plants per acre. The planting would be done in the fall of 2012. Planting plan success in these areas will be based on survivorship, at the end of 5 years, of the planted and naturally colonizing wetland shrubs and/or trees at a rate of 85% of the initial plant count. Tree and shrub species will be considered hydrophytic if they are listed with a wetland indicator status of OBL, FACW or FAC in the U.S. Fish and Wildlife Service's 1988 biological report entitled: *National List of Plants Species that Occur in Wetlands: Maine*. Upland plants will not be considered in the density calculations.

- **If the project is preservation by conservation easement, summarize proposed terms of the easement and who will hold the easement. Provide a draft conservation easement or fee agreement. –** The proposed easement would be based on the easement on the adjacent conservation land which was approved and accepted by ACOE and MDEP in 2005. At this time, the holder of the easement has not been finalized. No Land Trust or Conservation Commission is currently based within the Town of Gray. Due to the site's location in the Presumpscot River watershed, our efforts to date have focused on the Presumpscot Regional Land Trust (PRLT). Since being notified on July 31, 2011 of being selected to submit this proposal, a site walk has been held with representatives of PRLT, as well as a discussion of the merits of the project at one of their Board meetings. Based on feedback from the Board meeting, concerns were expressed with respect to the limited area being protected and its isolation from other PRLT holdings, the fragility of wetlands within a conservation easement and potential costs for stewardship, and the desire to limit public access. Due to the relatively small acreage, it does not appear that a larger entity such as the Nature Conservancy, the Trust for Public Lands, etc. would be appropriate for this project. Therefore, while McConkey Farm will likely continue discussions with PRLT, other potential holders will be pursued. At this time, contact has also been initiated with Trout Unlimited, the Windham Land Trust, and the Gray Community Endowment to review whether they would entertain being an easement holder. Periodic updates will be provided to the MNRCP of the status of the discussions with these entities. If an appropriate entity to

hold the easement can not be identified within the review schedule for the Proposals, this project will be withdrawn for consideration for this year.

- **Describe the level of support and involvement of other relevant agencies, organizations, and local community. –** None anticipated

Landscape Context:

- **Describe the proximity / benefits to statewide focus areas for land conservation (Beginning with Habitat Focus Area) or habitat preservation identified by a state agency, or other regional or municipal plans. –** This project is not proximate to a Beginning with Habitat Focus Area, or to the knowledge of the Applicant adjacent to habitat preservation identified by a state agency.

- **Describe the adjacency / proximity to other public or private protected properties and how this project will enhance overall conservation (e.g., refuges, management areas, preservation, parks, conservation organization properties, mitigation banks, or other protected restoration sites).** – The project site is a part of and adjacent to the Gray State Game Sanctuary as Shown on Attachment 1. This Game Sanctuary includes a significant acreage of deer wintering area. The proposed project will serve to enhance wildlife travel corridors adjacent to Thayer Brook which flows from the Sanctuary towards the Pleasant River, which includes an area mapped as Endangered, Threatened & Special Concern Species Habitat (New England Cottontail Rabbit). Combined with the adjacent land subject to the 2005 Conservation Easement, this project will result in 2.5 acres of created/enhanced riparian habitat.

- **Describe the proximity / benefits to important species in Maine such as habitat for wetland Rare, Threatened, Endangered Species, or Species of Special Concern; Habitat for Species of Greatest Conservation Need; S1 & S2 Wetland Natural Communities; and/or within or buffering brook trout, Atlantic sea-run salmon or other diadromous fish runs and habitats.** – Downstream of the Project Site is an area mapped as Endangered, Threatened & Special Concern Species Habitat (New England Cottontail Rabbit). The creation/enhancement of scrub-shrub wetlands within the riparian corridor of Thayer Brook would be compatible with the adjacent downstream habitat and offer additional opportunities for wildlife habitat connectivity. The project design also benefits from the planning of potential future expansion of the compensation program to the north to allow for further enhancement of the riparian habitat and connectivity to the adjacent Deer Wintering Area.

- **Describe any potential adverse impacts to any protected natural resource, such as upstream or downstream aquatic resources, ecologically sensitive areas and wildlife habitat and discuss any potential effect the mitigation project may have on any species listed as either federal or state threatened or endangered that may be found in the vicinity of the project. These impacts should be avoided to the greatest degree possible. –** As the proposed project will result in soil disturbance within 5 feet of Thayer Brook, the possibility exists that the construction could result in erosion that could temporarily lower water quality in Thayer Brook and downstream resources. The project design has incorporated appropriate erosion and sedimentation control measures to minimize the possibility of downstream impacts. The installation and maintenance of the measures has been included in the project budget.

Project Readiness

- **New requirement: Provide documentation of landowner willingness to participate in the proposed project, including conveying a conservation easement or fee title to the property (for projects not on existing conservation lands). Include landowner's name and address. –** Refer to Attachment 7
- **List permits needed (federal, state, and local) and which, if any, have already been secured. Describe the extent of legal access to the property. –** A Permit by Rule from the MDEP will be required for restoration of a natural area, as well as a Shoreland Zoning Permit from the Town of Gray due to the extent of the soil disturbance. Both of these permits were obtained for the adjacent project which demonstrates our ability to obtain the required permits.
- **Outline tasks / steps to be taken in completing the project, including time schedule. Please also include key tasks / steps that have already been completed and the date of completion. -**

Task	Start Date	Completion Date	Deliverable
Wetland Delineation	Completed		Shown on Project Plans
Topographic Survey	Completed		Shown on Project Plans
Schematic Design	Completed		Shown on Project Plans
Draft Final Compensation Design and Report	Upon Notice of Potential Award – Assumed 1/13/2012	Submitted to MNRCP on 2/10/12	Updated Plans and Report Similar to 2005 Project – Attachment 8
Completed Final Compensation Design and Report	Upon Receipt of Comments from MNRCP – Assumed 3/9/2012	Submitted to MNRCP on 4/13/12	Final Plans and Design Report
Legal Description of Easement Area	1/13/2012	Submitted to MNRCP on 3/2/12	Metes and Bound Description
Draft Compensation Easement	1/13/2012	Submitted to MNRCP on 3/2/12	Draft Easement
Title Opinion	2/13/2012	4/13/2012	Title Insurance Policy
Appraisal	1/13/2012	Submitted to MNRCP on 2/24/12	Appraisal Report
Phase 1 Environmental Assessment	Research 1/13/2012 – Field work – Upon Snow Melt	Submitted to MNRCP on or about 4/13/2012	Phase 1 Assessment
Draft MNRCP Agreement with Attachments	1/13/2012	4/13/2012	Agreement and all required attachments
Site Work and Earthwork	7/16/2012	9/28/2012	
Plantings	9/3/2012	10/12/2012	Weather dependent

- **Specify tangible outputs (work products and deliverables), including time schedule. Please also include key outputs that have already been completed and the date of completion. –** See Table Above.

- **Outline the anticipated <u>short-term monitoring plan</u> for restoration, enhancement and creation projects. A five-year monitoring term is typical, with a potentially longer period for resources with slow development rates. Please note that if the project is approved for funding, a detailed monitoring plan with success criteria will need to be submitted prior to receipt of funding. Preservation projects do not require short-term monitoring plans. –** Short term monitoring plan to be similar to monitoring outlined in the 2005 Design Report which is submitted in support of this Proposal as Attachment 8. Monitoring reports will be consistent with current ACOE reporting requirements, and include a wetland delineation as part of the final (fifth year) report.

- **New requirement**: **A <u>long-term stewardship and monitoring plan</u> must be developed for all projects prior to the award of MNRCP funds. Describe the anticipated process for developing the long-term stewardship plan for the project and provide information on who will maintain the property in perpetuity, general easement terms (if applicable), and who will conduct any monitoring. Describe anticipated costs in long-term maintenance of the project site and long-term monitoring of any easement conditions. Provide a detailed description of the financing mechanism (stewardship endowment, trust or other method) for funding the long-term stewardship of the project site. –** Boyle Associates would prepare a draft long-term stewardship and monitoring plan as part of the Compensation Design Report. The stewardship requirements are anticipated to be similar in scope to the "Rights of the Grantee" in the attached Conservation Easement executed for the adjacent area. At this time, final costs have not been determined. An allowance of $15,000 has been included in the project budget, which would serve as an endowment to fund the long-term stewardship.

Format for MNRCP Project Budget

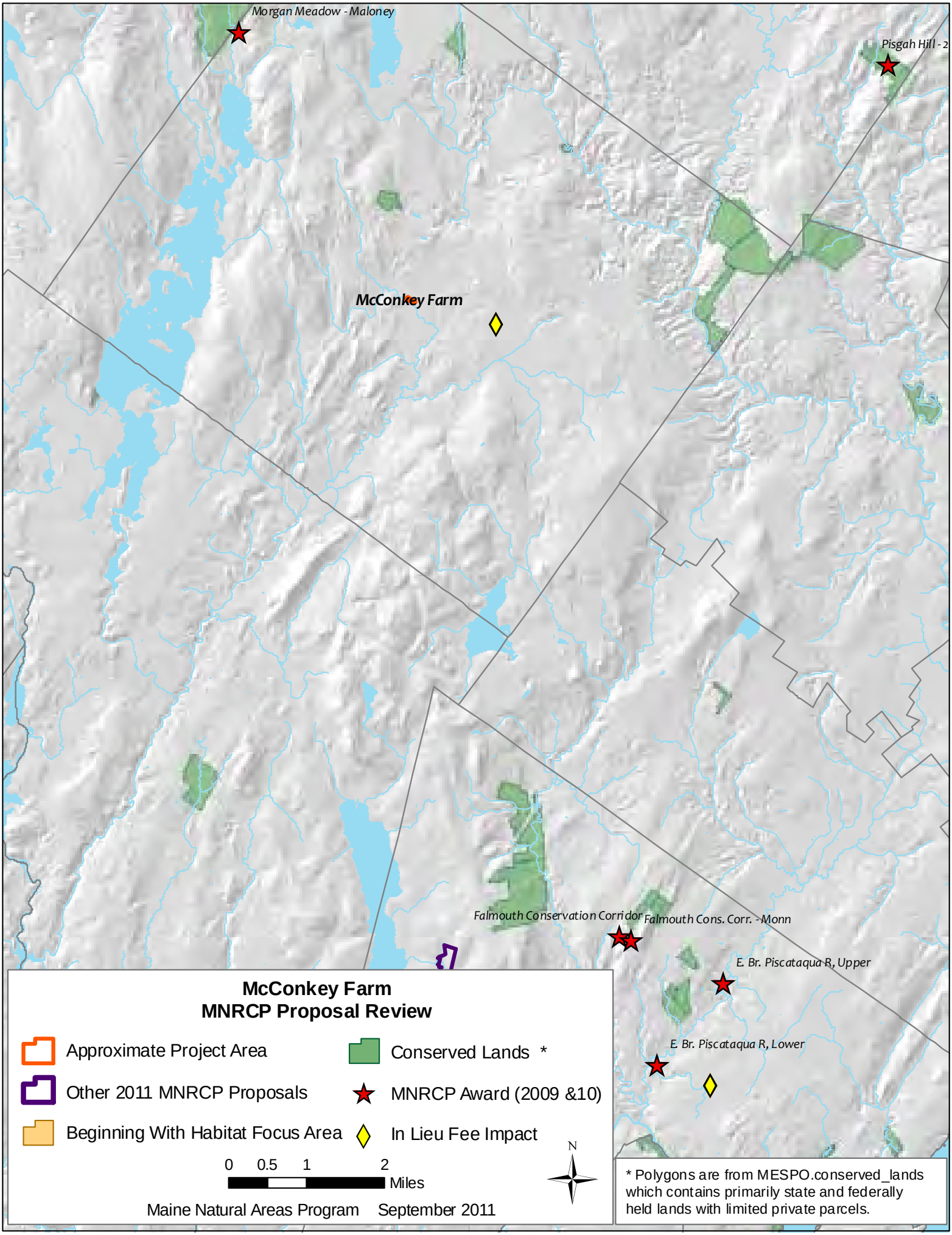
Identify costs as actual incurred or estimated. Describe the basis for any estimated costs.

Acquisition and Associated Costs	
Value of fee lands or conservation easements to be purchased*	$43,000
Appraisal costs	$1,250
Title, legal and closing costs	$5,000
Land survey	$3,500
Environmental hazard survey	$2,100
Baseline documentation *(easement only)*	$0
Long-term management/stewardship planning	$1,620
Natural resource survey/wetland delineation	$1,380
Restoration, Enhancement, or Creation Costs	
Restoration planning	$12,268
Personnel	
Site Work (Includes Labor and Materials)	$83,926
Contractual	
Equipment	
Supplies	
Other (Contingency)	$14,480
Monitoring and Long-Term Management Costs	
Short-term monitoring costs†	$16,270
Long-term management/stewardship costs‡ (Allowance)	$15,000
Total Project Cost:	$199,794
Total Maine Natural Resource Conservation Program (MNRCP) Request:	$199,794
Other Funding Sources and Amounts:	$0

* Land Acquisition or Conservation Easement Costs must based on an Appraisal completed within the past two years, in accordance with the Uniform Standards of Professional Appraisal Practice (USPAP). A copy of the final appraisal must be provided and consist of a complete appraisal and a self contained appraisal report.

† For restoration, enhancement or creation, a five-year monitoring term is typical, with a potentially longer period for resources with slow development rates. Preservation projects do not require short-term monitoring.

‡ Funded projects are expected to protect priority resources "in perpetuity," which requires an entity with the resources and expertise to ensure long-term management and stewardship. A financing mechanism (e.g., endowment, trust, or long-term financing plan) is required to ensure adequate funding is available over time, though all the funds needed for establishment do not need to be included in MNRCP request.


Morgan Meadow - Maloney
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McConkey Farm
Falmouth Conservation Corridor
Falmouth Cons. Corr. - Monn
E. Br. Piscataqua R, Upper
E. Br. Piscataqua R, Lower
McConkey Farm
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
Beginning With Habitat Focus Area
Conserved Lands *
MNRCP Award (2009 &10)
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N
Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

Executive Summary:

Project Sponsor: Town of Wells Conservation Commission, 208 Sanford Rd, PO Box 398,Wells ME 04090-0398. Contact: Keith Fletcher, Conservation Commissioner,(207) 729-7366 x111. kfletcher@mcht.org.

Project Location: Map 59 Lots 5 and 13, and Map 66 Lot 30 A, Town of Wells, Maine, on the Sanford Road near the Sanford Town Border.

Summary Project Description: This project will, through fee simple purchase, add 61 acres to the Town of Wells system of conservation lands, protecting 38 acres of forested wetlands and vernal pools. The property is currently in an undeveloped state and part of a large unfragmented forest block (as identified by IF&W). Though wet, the property has road frontage on the Sanford Road (Route 109) and has potential for both housing development on the uplands, and gravel mining. These activities, which would degrade the wetlands, will be prevented by the purchase and protection of this property. The property is nestled into, and will be added to, the 700 ac. Fenderson Wildlife Commons, a town conservation area containing the headwaters of the Merriland River. This acquisition is part of the Merriland River Corridor Project, a cooperative project of the Town of Wells and the Wells National Estuarine Research Reserve (WNERR) to protect the headwaters and corridor of the Merriland River for water quality and habitat. This property is also part of a planned conservation corridor between the Wildlife Commons and 4,000 acres of water district and conservation land at Kennebunk Plains, a Beginning with Habitat Focus Area.

The Goals of this MNRCP project are: 1. To protect high priority lands within the headwaters of the Merriland River, and protect and enhance the water quality in this stream which empties into the Wells National Estuarine Research Reserve, has wild trout and American eel populations, and is designated by Maine DEP as as 'Class A' waters 'suitable for drinking water' and 'characterized as natural.'; 2. Protect approximately 38 acres of freshwater forested wetlands; 3. To continue building the wildlife corridor between 4,000 acres of water district and conservation land at Kennebunk Plains and the 700 acre Fenderson Wildlife Commons; 4. to add a high priority parcel to the conservation holdings at Fenderson Wildlife Commons.

The landowner and President of Highpine Properties LLC, Mr. Hall, at the request of the Town of Wells, acted as a conservation buyer for this tract of land, thereby preventing its imminent development and/or mining. He is ready and willing to sell the land and transfer it to the town as soon as funding can be found to cover some of his original costs, which far exceed this request.

Estimated Project Cost: $159,000

- Total Project Cost: $159,000
- MNRCP Fund Request: $ 159,000

Resource Priority of Project Site:

- The property lies very near to the Kennebunk Plains/Wells Barrens focus area and, together with other Town conservation lands, enhances the viability of that area
- The property is adjacent to the Fenderson Wildlife Commons, Town of Wells owner.
- The Fenderson Wildlife Commons focus area is recognized in the Town of Wells Comprehensive Plan Update (numerous cites, plan dated February 24, 2005); the Great Works Regional Land Trust Strategic Plan, 'Piecing the Puzzle Together' http://www.gwrlt.org/images/stories/stratconplan/SCP_10-09-09.pdf; and the 'Land Conservation Plan for Maine's Piscataqua Region Watershed' dated June 2010, where the Highpine Properties LLC Tract is part of a 'core focus area'.
- The property contains Smooth Winterberry, an S3-ranked species; it includes at least one vernal pool, and several highly productive natural springs issue from a gravel deposit on the property's

southwest edge. Moose, Black Bear, and other far ranging animals are present, and the downstream Merriland River sustains native brook trout.

Type of Conservation:

Natural Resource Type		Restored acres	Enhanced acres	Preserved acres	Created acres	Total acres
Freshwater Resources	Freshwater wetland, emergent (PEM)					
	Freshwater wetland, forested (PFO)			38		38
	Freshwater wetland, shrub-scrub (PSS)					
	River, stream or brook			➢ 800'		
	Significant wildlife habitat, vernal pool (*indicate number of pools if necessary*)			1 identified; likely more.		
Project Total				**38**		**38**

Potential to Meet MNRCP Goals:

The parcel was examined in detail by Attar consulting engineers in 2009. Forested wetland communities dominate the parcel, with a few upland islands scattered about. Wetland communities are generally classified as Spruce-Fir-Cinnamon Fern Swamp (S4) by the Maine Natural Areas Program (MNAP). The wetlands are primarily dominated by red maple (*Acer rubrum*), red spruce (*Picea rubens*), and balsam fir (*Abies balsamea*). The shrub layer typically contains abundant winterberry (*Ilex verticillata*), highbush blueberry (*Vaccinium corymbosum*), and maleberry (*Lyonia ligustrina*), along with cinnamon fern (*Osmunda cinnamomea*), sensitive fern (*Onoclea sensibilis*), sphagnum, and long sedge (*carex folliculata*) in the understory.

Upland communities are classified as Oak-Pine Forest (S4). Dominant tree species include red oak (*Quercus rubra*), eastern white pine (*Pinus strobus*), white birch (*Betula papyrifera*), red maple, balsam fir, white oak (*Quercus alba*), eastern hemlock (*Tsuga canadensis*), and American beech (*Fagus grandifolia*). The parcel is part of a large, intact forest block defined by Beginning with Habitat.

Functional Benefits:

Freshwater & Coastal Functions	
Education/scientific value: *Very high values*; Fenderson Wildlife Commons is used as an outdoor classroom by students in the Wells School System and by the University of New England. This tract, with road frontage on Route 109, would be especially easy to visit and will improve access to the interior conservation lands.	Retention/storage of floodwater/surface water. Forest can retain and store floodwaters.
Floodflow alterations. *High values*. The 38 acres of wetlands have considerable capacity to absorb and slow floodwaters.	Shoreline/sediment stabilization. Retaining and slowing floodwaters will help moderate the effects of extreme precipitation events and the bank erosion and sedimentation associated with them, on the Merriland River.
Fish & shellfish habitat. N/A	Retention of sediment/toxicants. Protects water quality by trapping sediment and runoff.
Nutrient removal/transformation. Capable of trapping nutrients and converting to other trophic	Uniqueness/Heritage. *Very high values*. Property greatly improves public access to 700 acres of

levels.	interior conservation land and will be a community asset. It is the best opportunity to provide access from Route 109.
Production export. Wildlife food sources, higher trophic level users utilizing wetland.	Visual quality/aesthetics. The springs and associated streams are particularly attractive; vegetation turns bright colors in the fall.
Recreation. *Very high values*. Existing, popular pedestrian trails through Fenderson Commons may be extended to this property if it can be done in a manner sensitive to the wetlands . A through trail may be developed to connect to Horace Mills Road 2.5 miles away.	Wildlife habitat. *Very high values.* Part of a large block of undeveloped land; it is frequented by far ranging animals; vernal pools have potential to host amphibians.
Groundwater recharge/discharge (*Freshwater*): *Very high values*. Portions of this tract are recharge areas for the Branch Brook Aquifer, part of a public water system. (The Kennebunk Kennebunkport Wells Water District.)	

Proposed future condition and "functional lift": Protection of the Highpine Properties LLC tract will help maintain the high water quality in the Merriland River, a major source of fresh water to the Wells National Estuarine Research Reserve. Protection of the property is critical to forming the conservation link to Kennebunk Plains/Wells Barrens**. Protection of water quality is essential to the tourist economy of Wells, which relies on clean water and beaches.** During the summer the population of the town swells from 11,000 to 40,000 thanks to summer visitors to its beaches.

Level and type of threats to resources on and adjacent to the property: The primary threat to the property is housing development, as an estate lot or a subdivision. Though the land has many wetlands, comparable tracts have been developed elsewhere in town, and development is still a threat. One abutting tract along Route 109 has recently been subdivided and lots are now being actively marketed. It's an attractive property for development because the location is favorable for anyone who wishes to commute via the Turnpike – it is a ten minute trip down Route 109, a fast road, to the turnpike entrance. It is also convenient to Sanford (a regional service center) and to the Walmart and other shopping areas ten minutes to the north.

A secondary threat is gravel mining, most easily facilitated by a sale to the abutting gravel pit to the east (not now active). The gravel deposits are overlain by springs and streams and mining activity would forever alter these resources. There are few deposits of gravel remaining in Wells, and it is a rare and valuable commodity for road construction, landscaping, etc.

The property's context should remain excellent over the next twenty years. The land to the south, and most land to the east and west, some 700 acres, is conserved as the Fenderson Wildlife Commons. Efforts are underway to join together surrounding conservation areas including Kennebunk Plains/Wells Barrens, the Great Haith, and even Mt. Agamenticus. (Please see the below quote from the biologists at Woodlot Alternatives about this area.) The town hopes to acquire in the future an inholding along the western property line.

Current and proposed buffers: The land to the south of the property is conserved already. Most of the east and west boundaries are buffered by conservation land. Additional buffer, to the north across Route 109, is planned. In addition to purchasing the subject property, Mr. Hall acted as conservation buyer for the Town for 550 acres across Route 109 from the subject property. The plan is to conserve 400 acres and thereby create a conservation bridge between Fenderson Wildlife Commons and the 4,000 acres of conservation land at Kennebunk Plains/Wells Barrens. (Please see the map, attached.)

Woodlot Alternatives, Inc., the consultants who developed the management plan for Fenderson Wildlife Commons, had this to say about the value of doing conservation there: "The Fenderson Wildlife Commons is unique in southern York County because of its large, contiguous undeveloped land

uncrossed by roads and it is municipally owned…Furthermore, in its size and goals, the Fenderson Commons offers significant potential when considered as a part of a group of large conservation areas including the Blueberry Plains to the east and Mount Agamenticus Preserve to the south. **This group of conservation lands, if enhanced by some future acquisitions and greenway connectors, holds the possibility of providing an immense variety of habitat and species diversity that could be preserved indefinitely into the future.**

Current use of the property and land use activities in the surrounding area: The property is used by hunters, hikers, and other recreationists. There are no improvements. Abutting property is managed as part of the Fenderson Wildlife Commons, except for residential lots along Route 109, a private woodlot to the west, and an apparently abandoned gravel pit that abuts the eastern property line for a short distance.

Proposed use & management: The primary use of the property will be for wildlife habitat, recreation, and education. Management will be consistent with the Management Plan for the Fenderson Wildlife Commons, which may be viewed here:

http://www.wellsconservation.org/documents/Fenderson%20Report%20072304_Part1.pdf

A trail may be developed to facilitate recreation. It will be carefully located and designed to minimize impacts on wetland resources.

Describe the specific techniques and methods that will be used to conserve the habitat: The land and wetland resources will be protected by fee simple acquisition by the town of Wells; and by a Project Agreement with MNRCP.

Support and involvement of other relevant agencies, organizations, and local community:

Public support for the town land conservation effort is very high. For more than 25 years Wells has funded land conservation through annual appropriations to its land bank. In June 2010 a vote to expend $450,000 of town funds to acquire the Tilton and Granite State lands, passed by 64% of the vote – remarkable given the times. More than $60,000 in private donations have also been contributed to the land bank in recent years, mostly by town residents. A case study of the Wells Land Bank may be found here:

http://www.meacc.net/achievements/Wells%20Case%20Study.pdf

The Wells National Estuarine Research Reserve is a full partner in the Merriland River Corridor Project. A letter of support is included as part of this application.

Landscape Context:

Proximity / benefits to statewide focus areas for land conservation: The property lies 1.3 miles from the Kennebunk Plains/Wells Barrens focus area. It, together with the other town conservation lands, will enhance the viability and protect the conservation investments made in that focus area. It lies less than five miles from the Mt. Agamenticus Focus area and is part of a planned conservation bridge (or stepping stones) between Mt. A. and K-Plains. The project will especially benefit Wells National Estuarine Research Reserve, which lies six miles to the east, and receives the flow from the Merriland River.

Proximity to other public or private protected properties: The property lies less than five miles from more than 12,000 acres of conservation land around Mt. Agamenticus; it lies less than three miles from 540 conserved acres in and around the town Great Haith conservation area; and is 1.3 miles from 4,000 acres of conservation and water district lands at Kennebunk Plains. It is six miles from thousands of acres of coastal conservation land at WNERR and Rachel Carson National Wildlife Refuge.

Proximity / benefits to important species: Protection of this property will benefit the native Brook Trout populations of the Merriland River; and preserve a population of Smooth winterberry (*Ilex laevigata*), an MNRCP Species of Concern ranked S3.

Potential adverse impacts to any protected natural resource: None.

Project Readiness:

Landowner willingness to participate: Please see attached letter.

Permits needed and access: No permits needed. The property has frontage on a public road.

Outline tasks: 1. Survey land (Completed, 2009); 2. Obtain grant award (by January 2012); 3. Enter into P&S (January 2012); 4. Hire appraiser (April 2012); 5. Do title, create deed (May 2012); 6. Close. (June 2012)

Tangible outputs: Survey (Done, 2009); Signed P&S (Jan. 2012); Appraisal report (April 2012); Title report (May 2012); Recorded deed and project agreements with book and page (June 2012).

Management planning and costs:

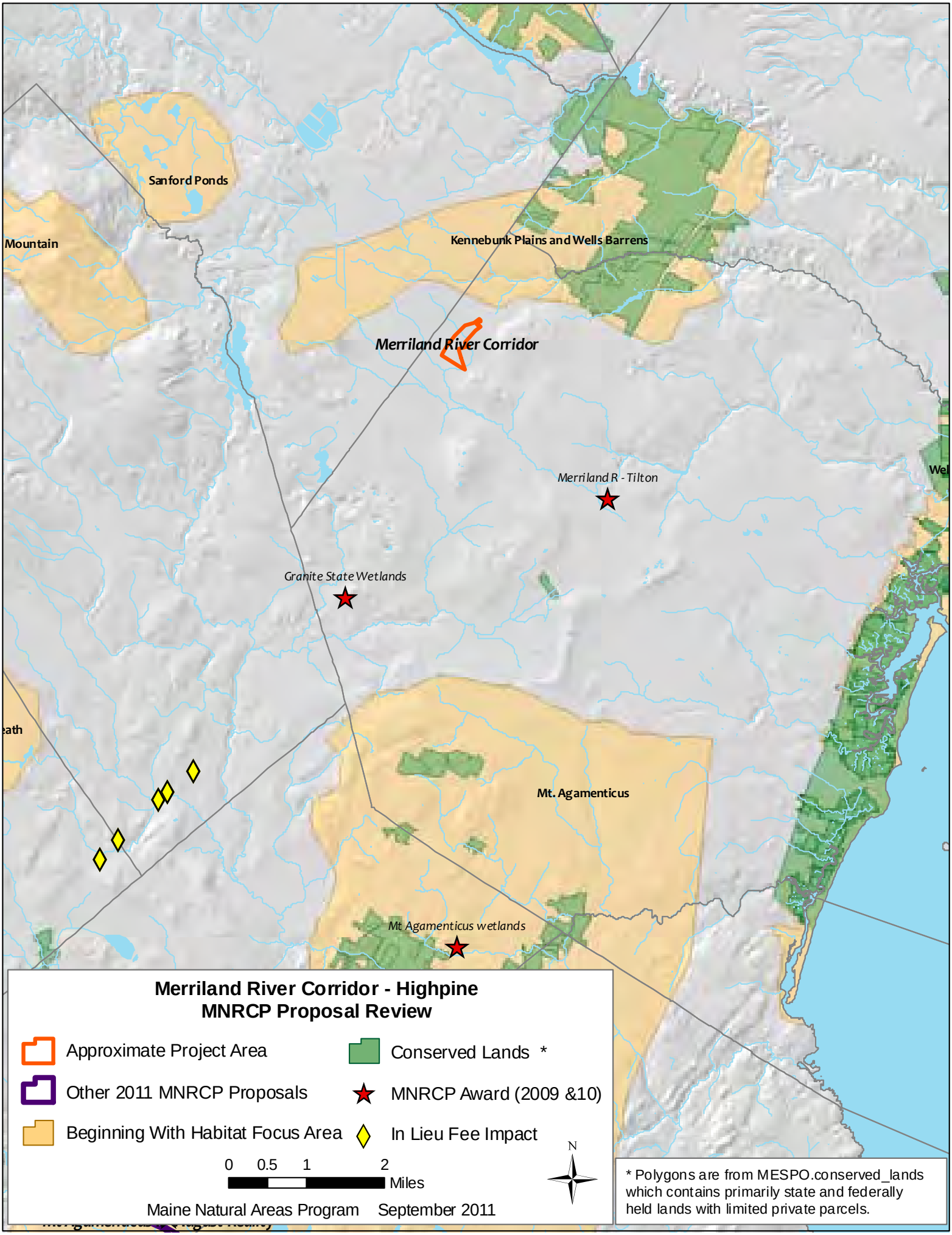
The Conservation Commission will develop the stewardship and monitoring plan, using its experienced volunteers, prior to closing. The plan will include an assessment of whether a trail is feasible on the property and if so, a trail will be designed that avoids impacts to wetlands. The trail will be marked and the route GPS'd using volunteers. Start-up costs of $5,000 will primarily be for signs and for materials for a stream crossing if needed for the (potential) trail. Ongoing costs of monitoring and upkeep will be handled through the Conservation Commission's operating budget, currently around $3,000, and raised through taxation; and through the use of volunteers (scouts, conservation commissioners) who have long helped on the other 700 acres of Fenderson Wildlife Commons. Costs will be approx. $50 per year for materials plus volunteer time (in-kind) for monitoring/management worth approximately $200 per year (20 hours @ $10).

Project Budget

Acquisition and Associated Costs	
Value of fee lands or conservation easements to be purchased*	$150,000
Appraisal costs	3,000 (Est.)
Title, legal and closing costs	1,000 (Est.)
Land survey	Completed.
Environmental hazard survey	In-Kind
Long-term management/stewardship planning	In-Kind
Natural resource survey	Completed.
Monitoring and Long-Term Management Costs	
Short-term monitoring costs (stewardship start-up)†	5,000 (Est.)
Long-term management/stewardship costs‡ **See discussion above.**	
Total Project Cost:	159,000
Total Maine Natural Resource Conservation Program (MNRCP) Request:	159,000

† For restoration, enhancement or creation, a five-year monitoring term is typical, with a potentially longer period for resources with slow development rates. Preservation projects do not require short-term monitoring.

‡ Funded projects are expected to protect priority resources "in perpetuity," which requires an entity with the resources and expertise to ensure long-term management and stewardship. A financing mechanism (e.g., endowment, trust, or long-term financing plan) is required to ensure adequate funding is available over time, though all the funds needed for establishment do not need to be included in MNRCP request.


Sanford Ponds
Mountain
Kennebunk Plains and Wells Barrens
Merriland River Corridor
Merriland R - Tilton
Granite State Wetlands
Mt. Agamenticus
Mt Agamenticus wetlands
Merriland River Corridor - Highpine
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
Beginning With Habitat Focus Area
Conserved Lands *
MNRCP Award (2009 &10)
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N
Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

Mt. Agamenticus Wetlands II

Executive Summary:

Project Sponsor: Great Works Regional Land Trust, PO Box 151, South Berwick, ME 03908. Contact Keith Fletcher, (207) 641-2866, kfletcher@mcht.org.

Project Location: South Berwick, Maine: Map 2 Lots 39 and 39A, off Bennet Road; Map 2 Lot 45, off Bennet Road; and Map 40 Lot 20A, off Belle Marsh Road.

Summary Project Description: This project will protect, through fee simple acquisition, wetland resources on three tracts comprising 83 acres within the Mt. Agamenticus Beginning with Habitat Focus Area. All are adjacent to existing conservation lands and will add to the highly significant wetland resources being conserved at Mt. Agamenticus. In particular, these wetlands are used by some of the most viable populations in the state of Blandings and spotted turtles. Some wetlands may also host the globally rare ringed boghaunter dragonfly.

The three tracts will be acquired and managed by the Great Works Regional Land Trust, to insure permanent protection of the wetlands and associated upland reasources. The three tracts are shown on the attached map titled 'Mt. Agamenticus Wetlands II -- Tract Locations.' The project goals are to: 1. Consolidate, expand and connect existing conservation holdings; 2. Make progress towards the goal of 15,000 acres of proximal conserved lands at Mt. Agamenticus. (There is currently about 12.000 acres conserved.) According to the Nature Conservancy, 15,000 conserved acres are needed to ensure that all species now present may thrive indefinitely. The larger Mt. Agamenticus to the Sea project, which includes the York River and parts of the coast, has a 20 year goal of 18,000 conserved acres and this project would make significant incremental project towards that goal as well. The story of Mt. A. is one one of incremental, but persistent progress over time, with some 100 conservation transaction during the past twenty years, thanks to the efforts of dozens of volunteers and highly active partner organizations.

The three tracts are all contain high quality wetland resources: **The Philbrick tract**, 38 acres, is adjacent to a 300 acre conservation easement held by the Great Works Regional Land Trust, and has vernal pools, scrub-shrub wetlands (not identified on NWI), and forested wetlands throughout. It is home to spotted and likely also Blandings turtles, and may host the ringed boghaunter dragonfly. Many of the wetlands are hydrologically connected and are fed by overflows from the wetlands above them. Numerous wetlands exist in addition to those shown on NWI; many of these can be discerned from the aerial photo.

The nearby 10 acre **August Realty tract** abuts the 38 acre Parent preserve, acquired using MNRCP funds from the 2009 funding round, and also abuts conservation land on two other sides. The August Realty tract (Also labeled as August Realty I in this proposal) was identified in the survey done for the Parent project of MNRCP. It has spotted and Blandings turtles, and may host the Ringed Boghaunter dragonfly. (IF&W biologists, after viewing photographs of the wetland flora, expressed an interest in surveying the property for dragonflies, and MNAP has made this recommendation to them.). The August Realty tract is part of a larger purchase option that encompasses 230 acres at Mt. Agamenticus, the remaining lands of August Realty. This is one of the largest remaining private land holdings in the Mt. Agamenticus region. This tract is the key to the larger option. The landowner strongly desires to close by the end of 2011.

The **Fortier tract**, 30 acres, includes a portion of Hoopers Brook Marsh, connected to the Chases Pond reservoir of the York Water District. It is bisected by a linear forested wetland and includes a sizeable perennial stream; it also includes open water on the marsh. It has road frontage and is readily subdividable.

Estimated Project Cost:

- Total Project Cost: $185,140
- MNRCP Fund Request: $175,140

Resource Priority of Project Site:

- Within the Mt. Agamenticus BWH Focus Area.
- The August Realty tract abuts a 38 acre Great Works Regional Land Trust (GWRLT) preserve to the north; an approximately 80 acre complex of town, GWRLT and Nature Conservancy conservation lands to the south, part of the „dragonfly wetland' complex; and 25 acres of town lands to the east. The Philbrick tract abuts a 300 acre GWRLT easement, and is near to the dragonfly wetland conservation lands; and the Fortier tract abuts 5 acres of South Berwick town land and is within 1,500 feet of several thousand acres of MDIFW and other conservation lands at Mt. Agamenticus.
- All tracts lie within a Great Works Regional Land Trust Core Focus Area, GWRLT Strategic Conservation Plan (2009); and are identified as priority tracts within A Conservation Plan for the Mt. Agamenticus to the Sea Conservation Initiative (2005). Most town comprehensive plans recognize the Mt. A. region as important to the „rural character' that the town wishes to retain.
- Blandings turtle (Emydoidea blandingii), spotted turtle (Clemmys guttata) are likely present on all tracts; and the ringed boghaunter dragonfly (Williamsonia lintneri) may be present on the August Realty and Philbrick tracts. All tracts are wholly or partly within a large contiguous forest block as identified by IF&W.

Type of Conservation:

Natural Resource Type		**Restored acres**	**Enhanced acres**	**Preserved acres**	**Created acres**	**Total acres**
Freshwater Resources	Freshwater wetland, emergent (PEM)			1		1
	Freshwater wetland, forested (PFO)			20		20
	Freshwater wetland, shrub-scrub (PSS)			3		3
	River, stream or brook					
	Significant wildlife habitat, vernal pool (*indicate number of pools if necessary*)					
	Significant wildlife habitat, vernal pool critical terrestrial habitat					
	Significant wildlife habitat, Inland Waterfowl and Wading Bird Habitat			1		1
	Significant wildlife habitat, Shorebird Feeding & Staging Areas					
	Upland buffer (non wetland habitat)			58		58
	Project Total			**83**		**83**

Potential to Meet MNRCP Goals:

Habitat type and the current habitat conditions: All tracts contain apparent vernal pools and forested wetlands (primarily red maple/sensitive fern swamp), and associated uplands (primarily oak, pine and hemlock). The Fortier tract also includes freshwater emergent wetlands (PEM). Both Philbrick and August Realty contain shrub-scrub wetlands; Philbrick has numerous unmapped wetlands of this type.

Functional benefits of the project:

Freshwater & Coastal Functions	
Education/scientific value: *Very high values*: IF&W is interested in surveying the August Realty tract for ringed boghaunter. Two tracts are readily accessed by public ROWs and will be readily available for education and study.	Retention/storage of floodwater/surface water. Forest can retain and store floodwaters.

Floodflow alterations. *High values*. The wetlands have considerable capacity to absorb and slow floodwaters.	Shoreline/sediment stabilization. Retaining and slowing floodwaters will help moderate erosion and sedimention into Cox's Pond (Philbrick) and Hoopers Brook Marsh (Fortier).
Fish & shellfish habitat. N/A	Retention of sediment/toxicants. Protects water quality by trapping sediment and runoff.
Nutrient removal/transformation. Capable of trapping nutrients and converting to other trophic levels.	Uniqueness/Heritage. The August Realty and Fortier tracts have public access and provide excellent opportunities for access and use by the community.
Production export. Wildlife food sources, higher trophic level users utilizing wetland.	Visual quality/aesthetics. *Very high value.* Vegetation turns bright colors in the fall. Relatively open understory leads to long views of large trees, wetlands and streams, and rock outcrops.
Recreation. All tracts have potential to be incorporated into the regional trail system. All are currently used for hunting, hiking, and other nonmotorized recreation.	Wildlife habitat. *Very high values.* Each tract lies within a large block of undeveloped land; all are frequented by far ranging animals; vernal pools host amphibians, rare turtles, and dragonflies. The PEM open water on Fortier includes bird nesting habitat and beaver activity.
Groundwater recharge/discharge: Wetlands are capable of recharging groundwater. The Fortier includes part of Hoopers Brook Marsh, part of the water supply for the York Water District.	

Future condition of the property: Property will be maintained in its natural state.

Level and type of threats to resources: The primary threat to all parcels is road construction, leading to subdivision. This results in fragmentation of large forest blocks, and can eliminate the opportunity to make connections between conservation nodes. The MtA2C partners have a 20 year goal to purchase an additional 6,000 acres in the region, to complete the original conservation vision for the area. There is a special emphasis on conserving the intact forest block surrounding and connecting the Philbrick and August Realty tracts, as it is prime turtle and dragonfly habitat, and much conservation work has already been done there.

Current and proposed buffers: The larger option currently under negotiation with August Realty, will create a conservation connection between the Fortier tract and several thousand acres of Water District and state conservation lands to the east. Efforts are underway to reach out to owners surrounding the Philbrick and August Realty tracts, to acquire additional lands. Each conservation transaction makes road building and subdivision of that area less likely.

Current use of the property: The properties are basically woodlots though none of the tracts have been recently harvested. There are no structures or improvements on any of the properties other than survey pins and old rock walls. The August Realty and Philbrick tracts are surrounded by wood lots and conservation land; the Fortier tract abuts low density residential housing on three sides.

Proposed use of the property and any proposed management: GWRLT, which pays taxes on our land, may enroll the August Realty and Fortier tracts in the Tree Growth program. Any harvesting will be done under a forest management plan designed to minimize impacts on wetland resources. There will be no cut zones around all streams and wetlands. No timber harvest is contemplated for the Philbrick tract. All tracts already have woods roads that are adequate for current levels of recreational use.

Techniques and methods that will be used to conserve the habitat: Fee simple acquisition and perpetual stewardship by Great Works Regional Land Trust.

Support and involvement of other relevant agencies, organizations, and local community: This is a project of the Mt. Agamenticus to the Sea Conservation Initiative (MtA2C), a coordinated ten partner

coalition that has worked for a decade to create a large conservation area in southern York County. Partners include: Great Works Regional Land Trust, Kittery Land Trust, York Land Trust, Rachel Carson National Wildlife Refuge, Wells National Estuarine Research Reserve, The Nature Conservancy, Maine Coast Heritage Trust, the Trust for Public Land, the York Rivers Association, and the Maine Department of Inland Fisheries and Wildlife. In addition the Towns of South Berwick, Wells and York, and the York and Kittery Water Districts, have each contributed funds towards MtA2C projects. One measure of community support is voting: Every single warrant article to fund a MtA2C project, in every town where a project has been brought forward, has passed by an overwhelming margin. For example, York recently voted by more than 70% to contribute $250,000 to a MtA2C project; the vote in Wells (town meeting) to contribute $20,000 to Great Works Regional Land Trust for a MtA2C project, was unanimous.

Landscape Context:

Proximity / benefits to statewide focus areas: All tracts lie within the Mt. Agamenticus Beginning with Habitat Focus Area, and are within or near the Mt. Agamenticus Wildlife Management Area of IF&W.

Describe the adjacency / proximity to other public or private protected properties and how this project will enhance overall conservation: This project will add to the almost 12,000 acres of conservation land in the region and continue important incremental progress towards the 15,000 goal. It will help expand existing conserved areas and will form connections with other conserved lands. All tracts are within a mile of State of Maine conservation lands and all abut land trust and town conservation lands. The August Realty tract abuts a 38 acre Great Works Regional Land Trust (GWRLT) preserve to the north; an approximately 80 acre complex of town, GWRLT and Nature Conservancy conservation lands to the south, part of the „dragonfly wetland' complex; and 25 acres of town lands to the east. The Philbrick tract abuts a 300 acre GWRLT easement, and is near to the dragonfly wetland conservation lands; and the Fortier tract abuts 5 acres of South Berwick town land and is within 1,500 feet of several thousand acres of MDIFW and other conservation lands at Mt. Agamenticus.

Describe the proximity / benefits to important species in Maine: All tracts are visited by spotted and Blandings turtles (state threatened and endangered, respectively). Two may host the ringed boghaunter (globally rare).

Describe any potential adverse impacts: None.

Project Readiness

Landowner willingness to participate in the proposed project: Letter from August Realty is included under separate cover. Others will follow shortly.

Robert and Maureen Fortier, 130 Oak Ridge Rd, Biddeford, ME 04005
Martin Parent, President, August Realty, 21 Old Route Four, Berwick, ME 03901
Russell Philbrick, 354 Maine Street, Manchester, CT 06040

Permits needed and access: No permits needed. Access to Fortier is via public road, to August Realty via public ROW from abandoned Bennet Road, and to Philbrick via the GWRLT easement from Witchtrot Road in South Berwick (for monitoring purposes only.)

Tasks / steps to be taken in completing the project: Willing sellers secured (completed Sept 2011); Enter into purchase option (October 2011); Hire appraiser (March 2011); Hire surveyor for Philbrick tract (January 2011 – the other surveys are already completed as of March 2011); Do title work, prepare deed, close (June 2012).

Tangible outputs: A purchase and sale agreement (October 2011), completed appraisal (March 2011), completed survey (May 2011), Recorded deed (June 2012).

Long-term stewardship and monitoring plan process: A plan will be developed by the GWRLT Stewardship Committee and our stewardship coordinator staff member, Darrel Detour. Long term stewardship will be funded through the GWRLT operations fund, approximately $475,000 currently. Interest from this fund, together with ongoing GWRLT member dues and fundraising, pays for GWRLT

operations. A stewardship contribution to this fund is sought to fund stewardship for these parcels. The extra contribution of $10,000 requested from MNRCP will provide funds for two days of stewardship staff time per year.

Budget

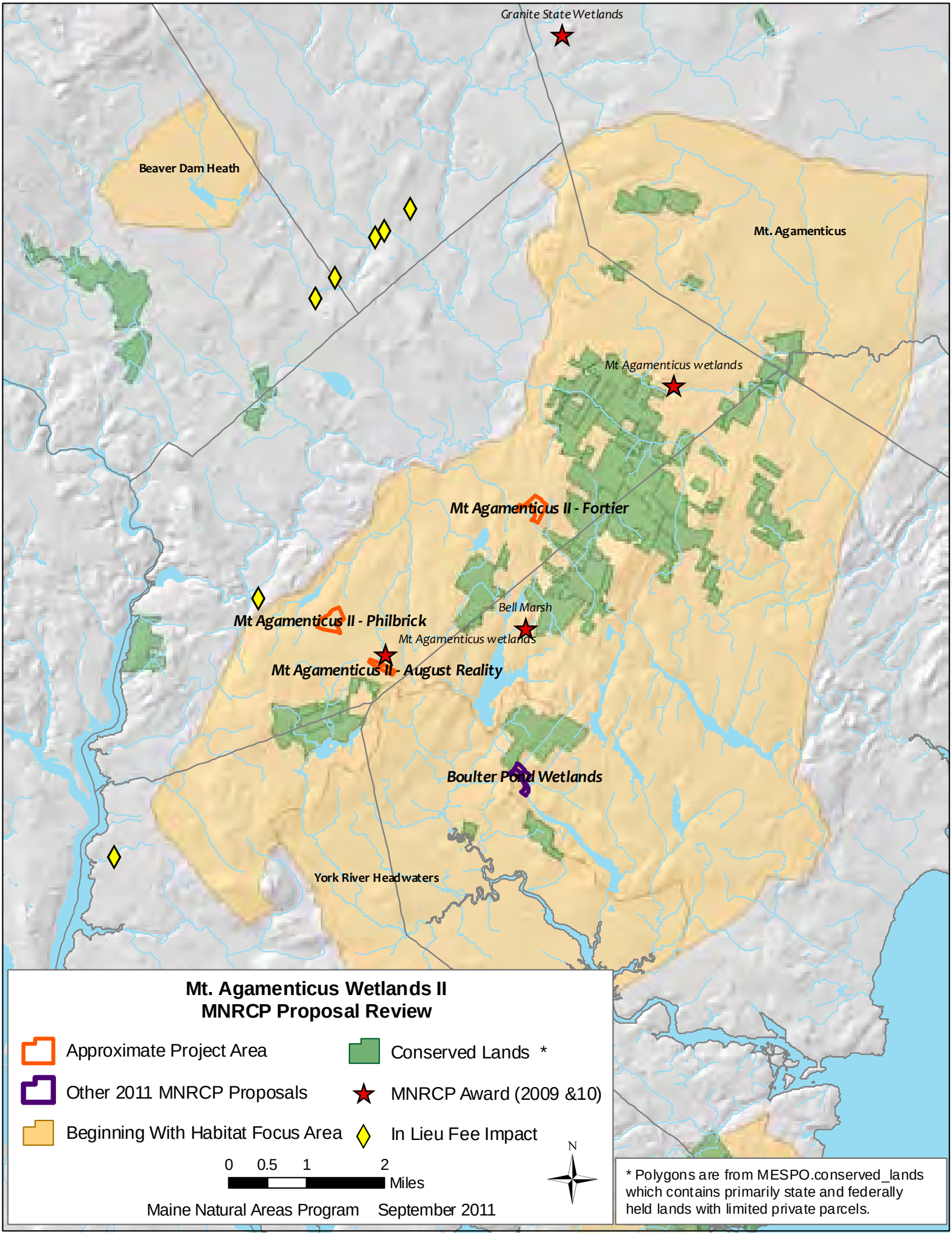
Acquisition and Associated Costs	
Value of fee lands or conservation easements to be purchased* Parent $15,000, Philbrick $34,200, Fortier $100,000 which is expected to be a bargain sale of $10,000)	$159,200
Appraisal costs (Bulk appraisal all tracts)	3,000 (Est)
Title, legal and closing costs (Based on past costs)	2,500 (Est)
Land survey (Based on past costs. Philbrick only, other surveys done.)	10,000 (Est)
Environmental hazard survey (Records search with First Search)	160
Baseline documentation *(easement only)*	
Long-term management/stewardship planning	In-Kind
Natural resource survey	In-Kind

Monitoring and Long-Term Management Costs	
Short-term monitoring costs† (Signs, staff time)	280
Long-term management/stewardship costs‡ (Contribution to GWRLT fund)	10,000
Total Project Cost:	185,140
Total Maine Natural Resource Conservation Program (MNRCP) Request:	175,140
Other Funding Sources and Amounts: (Fortier bargain sale.)	10,000

* Land Acquisition or Conservation Easement Costs must based on an Appraisal completed within the past two years, in accordance with the Uniform Standards of Professional Appraisal Practice (USPAP). A copy of the final appraisal must be provided and consist of a complete appraisal and a self contained appraisal report.

† For restoration, enhancement or creation, a five-year monitoring term is typical, with a potentially longer period for resources with slow development rates. Preservation projects do not require short-term monitoring.

‡ Funded projects are expected to protect priority resources "in perpetuity," which requires an entity with the resources and expertise to ensure long-term management and stewardship. A financing mechanism (e.g., endowment, trust, or long-term financing plan) is required to ensure adequate funding is available over time, though all the funds needed for establishment do not need to be included in MNRCP request.


Granite State Wetlands
Beaver Dam Heath
Mt. Agamenticus
Mt Agamenticus wetlands
Mt Agamenticus II - Fortier
Bell Marsh
Mt Agamenticus II - Philbrick
Mt Agamenticus wetlands
Mt Agamenticus II - August Reality
Boulter Pond Wetlands
York River Headwaters
Mt. Agamenticus Wetlands II
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
Beginning With Habitat Focus Area
Conserved Lands *
MNRCP Award (2009 &10)
In Lieu Fee Impact
0 0.5 1 2
Miles
N
Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

TOWN of THOMASTON
CONSERVATION COMMISSION

P. O. BOX 299
THOMASTON, MAINE 04861

Proposal for the 2017 Maine Natural Resource Conservation Program

Oyster River Reserve Project

Executive Summary

Sponsor & Location – The Town of Thomaston Conservation Commission, PO Box 299, Thomaston, ME 04861 – contact John Tracy, office (207) 354-2536; cell (207) 691-3566; email thomas@midcoast.com – would like to enlarge its current 100-acre conservation area by preserving and enhancing 127.5 acres of abutting land in the Town of Thomaston, Knox County.

Background & Description – The Oyster River is a major tributary to the St. George River and is tidal for 2½ miles of its 3½-mile length. In 1998 the Town of Thomaston purchased 300 acres in a long parcel paralleling the river for its new lagoon land application wastewater treatment facility (see Exhibit 1). To mitigate the loss of wetlands where the lagoons were built, 100 acres were deeded in a conservation easement to the Thomaston Conservation Commission (TCC). The entire 300-acre parcel is known as the Thomaston Town Forest and only on the TCC developed a 2-mile hiking trail through the forest. This trail was ultimately expanded north by the Georges River Land Trust (GRLT), a midcoast Maine conservation group, and is now part of the Georges Highland Path managed by GRLT. More recently, the TCC, working with the GRLT, has extended the trail south into Thomaston Village and created a loop trail along the Town's waterfront and through the village allowing and encouraging residents to walk and enjoy nature.

In the last two years, five parcels located between the Oyster River and the Town Forest, all owned by the Thorndike family, were partly cut over. The property now available for conservation and protection from the Thorndikes is 117 acres. Additionally, another land owner has offered to sell the 19.5-acre parcel with considerable wetland between the owner land and a small lot already owned by the Town on a bend in the river (see Exhibit 1). Part of the Thorndike land has recently been cut over, with some degradation during the logging, and needs restoration, enhancement, and, for maximum long-term benefit, preservation.

Estimated Project Cost – Total cost is estimated at $213,000 and the MNRCP fund request is $85,200.

Resource Priority – The proposed Oyster River Reserve is adjacent to the existing 100-acre TCC Conservation Easement located within the Thomaston Town Forest. The eastern portion of the land is largely upland with a few drainage gullies and some wetland, but it drops off closer to the Oyster River and the wetlands increase.

The project site is between two Beginning with Habitat Focus Areas within the Georges River watershed, namely the St. George River and Associated Ponds Focus Area and the Rockland Bog Focus Area. The Oyster River provides the link between these two ecologically valuable areas. The envisioned Oyster River "green belt" is also within a designated growth area, according to the Town of Thomaston.

Comprehensive Plan. More specifically, the 2005 Amendments to the Comprehensive Plan states that "the Town Forest can be an important part of a network of open space associated with, among other things, the Georges River Highland Path, that can serve to protect wildlife and enhance biodiversity in the midcoast area." Additionally the Plan recommends the purchase of land and easements adjacent to waterways to protect important riparian habitat from large-scale development.

The project area contains a Deer Wintering Area, Tidal Wading and Waterfowl Habitat, five potential vernal pools and Spongy Arrow-head a rare plant in Maine.

Type of Conservation:

Natural Resource Type		Restored acres	Enhanced acres	Protected acres	Created acres	Total acres
Freshwater Resources	Freshwater wetland, emergent (PEM)					0
	Freshwater wetland, forested (PFO)	0.133		20		20.133
	Freshwater wetland, shrub scrub (PSS)					0
	River, stream or brook	0.12	0.137			0.257
	Significant wildlife habitat, vernal pool (indicate number of pools if necessary)			0.123 6 pools		0.123
	Significant wildlife habitat, vernal pool critical terrestrial habitat			14.5		14.5
	Significant wildlife habitat, Inland Waterfowl and Wading Bird Habitat		6.88			6.88
Coastal Resources	Coastal wetland, Marine subtidal (M1)					0
	Coastal wetland, Marine intertidal (M2)					0
	Coastal wetland, Estuarine subtidal (E1)					0
	Coastal wetland, Estuarine intertidal (E2)					0
	Significant wildlife habitat, Tidal Waterfowl and Wading Bird Habitat					0
	Significant wildlife habitat, Shorebird Feeding & Staging Areas					0
	Upland habitat (non wetland habitat) Significant wildlife habitat, Deer Wintering Area			85.007		85.007
	Project Total	0.253	7.01	120.24	0	127.50

Potential to Meet MRRCP Goals:

Original Habitats and Current Habitat – A survey of the parcel was completed by a MCAP Ecologist to 1) identify any additional wetlands, 2) conduct a functions and values assessment of the wetlands, 3) determine any restoration or enhancement opportunities and 4) conduct a general natural resource and rare plant survey of the property (see Exhibit 2). In addition, a preliminary wetland and habitat assessment has been conducted on the property by a ME Certified Soil Scientist/ NH Certified Wetland Scientist (see Exhibit 3). Originally the streams within the property were impounded and free-flowing

while the forested portion of the site was mature softwood. Currently several of the streams have been filled with woody debris, gravel and a culvert.

Functional Benefits – Fish and Shellfish habitat, Nutrient Removal, Sediment/Toxicant Retention, Ground Water Discharge, Production Export, Wildlife Habitat, Recreation and Education Value are all realistic functional benefits of this project.

Proposed Future Condition – The proposed project will add new recreational trails, improve water quality for the Oyster River, restore riparian tree habitat within a tributary to the Oyster River, preserve a large deer wintering area, and enhance significant wildlife habitat. In addition, the proposed project will provide wildlife connectivity with the adjacent Thompson Conservation Commission (T.C.C.) easement land.

Threats to Resources – The property has been commercially harvested in a clear-cut manner rather than selective cutting. We estimate that approximately 40 acres have been clear cut within the past 2 years. Clear cutting poses an immediate threat to water quality and wildlife habitat. In addition, numerous subdivisions have been approved along Beechwood Street, the quarry abutting the Town Forest is active and has expanded extensively in last few years, and the sewage treatment plant will continue to grow in the future. Without conservation, degradation of the site within the next 10 years is likely, and within the next 20 years is almost certain.

Current and Proposed Buffers – The current buffers are the shoreland zone associated with the Oyster River and the 75-foot buffers adjacent to the streams on the property. The shoreland zone limits development to within 100 feet of the river, while the stream buffers can be reduced to 25 feet for justifiable reasons. The proposed project would preserve approximately 127.5 acres. If the vernal pools observed on the property turn out to be significant, they will be documented and the 250-foot critical terrestrial habitat will be identified. Preserving this property would also allow a connection to over 200 acres that has already been preserved for wildlife habitat – including a deer wintering area – as well as ensuring good water quality and fisheries habitat.

Current Use of the Property – There are no structures on the property. Wood has been commercially harvested, and hunting is allowed on the entirety of the property. Adjacent land-use activities include recreational use of the Granite Highland trail, spray irrigation of lagoon-treated sewage effluent on adjacent Town-owned land, and two commercial quarries that abut the town land to the east.

Proposed Use of the Property – Most of the property will be preserved in its natural state. Duck boxes will be placed to enhance wildlife habitat. Woody debris will be removed from streams to allow more free flow of water. Some limited forestry may be allowed to enhance the wildlife habitat.

Techniques to Conserve Habitat – The restoration areas are within clay-based wetlands and streams that have existed for centuries. The natural regeneration of softwoods will provide habitat for deer. The planned soil disturbances include the removal of a culvert, gravel and woody debris from a stream and a wetland. These areas will be loamed, mulched and seeded with wetland mix. The spray irrigation of land above this property ensures that its hydrology is sufficient to allowed existing conditions to persist for decades to come.

Easement – The conservation easement for the property would be held by the Thompson Conservation Commission, which currently holds a conservation easement on an adjoining parcel.

Landscape Context:

Proximity to Focus Areas – Deer wintering areas are critical to the long-term survival of deer in the area.

Proximity to other protected properties – This property directly abuts the approximately 300 acre Thomaston Town Forest that includes the 100 acres held in conservation easement by the Town of Thomaston Conservation Commission. It also abuts the Georges Highland Path.

Proximity to Important species in Maine – The project improves water quality for the Oyster River which has a strong native brook trout fishery and documented wood duck observations. The property also has a deer wintering area and amphibians associated with vernal pools.

Potential Adverse Impacts – There will be no adverse impacts to any protected natural resources.

Project Readiness

Land Purchase – The parcels considered for purchase have been appraised by the Pitson Agency, Inc (see Exhibit 4). The two landowners (Thorndike and Brooks) have agreed to sell the land to the Town but only at above the appraised price (the Town agrees with the higher price). Their letters are attached (see Exhibits 5 & 6). The Town has agreed to put the land into a conservation easement (see Exhibit 7).

Permits – Permits will be necessary from the MDEP and the ACOE to remove the culvert, gravel and organic debris from the wetland and associated stream corridor as well as the associated restoration plantings. Placing the wood duck nesting boxes requires a permit from the Town for work within the shoreland zone.

Access – The land is bounded on the east by the Thomaston Town Forest with a public hiking trail, and on the south by Studley Lane, a public road.

Steps to Complete the Project:

1) A preliminary wetland investigation has been conducted by a ME Certified Soil Scientist/ME Certified Wetland Scientist. (attached as Exhibit 3)
2) A wetlands delineation will need to be completed to inventory all wetlands and all areas of wetlands that have been impacted. (3 weeks)
3) A base map will be produced showing all wetlands and areas that are proposed for enhancement, restoration and preservation. (1 week)
4) A vernal pool survey will need to be completed during the flow frame when amphibians are breeding to determine if the potential vernal pools are significant. (1-3 weeks, requires 2 separate visits to all potential vernal pools)
5) A restoration and enhancement plan must be drafted and approved along with a planting plan, erosion control plan, and monitoring plan. (1-2 weeks)

Tangible Outputs:

1) Background data maps have been acquired, an inventory of wetland impacts has been taken and general inventory of wetlands as well as a functional analysis has been produced. (completed and summarized in this application)
2) A restoration enhancement plan with a base map showing the locations of proposed actions. The restoration/enhancement plan will include associated erosion control plan, planting plan and monitoring plan along.

Deliverables shall be produced within seven weeks of starting work on the project provided that weather does not significantly delay the project.

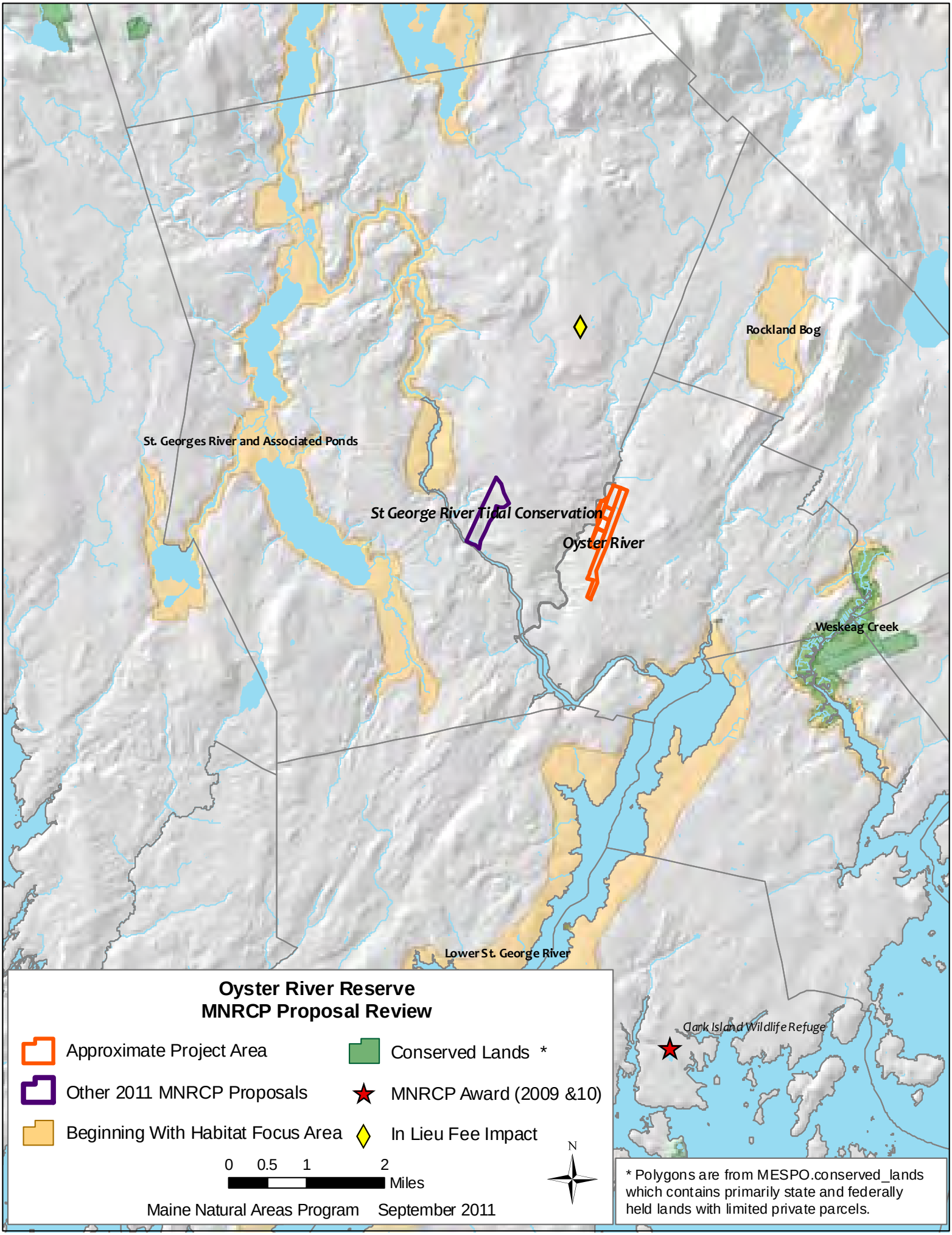
Short-Term Monitoring – A plan outlining the areas that are proposed to be restored by removing the culvert, gravel and woody debris will be produced with associated requirements for loam, seeding rates and other associated details. Another portion of the plan will show the locations of proposed wood duck nesting boxes along the Oyster River.

Stewardship & Long-Term Monitoring – In 1996 the Town established the Thomaston Conservation Commission (TCC) by ordinance (see Exhibit 8) and at the same time conveyed a deed of Conservation Easement on 100 acres in the Town Forest (see Exhibit 9) to them. The TCC has a long-term

management plan prepared and has had full responsibility for the land for the past 15-years. It is the intention of the Selectboard to follow a similar stewardship program on the parcel to be acquired with M.N.R.C.P. funding (see Exhibit 5). The TCC has two sources for their operating budget: an annual appreciation from the tax-based general fund and funds included in the user-based Pollution Control Dept. budget. The TCC budget has been in the $1,000 to $3,000 range for many years but will most likely increase if this funding request is successful.

MNRCP Project Budget

Acquisition and Associated Costs	
Value of fee lands or conservation easements to be purchased	$165,000
Appraisal costs	$1,500 PA
Title, legal and closing costs	$3,500
Land survey	$7,500 F&S
Environmental hazard survey	
Baseline documentation *(easement only)*	
Long-term management/stewardship planning	$5,000
Natural resource survey	$17,750 G&D
Restoration, Enhancement, or Creation Costs	
Restoration planning (Restoration Plans & Bid Administration)	$2,250 G&D
Personnel (Construction Oversight By Wetland Scientist)	$750 G&D
Site Work (Machine, Crew & Material - Estimated)	$7,500
Contractual	
Equipment	
Supplies	
Other	
Monitoring and Long-Term Management Costs	
Short-term monitoring costs (Site Inspection Once Per Year for 5 Years)	$2,500 G&D
Long-term management/stewardship costs	
Total Project Cost:	$213,250
Total Maine Natural Resource Conservation Program (MNRCP) Request:	$165,000
Other Funding Sources and Amounts: (Town of Thomaston)	$48,250


Rockland Bog
St. Georges River and Associated Ponds
St George River Tidal Conservation
Oyster River
Weskeag Creek
Lower St. George River
Clark Island Wildlife Refuge
Oyster River Reserve
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
Beginning With Habitat Focus Area
Conserved Lands *
MNRCP Award (2009 &10)
In Lieu Fee Impact
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Miles
N
Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

Maine Natural Resource Conservation Program
Pushaw Lake Fishway Project Proposal

Executive Summary:

Project Sponsor: Andrew Goode, Atlantic Salmon Federation, 14 Maine Street, Suite 406, Brunswick, ME 04011, 207-725-2833, andy@asf.comcastbiz.net

Project Location: Pushaw Lake Outlet Dam, Beechwood Avenue, Town of Hudson, Penobscot County

Summary Project Description: The restoration of sea-run alewives into the 5,051-acre Pushaw Lake will provide far ranging benefits to aquatic resources in the Penobscot River watershed including potential benefits to water quality, invertebrate and fish communities and wildlife such as birds of prey. The goal of this project is to reconnect Pushaw Lake and Little Pushaw Lake to the main stem of the Penobscot River and the Gulf of Maine by constructing a fishway at the outlet dam.

Estimated Project Cost:

- *Total Project Cost* = $312,865
- *MNRCP Fund Request* = $50,000

Resource Priority of Project Site:

- *Within or adjacent to a Beginning with Habitat Focus Area*: Pushaw Lake is in the center of a large (31,000) Beginning with Habitat Focus Area named the Caribou Bog Wetland Complex.
- *Within or adjacent to existing public or private conservation lands*: There are 4,929 acres of protected lands in this focus area, most associated with the lake and its tributary or outlet stream. These include 15 parcels of land ranging from 3 to 1,573 acres in size and held by: Mane Department of Inland Fisheries and Wildlife (IF&W), City of Bangor, University of Maine, Maine Audubon Society, Maine Bureau of Parks and Lands, and Bangor Land Trust
- *Within or adjacent to other natural resource priority areas*: The Caribou Bog Wetland Complex contains many state listed species and exemplary natural communities.
- *Contains natural resources of significant value and/or rarity:* There are 17 state and globally listed aquatic species in the area, along with intact brook trout populations and several migratory species documented in Pushaw Stream below the dam.

Type of Conservation: The project will restore migratory fish to 5,462 acres of lacustrine wetland habitat and will enhance another 83 acres of surrounding wetland emergent habitat.

Type Potential to Meet MNRCP Goals:

Original habitat type and the current habitat conditions: At some point over 100 years ago, Pushaw Lake was a freshwater lake that contained migratory fish such as sea-run alewives. Since that time an outlet dam has been built and the alewife run has been lost, though alewives have been documented occasionally below the dam.

Functional Benefits/Future Condition/Functional Lift: This fishway will reconnect Pushaw Lake, Little Pushaw Lake, Pushaw Stream, and all of the feeder tributaries to the main stem of the Penobscot River and the Gulf of Maine. It will restore 11 stream miles and 5,462 acres of lake habitat (Pushaw and Little Pushaw) for sea-run alewives and American eel. Given estimates by the Maine Department of Marine Resources (DMR) that Pushaw's carrying capacity for alewives is 235 returning adults per acre, production potential of 1,186,985 alewives for Pushaw and 96,585 alewives for Little Pushaw can be expected.

Given the large size and ideal spawning habitat in this system, we also expect that over time there will be a significant increase in marine derived nutrients (carbon, nitrogen, potassium) that can benefit all aquatic species in the watershed. Based on evidence elsewhere in the Kennebec watershed (Webber Pond) there is also the potential to improve water quality by removing excess phosphorous from Pushaw and Little Pushaw Lakes through the annual emigration of millions of juvenile alewives that feed on zooplankton containing phosphorous.

Over the past 15 years there has been a growing recognition that the river herrings (alewives, bluebacks, and shad) play a similar ecological role to Pacific salmon by being the conduit to bring marine nutrients far into a rivers, streams, lakes and wetlands. These nutrients are important to a wide variety of speices that live in and around the freshwater environment including, minks, otters, herons and birds of prey such as ospreys and eagles. In June 2011, IF&W eagle biologist Charlie Todd documented the largest aggregation of bald eagles he had seen in his career in Maine (pers. comm.). The eagles were observed on the Sebasticook River feeding on the alewife run that was restored following the construction of fishways on the river. We can expect similar and even larger events in the Penobscot watershed as lakes such as Pushaw are reconnected once again to the ocean.

Indirectly, the restoration of a significant run of alewives into the Pushaw system will benefit federally endangered Atlantic salmon (2009). Alewives are thought to be the most important co-evolved fish to Atlantic salmon, as they serve as a prey buffer to multiple salmon age classes including fry, parr, adults and particularly to emigrating salmon smolts in the spring. We anticipate the re-colonization of severely diminished species as well, such as the state-listed mussel brook floater that depends on alewives for transport.

Describe the level and type of threats to resources on and adjacent to the property: Historically, alewives ranged from South Carolina to Newfoundland. In recent decades, alewives and their close relative blueback herring (together referred to as river herring) have been in decline across their range. In 2006, both species were listed as a “species of concern” by NOAA's National Marine Fisheries Service.

The only commercial fisheries for river herring on the East Coast are in Maine. Here, the population continues to thrive where it has access to spawning habitat. These commercial fisheries still provide important revenues for many towns. These towns, including Ellsworth, New Castle, Nobleboro, Orland and more recently Benton (Sebasticook restoration), earn $5,000 to $25,000 in bait dealer permit fees.

The Penobscot River watershed covers one-third of Maine yet alewives can only be found in a few small tributaries below the main stem dams. The absence of alewives in the Penobscot watershed, which probably numbered in the hundreds of millions at one time, means that aquatic communities within the Penobscot drainage, its estuary, and the marine environment in the Gulf of Maine are without this once bountiful source of food. Subsequently, everything in these food webs is negatively impacted. Pushaw Lake is one of the two largest Phase I ponds targeted for immediate alewife restoration in the State of Maine's Operational Plan for the Restoration of Diadromous Fishes to the Penobscot River (2009).

Describe the current and proposed buffers on the project site: Current Maine regulations have protections on the shorelines and wetlands around Pushaw Lake and Little Pushaw Lake.

Describe the current use of the property and the land use activities in the area surrounding the property:
The current use of the property is a low head concrete dam at the outlet of Pushaw Lake that exists to maintain lake levels. The dam has a gate that allows modest manipulation of the lake levels by the dam association. The land surrounding the property on both sides of Pushaw Stream is extensively forested and relatively remote for being so close to Bangor. The Orono Land Trust (the Orono town line is very close to the dam) is active in the area and has targeted the land around the dam for acquisition (pers. comm. with Bucky Owen, board member).

Describe the proposed use of the property and any proposed management: The proposed use is for the dam to stay in place to control lake levels and for a fishway to be constructed that will be open during the spring and summer migration periods. Given the potential size of the run, a commercial harvest could be allowed at some point in the future by DMR.

Describe the specific techniques and methods that will be used to conserve the habitat:
A Denil fishway will be installed at the site to allow passage for migratory fish such as alewives. The US Fish and Wildlife Service and DMR have collected flow data above and below the dam, analyzed the nearest gauging stations and estimated an overall water budget that predicts inflows and outflows of Pushaw Lake. As a result of this work, the project will include removing the flow gate in the middle of the dam and replacing it with a new gate adjacent to the fishway that will include removal slots for adult and juvenile emigration. The fishway will use 6 cubic feet of water per second and, given the large surface area of the lake, engineers have said the most this could affect lake levels is one-half inch. While the existing gate can only be wide open or completely shut, the new gate can be adjusted in small increments and will eliminate the water fluctuations that now occur in Pushaw Lake. We anticipate completing the final design and necessary permits for construction by March 2012, with construction to occur over a 60-day period in the late summer of 2012. A soil disturbance and revegetation plan is included in the final engineering design scope of work that has been contracted.

Describe the level of support and involvement of other relevant agencies, organizations, and local community: Over the past two years, DMR, the Atlantic Salmon Federation (ASF) and its Maine Council have conducted public outreach in the watershed to camp owners and the local communities. DMR's Richard Dill has been the lead in this work along with assistance from ASF's Andrew Goode and ASF Maine Council volunteer, Bucky Owen. Two presentations have been made to the Greater Pushaw Lake Association (GPLA) about the work of the State and others to restore sea-run fish to the Penobscot, the historical significance of Pushaw Lake to river herring, and the potential impact of sea-run alewives on Pushaw Lake. Richard Dill has also conducted two publicly noticed meetings in the watershed to talk about alewives and the work being done to restore this species in the Penobscot watershed. As a result of these outreach efforts, the GPLA, which represents over 900 camp owners around Pushaw Lake, and the Kukunsook Camp Owners Association (KCOA), which owns the dam, have both expressed their support for the fishway.

There are numerous agencies and organizations that support this project, including the US Fish and Wildlife Service, NOAA Fisheries Habitat Restoration Center, Maine Department of Marine Resources, Maine Department of Inland Fisheries and Wildlife, The Nature Conservancy, Greater Pushaw Lake Association, and the Kukunsook Camp Owners Association.

Landscape Context:

Describe the proximity / benefits to statewide focus areas for land conservation (Beginning with Habitat Focus Area) or habitat preservation identified by a state agency, or other regional or municipal plans: The Caribou Bog Wetland Complex, a Beginning with Habitat Focus Area, extends from near Stillwater Avenue in Orono, northwest along the east shore of Pushaw Lake, to Whitten Bog in Alton. The location, size and depth of Pushaw Lake make the potential for alewife production extremely high. DMR has estimated the restoration potential of adult alewives at 1.3 million adults, making it the highest priority restoration lake in entire southern half of the Penobscot watershed (State of Maine's Operational Plan for the Restoration of Diadromous Fishes to the Penobscot River (2009)). The marine-derived nutrients that will be represented in the alewife run have the potential to positively impact all the aquatic food webs in this Focus Area as well as such as bald eagles and ospreys.

Proximity to other public or private protected properties: There are 4,929 acres of protected lands in this Focus area, most associated with the lake and its tributary or outlet stream. These include 15 parcels of land ranging from 3 to 1,573 acres in size and held by: IF&W, City of Bangor, University of Maine, Maine Audubon Society, Maine Bureau of Parks and Lands, and Bangor Land Trust.

Describe the proximity / benefits to important species in Maine: The species in this area (not including upland species): Long-leaved bluet (S2S3); New England violet (S2, G4Q),Water stargrass (S3) ,Wild garlic (S2); Vasey's pondweed (S2, G4); Least bittern (S2B); Common moorhen (S2B); Sedge wren (S1B); American coot (S2B); Black tern (S2B, G4); Bald eagle nesting sites (State special concern); Spotted turtle (S3); Wood turtle (S4, G4); Common musk turtle (S3); Brook floater (S3, G3); Yellow lampmussel (S2S3, G3/G4); and Tidewater mucket (S2, G3G4)

Animal habitat: The lake and most of its tributaries harbor intact brook trout populations, documented through Eastern Brook Trout Joint Venture surveys with IF&W. American eel and blueback herring have been documented in Pushaw Stream just below the lake outlet.

For more than a decade, ASF and others have advocated that Atlantic salmon recovery may well depend on the recovery of the native assemblage of diadromous fish with which salmon co-evolved. Of particular importance to Atlantic salmon are alewives. As still seen in countless Canadian Maritime rivers, the spring migration of adult alewives serves as a prey buffer for emigrating Atlantic salmon smolts. Their sheer numbers and higher caloric content make alewives a preferred alternative prey resource (i.e., prey buffer) that protects salmon smolts from native predators such as cormorants, otters, ospreys, and bald eagles. Additionally, the adult migration of alewives likely provides some buffer predation on Atlantic salmon adults by otters and seals. Though alewives typically enter the river earlier than adult salmon, there is some temporal overlap. As still seen in many Canadian rivers, there is a substantial out-migration of post-spawn adult alewives into the estuary as salmon adults are arriving or staging in the estuary before their upriver migration.

Potential adverse impacts: There are no known potential adverse impacts to protected natural resources or rare species. The question of whether the restoration of alewives will benefit the illegally introduced pike population has come up, but IF&W and DMR have stated that there is already an abundance of forage fish in Pushaw Lake and the alewives will not affect this population.

Project Readiness

Landowner willingness: The dam at the outlet of Pushaw Lake is owned by KCOA, which represents approximately 100 camp owners along the southern end of Pushaw Lake in the towns of Hudson and Old Town. They approved moving ahead with the project at their 2011 annual meeting (see attached letter).

Required permits: State of Maine DEP Permit by Rule, Town of Hudson Shoreland Zoning Permit, Army Corps of Engineers General Construction Permit, Atlantic salmon ESA consultation with USFWS. We will secure these permits over the fall and winter of 2011-12. A legal Right of Way exists from Beechwood Avenue to the dam site.

Project Sponsor Capacity: ASF has completed 11 dam fish passage projects in Maine over the past decade ranging from $65,000-$350,000, and many more outside of Maine. We have three staff in the Brunswick office with a combined 31 years of experience in this type of work. We are setting aside funds for long-term maintenance and have an extensive volunteer network that assists with outreach and long-term monitoring of our fish passage projects. We have already secured all funds for both phases of the engineering work and have several commitments for construction.

Economic Activity: Approximately $250,000 of the budget will go towards employing Maine engineering and construction firms. This project will restore a run that we anticipate could well include a commercial harvest in 16 years (four generations). Restored alewife runs in the Kennebec are attracting large numbers of eagles and ospreys which can provide viewing benefits to the public.

Timeline/Outputs:

2009 – 2012: Public outreach and education in the watershed to camp owners and the local communities by staff from DMR, ASF, and ASF's Maine Council.

2010 – 2011: Preliminary engineering design completed (this is actually 70% of the total engineering design)

August 2011: Approval secured from KCOA to proceed with final engineering, construction and development of an operations and maintenance plan

Fall 2011 – Winter 2012: Contracted final engineering design; apply for necessary permits

Spring 2012: Alewife stocking anticipated by DMR in Pushaw

August – September 2012: Construction of fishway over 60-day period

Fall 2012- 2014: Short term monitoring of flows and fishway operation

2013- : Long term monitoring of fishway/alewife run

Short-term monitoring plan: DMR will begin monitoring the dam and fishway after it stocks alewives into Pushaw Lake in the spring of 2012. It will look at the how the outmigration of adults and then juveniles occurs at the fishway and dam site. This stocking is expected to continue for four years. An increased level of monitoring will begin in 2015 when the first significant numbers of adults is expected to return. For the first three years, ASF will be responsible for monitoring lake levels as well as monitoring the operation and functioning of the fishway. A third party fish passage/engineering consultant will be hired after construction of the fishway to ensure the structure was built as designed.

A long-term stewardship and monitoring plan: An Operations and Maintenance Plan for the fishway is currently being developed between DMR and the dam association (KCOA). The dam association will own the fishway and be responsible for its care. The dam association has assigned several of its members to work directly with DMR staff who have developed similar plans at other fishways in Maine. In general, it is anticipated that volunteers from the dam association will continue to be the local 'eyes and ears' to watch over activity at the dam and fishway, clear debris, and operate the gate based on an agreed upon schedule with DMR. DMR staff will monitor the fishway during the spring migratory season and monitor the outmigration of juveniles in the fall. They will also be available to assist KCOA as needed from their nearby Bangor office. ASF will establish a fishway maintenance fund that will be established in the dam association's name specifically for the care of the fishway. These types of Denil fishways are made of concrete and typically require minimal maintenance. The principal wear item is a series of wooden baffles that typically last 10 years and can be inexpensively replaced.

MNRCP Project Budget

Project Costs	
Restoration, Enhancement, or Creation Costs	
Restoration planning (incurred)	4,000
Personnel: ASF Staff (project management, permitting, contracting, admin) incurred and ongoing	11,000
Contractual: Engineering Prelim Design, field studies, meetings (incurred) $14,365 Engineering final stamped design (incurred) $14,000 Construction (estimated in preliminary design) $245,000	273,365
Other: Legal – deed, ROW reviews, contract preparation, document reviews $5,500 Community Outreach $2,600 Permitting application fees, studies, bid notices, supplies (estimate) $2,400	10,500
Total	**298,865**
Monitoring and Long-Term Management Costs	
Short-term monitoring costs*	2,500
Long-term management/stewardship costs†	11,500
Total	**14,000**
TOTAL PROJECT COSTS	**$312,865**

* For restoration, enhancement or creation, a five-year monitoring term is typical, with a potentially longer period for resources with slow development rates. Preservation projects do not require short-term monitoring.

† Funded projects are expected to protect priority resources "in perpetuity," which requires an entity with the resources and expertise to ensure long-term management and stewardship. A financing mechanism (e.g., endowment, trust, or long-term financing plan) is required to ensure adequate funding is available over time, though all the funds needed for establishment do not need to be included in MNRCP request.

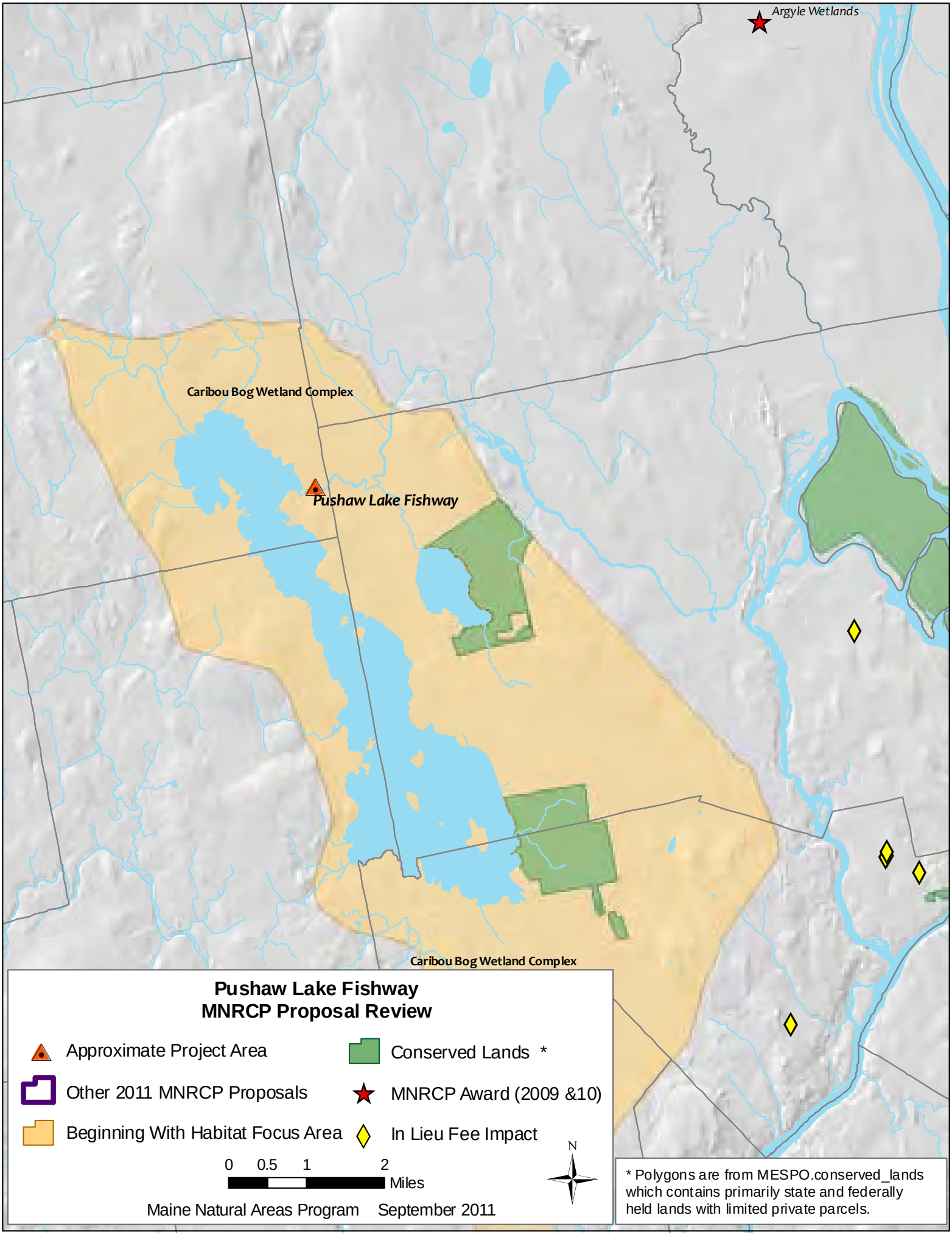
Project Funding Sources	
Total Maine Natural Resource Conservation Program (MNRCP) Request:	50,000
Other Funding Sources and Amounts:	
In-kind: USFWS Partners Program: $14,365 (2011), $4,660 (2012) committed DMR: $6,500 (2010 – 2012) ASF Volunteers: $1,700 (2010 – 2012)	27,225
Cash, Committed: USFWS Gulf of Maine Office: $16,000 USFWS Partners Program: $20,000 pledged for 2012 NOAA Restoration Center: $10,000 Atlantic Salmon Federation: $30,000 The Nature Conservancy: $25,000 Maine Corporate Wetlands Restoration Partnership: $7,500	108,500
Cash, Applied For or To Be Applied For: The Nature Conservancy $15,000 NOAA Restoration Center: $62,140 Maine Corporate Wetlands Restoration Partnership: $15,000 Maine Outdoor Heritage Fund: $25,000 Davis Conservation Foundation: $10,000	127,140
TOTAL PROJECT FUNDING	**$312,865**

Note: We recognize MNRCP funds are mitigation and cannot be used as match. USFWS funds in this project do not require match and we have a surplus of private funds to match NOAA federal dollars.

Attachments

Landowner Support Letter
- Kukunsook Camp Owners Association

Conceptual Design for Fish Passage
Location Map
Site Photos
Support Letters
- Greater Pushaw Lake Association
- The Nature Conservancy
- Maine Department of Marine Resources
- Maine Department of Inland Fisheries and Wildlife
- NOAA Restoration Center
- Maine Audubon


Argyle Wetlands
Caribou Bog Wetland Complex
Pushaw Lake Fishway
Caribou Bog Wetland Complex
Pushaw Lake Fishway
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
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0 0.5 1 2
Miles
N
Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

Executive Summary:

Project Sponsor -Saco River Recreational Council

Executive Director Bob Tagliaferri-603-447-2177

Conservation/education program-Michelle Broyer-207-256-7158

Project Location -*Swans Falls Campground and river access, 198 Swans Falls rd, Fryeburg, Oxford County, Maine 04037 (see attached Google image)*

Summary Project Description

Goal: It is the goal of the Saco River Recreational Council to restore/stabilize the banks of the Saco River in the vicinity of Swans Falls and develop a unique outdoor education facility. Included in these efforts would be to complete the following tasks:

- Restore/stabilize bank through engineered measures to ensure that the bank maintains the current geometry and does not jeopardize the valuable land behind the bank.
- Provide appropriate natural vegetated buffers between the top of the Saco River bank and the user areas.
- Provide defined and limited human access to the river so as to limit the human impact on the river bank (non access areas) and surrounding natural resources.

Area 1: the beach area immediately below the dam (see exhibit C attached)
Area 2: the portion of stream bank that was previously stabilized and still have rock along the bank
Area 3: the larger erosion area where canoe and use drop offs occur.

Here is a summary of my conceptual design considerations -Josh McAllister HEB Engineering, Conway, NH

Area 1: Beach below dam

Provide approximately 125-150 linear feet of stabilized river bank at the interface of the beach and the trees. Currently, in this area there are eroded roots and about a 4' high vertical face at the back of the beach sand. The restoration would be completed by using either large rip rap stone or bio-engineered measures such as gabion baskets with willow stakes or green walls.

On either end of the bank stabilization (in the area of the exposed roots on the dam side) provide defined human access points (ramp or stairs) to limit disturbance in the area surrounding the beach.

Provide a defined gravel path at the top of the stabilized bank in the same location as the current use path. Path should include delineators to prevent people from straying from the path and trampling the wooded areas.

o Clean up and restore approximately 6,000 square feet of the disturbed are between the pathway and the paved roadway to the drop off. This should be re-vegetated.

Area 2: Previously stabilized bank

Approximately 300 linear feet of previously stabilized bank exists between Area 1 and Area 3.

Approximately 200 linear feet of this area should have a 30' wide vegetated buffer installed.

Barriers should be included in this area to limit people from entering the vegetated buffer.

Area 3: Boat launch/unload area

Restore/stabilize approximately 175 linear feet of 12' high river bank. Bank stabilization should be completed with a bio-engineered measure or a structural

measure that promotes vegetated growth. Similar to Area 1 this can be accomplished in multiple ways.
Provide one defined access point to the river from the parking lot.
Provide/restore a 30' vegetated buffer along the bank.

Estimated Project Cost:
Total Project Cost $300,000
MNRCP Fund Request $300,000

Resource Priority of Project Site:

Within or adjacent to a Beginning with Habitat Focus Area
Upper Saco River, Fryeburg, Maine *See BWA map attached*
http://www.maine.gov/doc/nrimc/mnap/focusarea/upper_saco_river_focus_area.pdf
See this link for the "Focus Area of Statewide ecological Significance

Within or adjacent to existing public or private conservation lands
Swans Falls campground and river access, Maine Dept of Conservation, -*see attached map*
Abraham Krasker/ Fryeburg Bog Conservation area
Brownfield Bog Wildlife Area
Inland and Fisheries Wildlife areas
TNC Mt. Tom Conservation lands

Within or adjacent to other natural resource priority areas
Within the White Mtn National Forest and the Saco River Valley
Brownfield Bog Wildlife Management area

Contains natural resources of significant value and/or rarity
Many fishing, bird and wildlife habitats, eagles, herons, kingfishers, loons, turtles and many other rare species habitats.
Water supply for millions of people including for local farmlands
One of the cleanest rivers in the eastern US
A primary recreational river access with thousands of visitors annually

Type of Conservation

Natural Resource Type	Restored acres	Enhanced acres	Preserved acres	Created acres	Total acres
Freshwater Resources	Freshwater wetland, emergent (PEM)				
	Freshwater wetland, forested (PFO)	Potentially many miles			
	Freshwater wetland, shrub-scrub (PSS)	Potentially many miles of the upper Saco River			

	River, stream or brook	Protect over 50 miles of river			
	Significant wildlife habitat, vernal pool (*indicate number of pools if necessary*)	x			
	Significant wildlife habitat, vernal pool critical terrestrial habitat	x			
	Significant wildlife habitat, Inland Waterfowl and Wading Bird Habitat	x			

Potential to Meet MNRCP Goals:

The Saco River Recreational Council is a non profit organization, organized in 1983 who manages Swans Falls Campground and river access and leases the property from the Maine Dept of Conservation - Bureau Parks and Lands since 2007. We have their permission for this project. Written permission coming if needed for the purposes of this grant request. This campground and river access is a heavily forested, scenic, riverine and recreational area used by thousands of visitors from all over the world each season. See the attached IF&W wetlands map and Google Earth image showing this precious resource.

The educational and conservation efforts of the SRRC at Swans Falls campground and Access areas in the 20 mile stretch of the Upper Saco River in Fryeburg has been greatly beneficial in teaching respectful and responsible use of this unique recreational resource. We are teaching Leave No Trace and Outdoor ethics to our visitors through our websites, online media, new brochures, maps and river guides and outreach events. We monitor and educate for aquatic invasives on incoming boats and invasive pests on firewood. Our educators and river runners assists visitors at landing as well and direct them for orderly access to the river, makes sure they have a solid and safe plan for their overnight or day trips on the Saco River. Due to the abundance of visitors and recreators on the Upper Saco River we need to continue to protect, manage, preserve, and maintain these efforts and continue with the progress that has been made over the past few years including funding the law enforcement efforts on this recreational waterway to protect the habitats of many different wildlife, riverine and terrestrial habitats. There is no other riverine system like the Saco River. It is a major water supply for many communities both in Maine and in NH. We have the ability at this facility to protect the environment through, education, management, and our conservation efforts and our law enforcement commitments, but need your help to move forward. The benefits of this project will be immeasurable including, educating respectful use of this resource and protecting from the many invasives along with riverbank protection will ensure this resource will be around for generations to come.

Funding for this project would help re-inforce the river banks and protect from continued erosion from both environmental and human factors. Restore sections of the river bank and develop clear pathways and needed reinforcement for access areas to protect from human access not necessary for river access by defining such areas with signage and vegetative barriers, etc. Stairway or ramps will prevent any human effects on the access areas along with refoliation. This will lift the

functionality of the access areas and protect from continued environmental and human effects and make it more aesthetically pleasing. We have been experiencing major flooding 2 or more times per year which is causing extensive erosion and spreading of invasive terrestrial plant life.

We are managing the spread of invasive Black Locust and Japanese knotweed currently propagating on this property. Currently cutting and monitoring sprouts of Black Locust and the need to address the issue of Japanese Knotweed on the river banks here at Swans Falls and Canal Bridge river accesses. Canal Bridge access is owned by the town of Fryeburg but leased by the SRRC and they would give permission for management of these invasives, erosion and conservation projects for this access area.

We would like to protect and expand this facility and develop a unique outdoor education facility teaching Leave No Trace, protect from Invasive beetles, invasive aquatic plants such as Milfoil and provide outreach programs for the protection of the Saco River. This is the perfect demographic for this type of facility and with your help we can make a difference.

See the project description for the methods of protecting the erosion issues at Swans Falls access areas including a type of ramp or stairs for access areas 1 and 3 including reclaiming some vegetation within the bankings not used for river access. Increase education team, river runners and law enforcement to build a solid program here on the Upper Saco River.

The Saco River Recreational Council has a great working relationship with local law enforcement on the river and access areas working hand in hand to ensure people know the rules and are being safe and properly dispose of their trash and environment.
The Nature Conservancy has been a great supporter of our project over the years and we would not be where we are without their help. We are extremely thankful for their contributions. We are trained Courtesy Boat Inspectors and receive grant assistance from the Maine DEP and the Maine Invasive Aquatic Plants program. Our staff was also trained by the Maine Dept of Agriculture and Maine Forest Service for the invasive beetles and firewood programs. We have partnered with the National Leave No Trace Center for Outdoor Ethics, and receive some grant assistance from other environmental grants, private donations, LL Bean, and Nestle Waters.

Format for MNRCP Project Budget

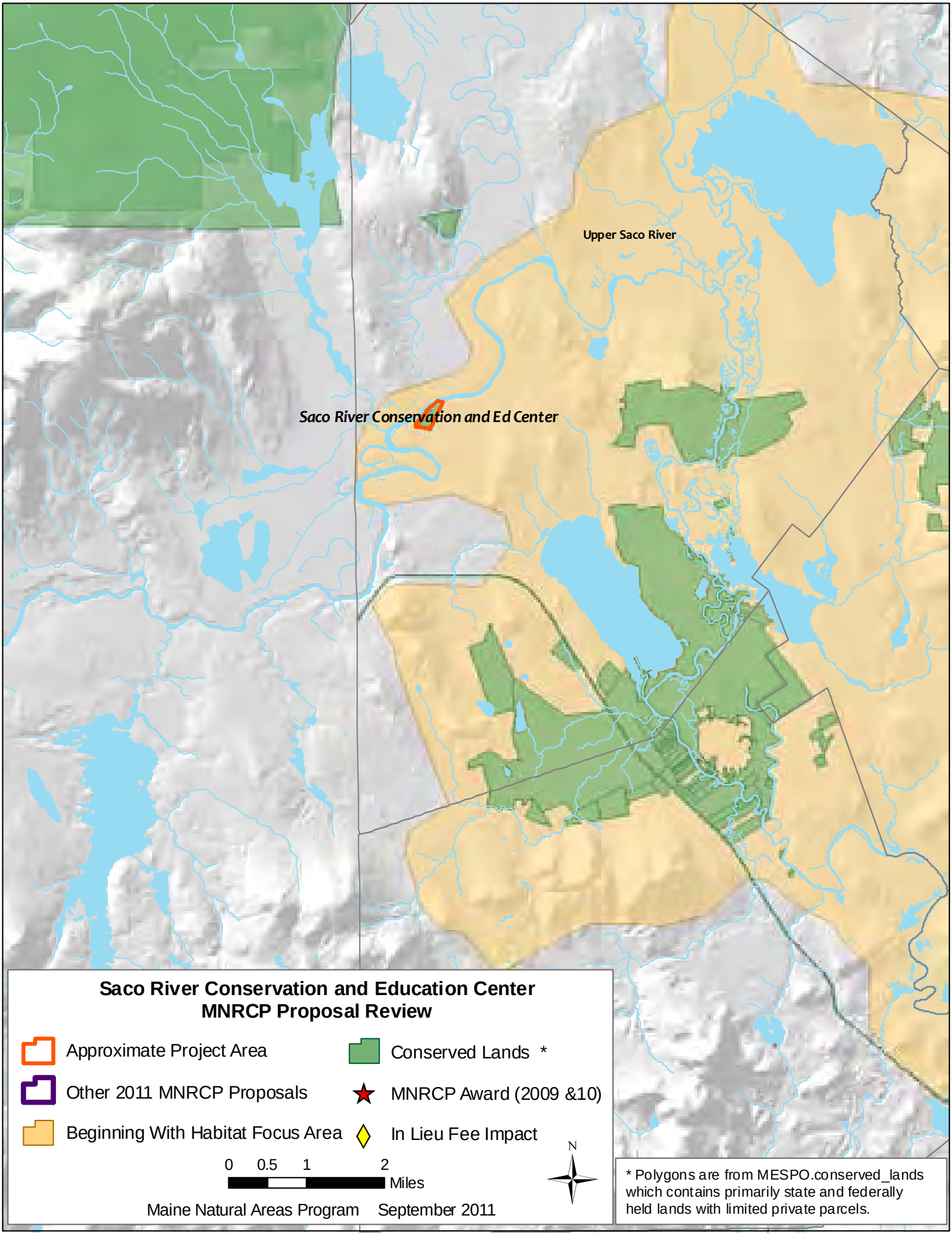
Identify costs as actual incurred or estimated. Describe the basis for any estimated costs.

Acquisition and Associated Costs	0
Value of fee lands or conservation easements to be purchased# Land Acquisition or Conservation Easement Costs must based on an Appraisal completed within the past two years, in accordance with the Uniform Standards of Professional Appraisal Practice (USPAP). A copy of the final appraisal must be provided and consist of a complete appraisal and a self contained appraisal report. #	No Acquisition

Restoration, Enhancement, or Creation Costs	
Restoration planning	(Survey, design by HEB) = $15,000
Personnel	15,000
Site Work	$200,000
Contractual	15,000
Equipment	15,000
Supplies	7500
Other	10,000

Monitoring and Long-Term Management Costs	
Short-term monitoring costs# For restoration, enhancement or creation, a five-year monitoring term is typical, with a potentially longer period for resources with slow development rates. Preservation projects do not require short-term monitoring.#	10,000
Long-term management/stewardship costs# Funded projects are expected to protect priority resources "in perpetuity," which requires an entity with the resources and expertise to ensure long-term management and stewardship. A financing mechanism (e.g., endowment, trust, or long-term financing plan) is required to ensure adequate funding is available over time, though all the funds needed for establishment do not need to be included in MNRCP request. #	Property of the Maine DOC Parks and Lands

Total Project Cost:	$300,000
Total Maine Natural Resource Conservation Program (MNRCP) Request:	$300,000


Upper Saco River
Saco River Conservation and Ed Center
Saco River Conservation and Education Center
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
Beginning With Habitat Focus Area
Conserved Lands *
MNRCP Award (2009 &10)
In Lieu Fee Impact
0 0.5 1 2
Miles
N
Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

Maine Natural Resource Conservation Program
Sebasticook River Conservation Land Acquisitions

Executive Summary:

- Project Sponsor
  Jennifer Irving, Executive Director, Sebasticook Regional Land Trust
  P.O. Box 184, Unity, ME 04988
  (207) 948-3766 email: jennifer@sebasticookrlt.org

- Project Location (*town, county, physical address*)
  A) Sousa Property (200 acres)
  Burnham, Waldo County
  Located off Troy Road and Battle Street
  Tax Maps & Lots: 5-19, 5-22, 8-15A

  B) 25 Mile Stream Parcel (439 acres)
  Unity, Waldo County
  Located off Prairie Road
  Tax Map & Lot: 10-31

- Summary Project Description (*project context, goals, type of conservation, method*)

  Sebasticook Regional Land Trust (SRLT) is working with willing landowners to purchase fee title to two properties in the Sebasticook River Watershed within the northern portion of the Unity Wetlands Focus Area. The 200-acre Sousa Property is situated near the confluence of the Sebasticook River and 25 Mile Stream on the northern boundary of a 5,600-acre unfragmented block, offering opportunity to conserve rich habitat, protect extensive stream frontage and maintain connectivity. The 439-acre 25 Mile Stream Parcel, located upstream on 25 Mile Stream at the southeastern edge of the same block, is a new conservation opportunity that arose in late August 2011. With TNC approval, SRLT proposes this parcel as part of our Sebasticook River Conservation Land Acquisition Project. One of the largest, contiguous single-owner parcels remaining in the Focus Area and with significant undeveloped stream frontage, it is situated within an active conservation corridor in an area of concentrated biological diversity. Combined, these acquisitions provide opportunity to protect 3 miles of rich riparian buffer, stop land uses detrimental to water quality and wetland function, and fortify the buffer for an existing conservation corridor. SRLT will pursue restoration on both properties via removal of inappropriate uses and increased buffers.

- Estimated Project Cost:
  - Total Project Cost: $518,280 MNRCP Fund Request: $395,492

- Resource Priority of Project Site:
  - Within or adjacent to a Beginning with Habitat Focus Area: *Unity Wetlands*
  - Within or adjacent to existing public or private conservation lands: Adjacent to *SRLT Conservation Easement*
  - Within or adjacent to other natural resource priority areas: *Conservation priorities identified in the Unity Wetlands Conservation Plan, supports goals of Unity and Burnham Comprehensive Plans*
  - Contains natural resources of significant value and/or rarity: *silver maple floodplain forest, Atlantic salmon breeding & rearing habitat, tidewater mucket and yellow lampmussel (state endangered), wood turtle, northern leopard frog and wild leek (state special concern), swamp white oak (state threatened), yellow-throated vireo (Species of Greatest Conservation Need)*

- Type of Conservation (*complete the following table*):

Natural Resource Type		**Restored acres**	**Enhanced acres**	**Preserved acres**	**Created acres**	**Total acres**
Freshwater Resources	Freshwater wetland, emergent (PEM)	5		5		5
	Freshwater wetland, forested (PFO)	265		265		265
	River, stream or brook			3miles		3 miles
Upland buffer (non wetland habitat)				374		369

Project Total					**639**

A) SOUSA PROPERTY

Potential to Meet MNRCP Goals:

Habitat Type & Conditions: Located on the northern boundary of an extensive unfragmented block, the 200-acre Sousa property provides a mix of habitat types including floodplain forest, grassland, upland forest and wetlands. Based on aerial photos and NWI maps, the property is comprised of at least 45 acres of forested wetlands, 3 acres of emergent wetland created in part by the rail line crossing the property, and 150 acres of upland mid-successional forest. These lands serve as an important wildlife corridor between the Sebasticook River and 25 Mile Stream and into the large undeveloped block to the south. The white pine forest, silver maple floodplain forest and interior forested wetlands have not been subject to active management, with no timber harvesting for an estimated 25 years. The property's grasslands, important for nesting birds like bobolink and meadowlark, have historically been managed for agricultural use (no activity in 2010-2011). Previous pasture and hayland use encroached on the property's emergent wetlands; light off-road vehicle use has encroached upon forested wetland in the southeast corner of the property.

Functional Benefits: The functions and values of the Sousa Property include:

- *Wildlife Habitat:* As part of an 8,000-acre mostly unfragmented block, the property offers significant habitat value in terms of ecosystem function and connectivity.
- *Fish & Shellfish Habitat:* The property includes more than 1 mile of frontage on 25 Mile Stream and the Sebasticook River, which offer habitat for Atlantic salmon, tidewater mucket and yellow lampmussel.
- *Floodflow Alteration:* The wetlands on the site feature broad, well-vegetated areas with organic soils capable of absorbing floodflow and/or sustaining high water levels.
- *Nutrient Removal:* The wetlands on the site are saturated wetlands with deep mineral and organic sediment deposits capable of trapping and converting nutrients.
- *Production Export:* The site's vegetation and plant structure are capable of supporting wildlife, with clear evidence of use by higher trophic level consumers.
- *Visual Quality/Aesthetics:* Preservation of the property's riparian buffers enhances the paddling experience on 25 Mile Stream and Sebasticook River.
- *Recreation:* The property is heavily used by moose, deer and gamebirds, and will be open to hunting, fishing and trapping. With careful trail creation, the property will provide rare public access to 25 Mile Stream as well as the Sebasticook River.
- *Sediment/Shoreline Stabilization:* Forested wetlands on the site have a dense resilient herbaceous layer capable of stabilizing sediments.

Functional Lift: This acquisition will ensure silver maple floodplain forest conditions are maintained in their current good condition. Additional forested wetlands and emergent wetlands on the site will have opportunity to rebound due to removal of inappropriate land use, off-road vehicle use and increased buffers.

Resource Threats: The natural resources on these parcels are threatened by poor land use practices (forestry and agricultural operations) and conversion for residential use. If the SRLT does not secure the funds needed to purchase the property by spring 2012, the property will be placed on the market. The Sousa property's extensive water frontage and good soils leave it vulnerable to division for house and camp lots. Subdivision of the Sousa property would hasten fragmentation of the large unfragmented block to the south. Agricultural uses on the property – pasture and hayland – have occurred within emergent wetland and without appropriate riparian buffer along 25 Mile Stream. Prevention of development and poor land use practices along the more than 1 miles of frontage included in this project is protective of water quality and the countless species associated with riparian corridors. Adjacent land use is residential, working woodlot and agricultural in nature. Large woodlot parcels to the south and east are a mix of individual and timber company holdings that have experienced relatively stable ownership in woodland resource management over the past decade; management objectives of future owners are impossible to predict.

Buffers: More than half of the project area is upland forest providing adequate buffer for the silver maple floodplain and connectivity to the habitat block to the south. Additional forested wetlands on the southeastern portion of the site extend

beyond project boundaries; the portion located within the project area has adequate upland buffer to protect ecological function. These buffers will be maintained with a minimum 250-foot setback in future timber harvests. The emergent wetlands on the northern parcel are currently surrounded by unmanaged grassland. Under SRLT ownership, the grasslands will be managed for grassland nesting birds and hay, with a setback along emergent wetlands.

Current Use: The property is moderately natural with some site disturbance, but the disturbance does not negatively affect the intended uses of the property. The old Belfast & Moosehead Lake rail line crosses the property, which is within a half-mile of the defunct line's terminus. Nearly 80 percent of the project area is woodlot that has not been harvested in at least 25 years. The property's grassland (approx. 35 acres) was most recently managed for pasture and hay. The property is lightly used by paddlers and sportsmen. The landscape context is rural, with light residential and agricultural development to the north and west and managed timberland to the south and east.

Proposed Use: Under SRLT ownership, the Sousa properties will be managed for sustainable forest resources, wildlife habitat, compatible public use and hayland.

Forest management: A forest management plan will be completed by a licensed professional forester meeting incorporating principles of Focus Species Forestry, focused on improving woodland habitat and forest health. A timber harvest in accordance with the forest management plan is anticipated within the first two years of ownership. There will be no commercial timber harvest within the floodplain or forested wetlands.

Wildlife habitat: SRLT will work with NRCS and other resource professionals to implement habitat improvements. These will include delayed mowing to allow for grassland nesting birds, installation of bird boxes, and other recommendations of the forest management plan. Agricultural operations within and along emergent wetlands will be discontinued to prevent further habitat degradation.

Public use: SRLT grants non-motorized public access to its conservation properties. Because this project has been named a finalist for Land for Maine's Future support, it must be open for hunting, fishing and trapping. Footpaths will allow for pedestrian access to the water. When a timber harvest is conducted, skid trails will be designed for conversion to post-harvest walking trails. Footpaths will avoid sensitive wetland habitat.

Hayland: SRLT intends to return the grasslands to hay production and lease them to a nearby farm. All operations will be conducted in accordance with an NRCS Conservation Plan, with specific management requirements to include mowing only after July 30 and setbacks from wetlands. Pasture operations will be prohibited.

Habitat Conservation*:* SRLT will acquire fee title to the property. Silver maple floodplain forest and forested wetlands on the southeast corner of the property will be conserved via designation of "Ecological Protection Areas" in which there will be no commercial timber harvest. Emergent wetlands will be conserved via upland buffers for all agricultural activity. These resources will be further protected by prohibition of off-road vehicle use in the preserve. Public trails will be designed to avoid impacting sensitive resources.

Project Support: The Sousa acquisition has garnered widespread support from the community and other agencies, including the Town of Burnham, Sebasticook River Watershed Association (proposal support) and Maine Dept. of Inland Fisheries and Wildlife (project sponsor for Outdoor Heritage Fund and Land for Maine's Future). The project has received financial support from numerous funders, as noted in the project budget.

Landscape Context:

Statewide Focus Area: The Sousa Property is located within the Unity Wetlands Focus Area and its acquisition supports the goals of the Unity Wetlands Conservation Plan drafted by SRLT in partnership with The Nature Conservancy and Natural Resources Conservation Service (available upon request). Conservation plan targets benefited by this acquisition include: hardwood floodplain forest, contiguous upland forest, rare/threatened/endangered aquatic and riparian species, wetland systems, grassland habitat for nesting birds, agricultural lands and public open space. This acquisition, with its more than 1 mile of river and stream frontage, also compliments nationally-recognized river restoration efforts on the Sebasticook River. Open space and public-access recreational lands are targets identified in the Burnham Comprehensive Plan.

Active Conservation Corridor: The Sousa Property, when purchased, will be the first conservation land in the town of Burnham. SRLT experience in other communities indicates this project will spur additional conservation activity in Burnham and surrounding towns and generate community support for SRLT's conservation activity.

Proximity/Benefits to Important Species: The lands to be included in this acquisition were identified as high value in the Unity Wetlands Conservation Plan. Their conservation will help meet the needs of species on a landscape scale within the Focus Area. The project will preserve more than 1 mile of Atlantic salmon (federal endangered) critical habitat, including nearly 1,500' of spawning and rearing habitat. Situated between two rivers, the Sousa property provides an important wildlife travel corridor. The property's 160-acres of mixed hardwoods and pine forest are located on the northwestern boundary of an 8,000-acre mostly unfragmented block of habitat and quality forestland. This is one of the largest remaining undeveloped blocks in Central Maine, important for songbirds, furbearers, moose, deer, bobcat, fisher, black bear and woodland hawks that require large areas. The Sebasticook River is among the best habitats in the state for at least two state endangered freshwater mussels, yellow lampmussel and tidewater mucket. These occurrences are extensive along the Sebasticook and some of its tributaries including 25 Mile Stream. The proposed land acquisition will help protect water quality for these sensitive species by preventing development and poor land use practices and its associated polluted runoff. The property includes more than 1 mile of floodplain forest along Sebasticook River and riparian area along 25 Mile Stream, and inland wetlands. These riparian areas are critical to countless species, including yellow-throated vireo (Species of Greatest Conservation Need), wood turtle (special concern), northern leopard frog (special concern), swamp white oak (state threatened) and spring ephemeral plants like wild leek (special concern).

Adverse Impact: This project has no potential adverse impacts to any protected natural resources.

Project Readiness

Landowner Willingness: The landowner (David Sousa, 237 Shattuck Rd., Calais, ME 04619) has signed a letter of intent to sell the property to Sebasticook Regional Land Trust, on the condition that closing occur before summer 2012. A copy of this letter is included in the Appendices.

Permits & Access: Legal access is via the property's frontage on Troy Road and Battle Street, both public roads. No permits are necessary at this time.

Tasks & Deliverables: If MNRCP funds are received to complete the project: appraisal and EHA complete by Dec. 30, 2011; title review and survey complete by Feb. 28, 2012; review of appraisal, title commitment, survey and legal description by Land for Maine's Future by April 15, 2012; completion of preserve management plan (including forest management, stewardship and monitoring) by April 15, 2012; transfer of ownership by April 30, 2012. Preliminary title and site surveys were completed in summer 2011.

Long-Term Stewardship & Monitoring Plan: The preserve will be owned and managed by SRLT, guided by a preserve management plan that incorporates forest management, long-term stewardship and monitoring objectives. The SRLT will have a forest management plan drafted by a licensed professional forester and a property conservation plan will be completed by SRLT's Stewardship Committee.

SRLT currently manages a 2,000-acre conservation portfolio in a mix of fee lands (820 acres) and conservation easements (1200 acres), including one preserve acquired with MNRCP support in 2010. Full-time executive director Jennifer Irving has more than 13 years' experience negotiating and implementing community conservation projects. She is supported by a part-time lands stewardship staff, a team of trained property stewards and the Stewardship Committee, comprised of landowners, community volunteers and natural resource professionals from state agencies, educational institutions and partnering organizations.

There will be a preserve steward and the property and adherence to the management plan will be monitored on an annual basis by SRLT land stewardship staff. To ensure the financial resources necessary for stewardship and enforcement, a dedicated stewardship endowment will be established and invested in the SRLT's Endowment Fund housed and managed by Maine Community Foundation. A minimum fund investment of $25,000 is desired for this project.

B) 25 MILE STREAM PARCEL

Potential to Meet MNRCP Goals:

Habitat Type & Conditions: The 439-acre 25 Mile Stream Parcel is dominated by a mixture of mesic upland mixed forest and floodplain forest with more than half of the tract's nearly flat terrain surrounded by 25 Mile Stream, the primary outlet to Unity Pond a tributary to the Sebasticook River. Based on aerial photography and NWI maps, the property is more than 50 percent forested wetland, with a small interior emergent wetland. The emergent wetland and riparian buffer characterized by silver maple floodplain forest remain largely intact after wintertime timber harvesting in 2010 and 2011. The remaining post-harvest forest is comprised of hardwood with a small mix of softwoods. The road supporting forestry operations appears to have at least minimally impacted hydrology on the site, with several collapsed culverts noted. The brief time period between the time this property became available and MNRCP deadlines prevented a full exploration of all restoration opportunities though some are noted below.

Functional Benefits: The functions and values of the 25 Mile Stream Parcel include:

Wildlife Habitat: The parcel is one of the largest contiguous single ownership forested properties remaining in the Unity Wetlands Focus Area. As part of a large unfragmented habitat, the parcel offers extraordinary habitat value in terms of ecosystem functions. Specifically, the parcel provides interior habitat for wildlife requiring large unfragmented forested conditions (e.g. northern goshawk, American marten) and it serves to buffer and connect specialized riparian habitat for several rare and endangered plants and animals identified within and proximate to 25 Mile Stream.

Fish & Shellfish Habitat: 25 Mile Stream provides habitat for Atlantic Salmon (federally endangered), Yellow Lampmussel (state threatened), and Creeper (state special concern).

Educational/Scientific Value: The property offers promise as a long-term study site for forestry and wildlife studies, located in close proximity to Unity College.

Floodflow Alteration: The wetlands on the site feature broad, well-vegetated areas with organic soils capable of absorbing floodflow and/or sustaining high water levels.

Nutrient Removal: The wetlands and floodplains on the parcel are saturated wetlands with deep mineral and organic sediment deposits capable of trapping and converting nutrients.

Production Export: The site's vegetation and plant structure are capable of supporting wildlife, with clear evidence of use by higher trophic level consumers (e.g. Salmon, Otter, Raptors).

Visual Quality/Aesthetics: The property includes nearly 2 miles of stream shore frontage on 25-Mile Stream and preservation of the parcel's riparian buffer will enhance the paddling experience on 25 Mile Stream.

Recreation: The property is heavily used by moose, deer, gamebirds, and fur-bearers and if protected will continue to be open to recreational hunting and trapping. The parcel also provides access and shore frontage to one of the Unity Wetlands best recreational canoe loop trails.

Sediment/Shoreline Stabilization: Forested wetlands and floodplains on the site have a dense resilient herbaceous layer capable of stabilizing sediments.

Uniqueness/Heritage: As discussed below, the parcel is one of the largest single-owner contiguous parcels remaining in the Unity Wetlands Focus Area and is located in the center of a focus area of state ecological significance per identification by Maine Natural Areas Program and Maine Department of Inland Fisheries and Wildlife. Stonework remains of the former Moulton's Mill are a historical resource located on the property's acreage off Waterville Road (Route 139).

Functional Lift: This acquisition will ensure that the riparian floodplain buffer and emergent wetland functions are maintained in their current good condition. Abandonment and closure of the current logging access road will stop off-road vehicle use and the associated soil erosion and polluted runoff that have historically degraded wetlands on the site. Conservation management will ensure long-term health of forest and wildlife resources.

Resource Threats: The natural resources on this parcel are threatened primarily by continued poor forest management practices, potential small scale development and associated fragmentation, and poorly planned off-road vehicle use. The riparian buffer remains intact after the most recent harvest. Preventing future timber harvesting along the 25 Mile Stream frontage included in this project is protective of water quality and the countless species associated with riparian corridors, with additional scenic benefit for paddlers on the stream. Off-road vehicle use poses threats to water quality and wetland condition. Adjacent land use is predominantly private woodlots, many of which have seen a transfer of ownership and

division in the past decade. An adjacent 165-acre parcel, including more than 0.5 miles of stream frontage, is protected by conservation easement held by SRLT.

Buffers & Connectivity: The parcel is part of the same large unfragmented block as the Sousa Property, in the heart of the Unity Wetlands Focus Area and on the western boundary of a protected corridor (SRLT and Unity College holdings) along more than 2 miles of 25 Mile Stream and Sandy Stream and associated wetlands. Though Unity College properties are not included in the state's conservation lands database, these parcels are managed as long-term study sites and most have deed restrictions preventing development. Preservation of this parcel will add considerably to this matrix block of open space and ensure the riparian corridor is not disturbed.

Current Use: The parcel has been long managed as commercial forestland, with the most recent harvest in 2010 and 2011. The interior access road (built for forest management purposes) is the only improvement. The parcel is occasionally used by recreational paddlers and sportsmen. The landscape context is rural woodland and agriculture.

Proposed Use: The SRLT will manage the property for wildlife habitat, scientific research/education and possibly low-intensity sustainable forestry. The property is well-suited for long-term forest regeneration study; SRLT's relationship with Unity College should support this goal. Public use will be allowed, though this use is limited due to legal access constraints. A forest management plan will focus on long-term forest health, incorporating principles of focus species forestry. Long-term, any potential commercial harvests will be subject to increased setbacks from 25 Mile Stream and the emergent wetland. Additional wildlife management measures will be limited to installation of duck boxes or other minor improvements if recommended by the property's stewardship and management plan.

Habitat Conservation: SRLT will abandon the forest access road in support of a long-term goal of restoring water flow to the interior wetlands along the road. The act of closing the road, via gates and/or boulders, will also prevent off-road vehicle use and the associated potential for soil erosion and polluted runoff that degrade wetlands and stream quality on the site. Riparian buffers will be enhanced by an increased setback (minimum 300') in the event of future timber harvests.

Project Support: Conservation of the 25 Mile Stream Parcel is supported by The Nature Conservancy, a key partner in the Unity Wetlands Conservation Plan.

Landscape Context:

Statewide Focus Area: This property is located within the Unity Wetlands Focus Area and its acquisition supports the goals of the Unity Wetlands Conservation Plan. Conservation plan targets benefited by this acquisition include: hardwood floodplain forest, contiguous matrix upland forest, rare/threatened/ endangered aquatic and riparian species, wetland systems and public open space. Open space and public-access recreational lands are targets identified in the Unity Comprehensive Plan.

Active Conservation Corridor: The 25 Mile Stream Parcel is adjacent or proximate to a) a165-acre field and forest conservation easement held by SRLT, b) a 55-acre unit of the USFWS Sunkhaze Meadows National Wildlife Refuge, and c) more than 100 acres of Unity College protected outdoor classroom acreage. With this acquisition, the extent of protected stream frontage on 25 Mile Stream in Unity will increase to more than 3 miles.

Proximity/Benefits to Important Species: This 439-acre parcel is one of the largest contiguous single-owner parcels remaining in the Unity Wetlands Focus Area. The project area is one of the most biologically rich in the Unity Wetlands Focus Area, with documented occurrences of wood turtle (special concern), yellow-throated vireo (Species of Greatest Conservation Need), yellow lampmussel (state threatened) , creeper mussel (special concern), northern leopard frog (special concern), swamp white oak (state threatened), silver maple floodplain forest (rare natural community), and wild leek (special concern), and other uncommon plants (e.g. rich site ephemeral wildflower community) and animals (e.g. blue gray gnatcatcher, otter) that are associated with rich floodplain forests. 25 Mile Stream is also designated Atlantic salmon habitat. In the short term, conservation of the 25 Mile Stream Parcel offers connectivity for these species that are vulnerable to fragmentation and development. Long term, the property will provide a large matrix block of forested, late-successional, interior habitat.

Adverse Impact: This project has no potential adverse impacts to any protected natural resources.

Project Readiness

Landowner Willingness: The landowner recently placed this property on the market and is actively marketing it via Fountains Land Inc. It has expressed an interest in an offer from SRLT and we hope to execute a Purchase & Sale Contract by Oct. 15.

Permits & Access: No permits are needed. Deeded access to this parcel is limited to its frontage on Route 139. Forest management access is available through the SRLT's easement property to the east.

Tasks & Deliverables: The landowner's representative has indicated a need for closing within 90 days of executing a contract. SRLT will initiate appraisal, EHA, survey and title commitment to meet this deadline after a positive review by MNRCP. Preliminary title review will be complete by Sept. 23. SRLT anticipates the need to secure a bridge loan to allow us to close on the property prior to receipt of MNRCP funds.

Short-Term Monitoring Plan: The road area will be monitored periodically to evaluate natural restoration of water flows and wetland function.

Long-Term Stewardship & Monitoring Plan: The preserve will be owned and managed by SRLT, guided by a preserve management plan that incorporates forest management, long-term stewardship and monitoring objectives. The SRLT will have a forest management plan drafted by a licensed professional forester and a property conservation plan will be completed by SRLT's Stewardship Committee with assistance from the Natural Resources Conservation Service.

SRLT currently manages a 2,000-acre conservation portfolio in a mix of fee lands (820 acres) and conservation easements (1200 acres), including one preserve acquired with MNRCP support in 2010. Full-time executive director Jennifer Irving has more than 13 years' experience negotiating and implementing community conservation projects. She is supported by a part-time lands stewardship staff, a team of trained property stewards and the Stewardship Committee, comprised of landowners, community volunteers and natural resource professionals from state agencies, educational institutions and partnering organizations.

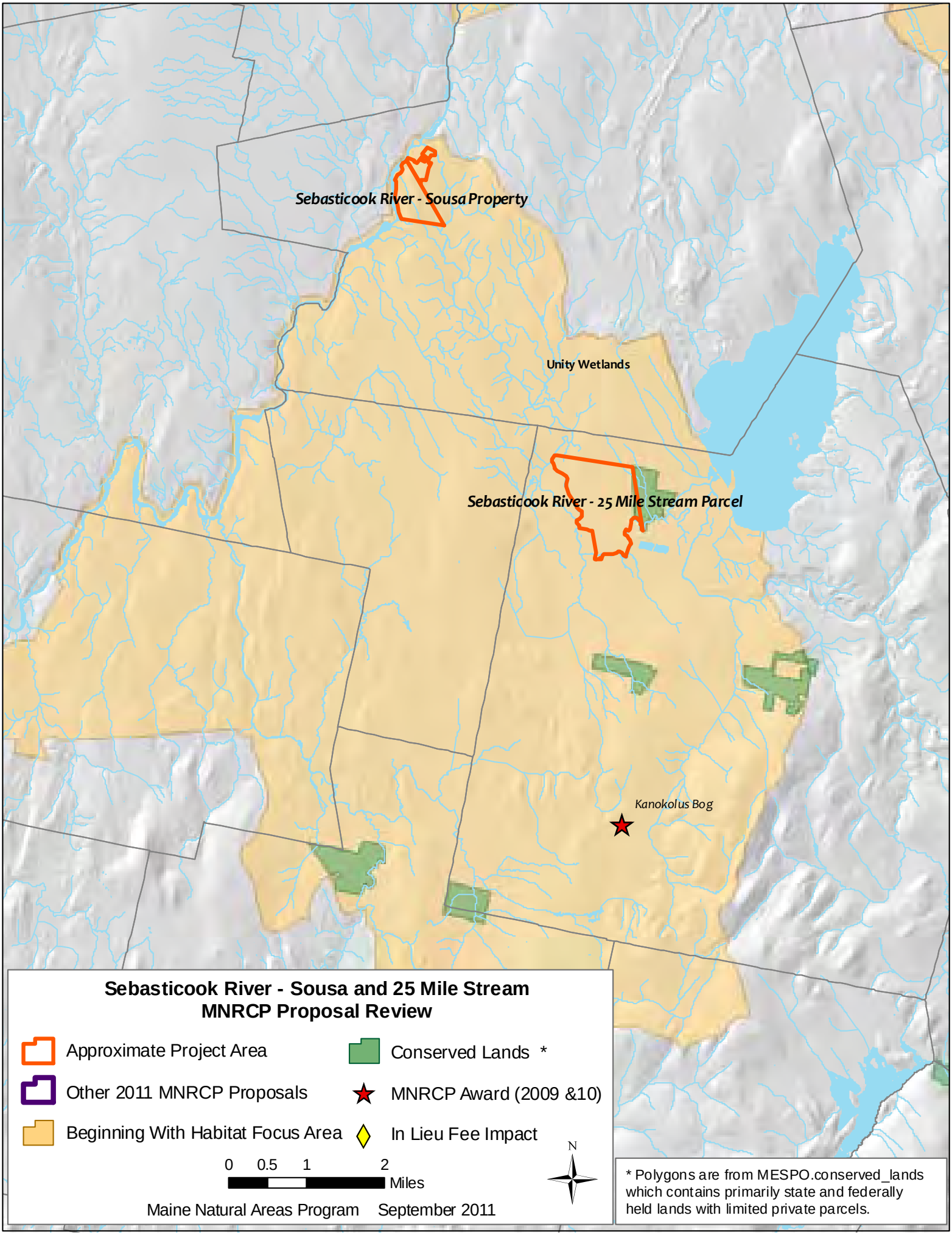
There will be a preserve steward and the property and adherence to the management plan will be monitored on an annual basis by SRLT land stewardship staff. To ensure the financial resources necessary for stewardship and enforcement, a dedicated stewardship endowment will be established and invested in the SRLT's Endowment Fund housed and managed by Maine Community Foundation. A minimum fund investment of $25,000 is desired for this project.

MNRCP Project Budget

Identify costs as actual incurred or estimated. Describe the basis for any estimated costs.

Acquisition and Associated Costs	**SOUSA**	**25 MILE ST. PARCEL**	
Value of fee lands or conservation easements to be purchased	255,000 E[1]	180,000E[2]	
Appraisal costs	8,000E[3]	4,200E[4]	
Title, legal and closing costs	1,200E[4]	1,200E[4]	
Land survey	5,000E[4]	8,000E[4]	
Environmental hazard survey	840 E[4]	840 E[4]	
Baseline documentation *(easement only)*	NA	NA	
Long-term management/stewardship planning	1,000	2,000	
Natural resource survey	250 E[4]	250 E[4]	
Restoration, Enhancement, or Creation Costs			
Restoration planning		1,000	
Personnel			
Site Work		500	
Contractual			
Equipment			
Supplies			
Other			
Monitoring and Long-Term Management Costs			
Short-term monitoring costs	0	1,250	
Long-term management/stewardship costs (**Endowment Investment)**	25,000	25,000	
Total Project Cost:	296,290	221,990	518,280
Total Maine Natural Resource Conservation Program (MNRCP) Request:	**173,252**	**221,990**	**395,492 TOTAL**
Other Funding Sources and Amounts: Local Fund Raising	3,000		
Land for Maine's Future	65,538		
Davis Conservation Foundation	20,000		
Maine Outdoor Heritage Fund	18,000		
William Wharton Trust	14,000		
John Sage Fund	2,500		
TOTAL MATCH	**$123,038**	0	

Notes:
[1] Estimate based on commissioned Opinion of Value and unofficial timber assessment
[2] Estimate represents landowner's asking price, to be supported by appraisal
[3] Estimate based on SRLT experience. Sousa appraisal will require timber inventory.
[4] Estimates based on SRLT experience on recent acquisition projects


Sebasticook River - Sousa Property
Unity Wetlands
Sebasticook River - 25 Mile Stream Parcel
Kanokolus Bog
Sebasticook River - Sousa and 25 Mile Stream
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
Beginning With Habitat Focus Area
Conserved Lands *
MNRCP Award (2009 &10)
In Lieu Fee Impact
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Miles
N
Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

MNRCP Project Description
SEVEN MILE STREAM CONSERVATION AREA

FULL PROPOSAL TO MAINE NATURAL RESOURCE CONSERVATION PROGRAM
September 2011

Executive Summary:

- **Project Sponsor** *(name, organization, address phone, email)*
  Jonathan P. LaBonte, Executive Director, Androscoggin Land Trust; P.O. Box 3145, Auburn, ME 04212; 207-782-2302; jlabonte@androscogginlandtrust.org

- **Project Location** *(town, county, physical address)*
  Jay, Franklin County; on unnamed dirt road running north from State Route 140; Jay Tax Map 5, Lot 70

- **Summary Project Description** (*project context, goals, type of conservation, method*)
  The Androscoggin Land Trust (ALT) and the Town of Jay have reached agreements with Verso Paper Corp., Maine's Department of Conservation, and Otis Ventures LLC that will permanently protect from development a total of 1,295 acres of forest, wetlands, and open space in Canton and Jay, linking to 2.3 miles of new multi-use recreational trails and a new Androscoggin River access point in Jay and Livermore Falls. This "Expanding the Androscoggin Greenway Project" will conserve, through ALT's acquisition in fee of 1,250 acres and a conservation easement on 15 acres, land long owned by the pulp and paper industry. We will manage these parcels for community forest benefits, in compliance with Forest Stewardship Council (FSC) standards. One of these parcels, the subject of this proposal, is a 42-acre lot in the town of Jay just northeast of Seven Mile Stream, an Androscoggin River tributary. This parcel is comprised primarily of a forested and open wetlands complex surrounding Seven Mile Stream oxbows and adjacent to the current stream course. It is part of a large wetlands complex that broadens upstream and continues downstream nearly to the Androscoggin River confluence, less than a mile to the south. Its palustrine forested wetland component is a wetland type that is experiencing a decreasing trend nationally, and we recognize that this resource type, and its streamside habitat on the site, are Priority Resource Types in the Central Interior and Midcoast MNRCP Region. ALT will purchase this parcel from Verso Paper Corp., manage it for its natural values (including wildlife habitat, water quality protection, and low-impact recreation), and practice sustainable forest management, with limited FSC-compliant timber management on its upland area. This project has a high degree of readiness. We anticipate that if it is funded by MNRCP, we could complete it in 2012.

- **Estimated Project Cost:**
  - Total Project Cost: $ 48,938.
  - MNRCP Fund Request: $ 42,848.

- **Resource Priority of Project Site:**
  - Within or adjacent to other natural resource priority areas (*name & brief description*): In Canton/Jay Focus Area in *Conservation Plan for the Androscoggin River Corridor: Canton-Jay to Durham-Lisbon, Maine* (2006): prepared for Androscoggin Land Trust by Conservation Partners, LLC

- **Type of Conservation** (*complete the following table*):

Natural Resource Type		Restored acres	Enhanced acres	Preserved acres	Created acres	Total acres
Freshwater Resources	Freshwater wetland, emergent (PEM)	0	0	0	0	0
	Freshwater wetland, forested (PFO)	0	0	34	0	34
	Freshwater wetland, shrub-scrub (PSS)	0	0	0	0	0
	River, stream or brook	0	0	0	0	0
	Significant wildlife habitat, vernal pool (*indicate number of pools if necessary*)	0	0	0	0	0
	Significant wildlife habitat, vernal pool critical terrestrial habitat	0	0	0	0	0
	Significant wildlife habitat, Inland Waterfowl and Wading Bird Habitat	0	0	0	0	0
Coastal Resources	Coastal wetland, Marine subtidal (M1)	0	0	0	0	0
	Coastal wetland, Marine intertidal (M2)	0	0	0	0	0
	Coastal wetland, Estuarine subtidal (E1)	0	0	0	0	0
	Coastal wetland, Estuarine intertidal (E2)	0	0	0	0	0
	Significant wildlife habitat, Tidal Waterfowl and Wading Bird Habitat	0	0	0	0	0
	Significant wildlife habitat, Shorebird Feeding & Staging Areas	0	0	0	0	0
	Upland buffer (non wetland habitat)	0	0	8	0	8
	Project Total	**0**	**0**	**42**	**0**	**42**

Potential to Meet MNRCP Goals:

- This property consists of 34 acres of forested forested freshwater (palustrine) and open wetlands (incorporating roughly 3 acres of open water in oxbows) and 8 acres of forested upland that is characterized by Beginning with Habitat as "Large Areas of Interior Forest; stocking is predominantly softwood (white pine, red spruce, hemlock, balsam fir, and northern white cedar) with red maple and traces of red oak and paper birch.
- We anticipate that this project will provide these functional benefits: education/scientific value, floodflow alterations, fish & shellfish habitat, nutrient removal/transformation, recreation, groundwater recharge/discharge, retention/storage of floodwater/surface water, shoreline/sediment stabilization, retention of sediment, visual quality/aesthetics, and wildlife habitat.
- We propose to permanently preserve this property in its present condition, primarily as a fully functioning forest palustrine wetland and open wetland, with adjacent forested upland.
- The primary potential threats to resources on and adjacent to this property in the next 20 years, if ALT were not to protect it, include unsustainable forest management and road building practices that could be applied by new ownership after sale by Verso Paper Corp., and the introduction of invasive plant species. The unsustainable land uses could result in habitat fragmentation, soil erosion, and degradation of water quality in the wetland that could adversely affect both Seven Mile Stream and the nearby Androscoggin River.

- The property's forested upland, on its northern and eastern sides, provides a modest buffer for the wetland acreage. This intact buffer protects and supports both this property's wetland and the larger expanse of wetland complex immediately to the north, providing connectivity between these healthy habitat areas within a forested upland described by Beginning with Habitat as "Large Areas of Interior Forest."
- This property has no structures or other improvements. The primary land uses on and surrounding this parcel are forest management and recreation.
- ALT plans to manage this property for multiple uses, including sustainable forestry and recreation, guided by a Land Management Plan that will incorporate a Forest Management Plan already developed by Integrated Forest Management of Turner, Maine, accredited by the Society of American Foresters Certified Forestry Program. This Forest Management Plan adheres to Forest Stewardship Council standards; this compliance will protect a wide range of natural resource values, including water quality and wetland function.
- We will permanently conserve this property's wetland and forested upland habitat through the purchase of fee interest.
- This project enjoys strong support from the Maine Department of Inland Fisheries and Wildlife, the Maine Department of Conservation's Bureau of Parks and Lands (which sponsored our Land for Maine's Future Program funding application), Verso Paper Corp. (the current landowner), the Town of Jay, recreational user groups, and other local entities.

Landscape Context:

- This property lies within and includes forested upland that Beginning with Habitat characterizes as "Large Areas of Interior Forest." As noted above, it is part of the Canton/Jay Focus Area in *Conservation Plan for the Androscoggin River Corridor: Canton-Jay to Durham-Lisbon, Maine* (2006), prepared for ALT by Conservation Partners, LLC.
- This property is the northernmost, and most geographically isolated, parcel of ALT's "Expanding the Androscoggin Greenway Project." It lies within 3-1/4 miles of the Maine Department of Inland Fisheries and Wildlife's Androscoggin River Access in Canton, ALT's Stevens Island Rivershore Preserve, and the seven other areas in the Expanding the Androscoggin Greenway Project. The permanent conservation of this property and protection of the wetland's ecological integrity will advance and enhance ALT's expansion of our model of linking conservation of landscapes and regional recreation that we developed with the National Park Service in the initial Androscoggin Greenways plan in the1990s.
- We anticipate that this project will have no adverse impacts to any protected natural resources. To the contrary, it will provide for sustainable management designed to protect the full suite of natural resource values addressed by Forest Stewardship Council management standards.

Project Readiness

- This property's current owner, Verso Paper Corp. (6775 Lenox Center Court, Suite 400, Memphis, TN 38115-4436), is willing to convey fee title to the Androscoggin Land Trust for the completion of this project, as documented in the attached letter dated March 24,

2011, which was submitted to the Land for Maine's Future Program. The subject property is identified on the letter as Parcel Number 18.

- We anticipate that no permits will be required for this project. ALT has been granted legal access to the property through its lease from Verso Paper Corp. on this parcel. ALT will acquire fee title to the property as this project proceeds.

- ALT already has accomplished a key task in this project, its application for funding for the Expanding the Androscoggin Greenway Project, from the Land for Maine's Future Program, which outlined in detail a plan for, among other things, permanent protection of 1,250 acres in Jay and Canton that ALT will acquire in fee from Verso Paper Corp. The LMF Board allocated $259,185 to that broader project on July 12, 2011. The $6,090 identified as funding from LMF in this MNRCP proposal's project budget is a prorated portion of that grant toward the broader project.

- The following tasks remain to be accomplished to complete this project. Accomplishment of each of these tasks will deliver the stated output.

    - Finalize appraisal for the Seven Mile Stream Conservation Area.
    - Perform title work for this property.
    - Perform an Environmental Hazard Assessment.
    - Confirm and mark property boundary – a land survey exists.
    - Draft and execute the deed upon the purchase of the property.

  We cannot currently apply a precise time schedule to the accomplishment of these tasks, given that we cannot begin them until we receive a commitment of sufficient funding to complete the project. We anticipate that we will be able to undertake the first four tasks concurrently, with the fifth following in turn, and that if we are awarded the funding we are requesting from MNRCP, we will be able to successfully complete this project in 2012.

- ALT's Director of Land Protection & Stewardship will develop the long-term stewardship and monitoring plan for this project. Once the property is permanently conserved, ALT will draft a management plan for it that will include a long-term stewardship plan. Annual monitoring of the property to test for changes in vegetation type or water quality will be conducted by ALT staff, contractors, or volunteers. After purchasing the property, ALT will maintain it in perpetuity, or transfer it at a later date with a permanent conservation easement to a suitable owner. Our Director of Land Protection & Stewardship will conduct the annual monitoring, probably with the assistance of a local steward. We will finance our long-term monitoring of the property through a stewardship fund created for the purpose; we intend for this fund to be a minimum of $5,000.

MNRCP Project Budget: SEVEN MILE STREAM CONSERVATION AREA

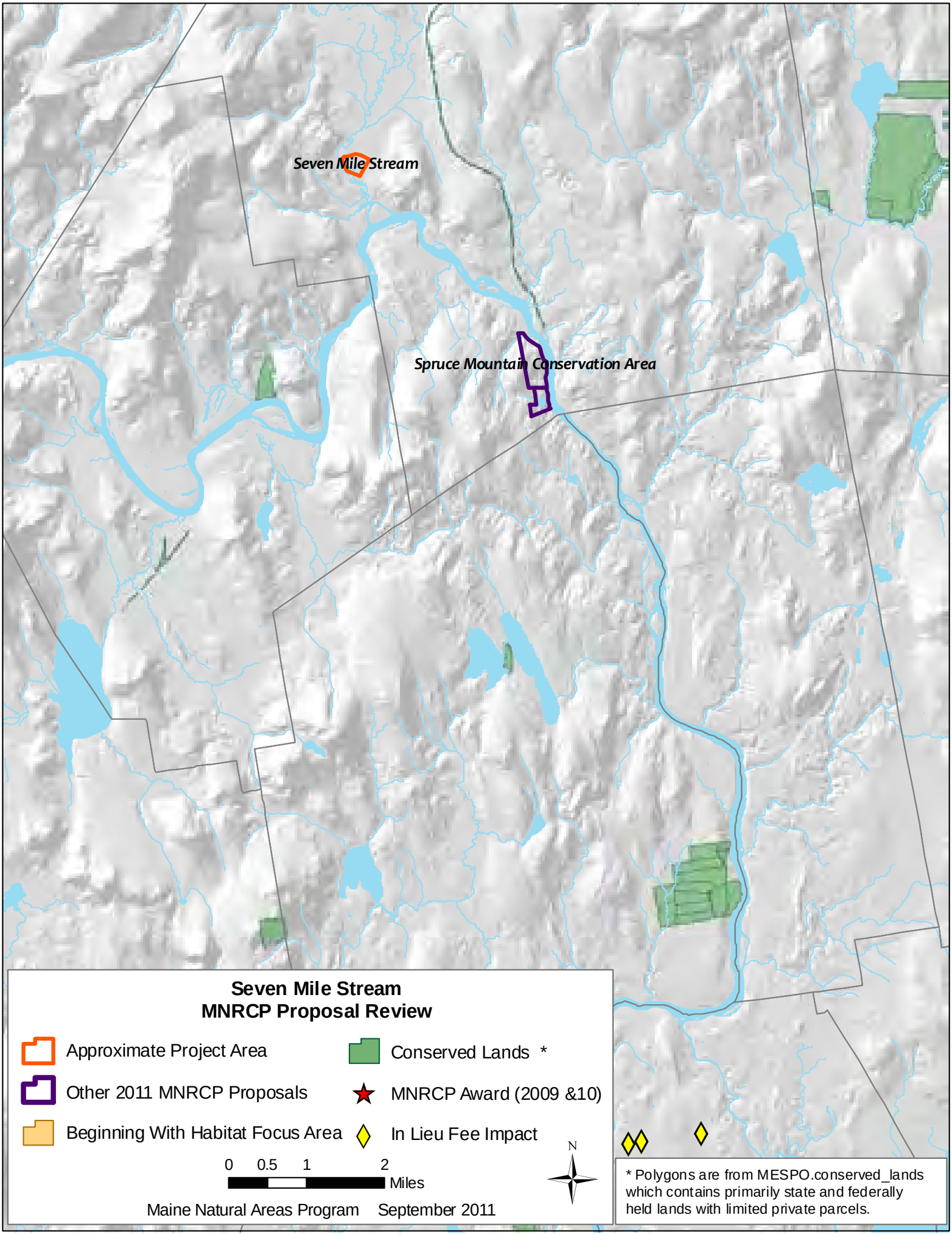
Identify costs as actual incurred or estimated. Describe the basis for any estimated costs.

Acquisition and Associated Costs	
Value of fee lands or conservation easements to be purchased* (opin of value)	$ 33,500.
Appraisal costs (est. prorated from Expanding Andro. Greenway LMF bgt)	4,375.
Title, legal and closing costs (est. prorated from Exp. Andro GW LMF bgt)	3,125.
Land survey (est. prorated from Expanding Andro. Greenway LMF bgt)	1,250.
Environmental hazard survey (est. prorated from Exp. Andro GW LMF bgt)	688.
Baseline documentation *(easement only)*	0.
Long-term management/stewardship planning (est. based on ALT experience)	1,000.
Natural resource survey	0.
Restoration, Enhancement, or Creation Costs	
Restoration planning	0.
Personnel	0.
Site Work	0.
Contractual	0.
Equipment	0.
Supplies	0.
Other	
Monitoring and Long-Term Management Costs	
Short-term monitoring costs†	0.
Long-term management/stewardship costs‡ (est. based on ALT experience)	5,000.
Total Project Cost:	$ 48,938.
Total Maine Natural Resource Conservation Program (MNRCP) Request:	$ 42,848.
Other Funding Sources and Amounts: Land For Maine's Future Program	$ 6,090.

* Land Acquisition or Conservation Easement Costs must based on an Appraisal completed within the past two years, in accordance with the Uniform Standards of Professional Appraisal Practice (USPAP). A copy of the final appraisal must be provided and consist of a complete appraisal and a self contained appraisal report.

† For restoration, enhancement or creation, a five-year monitoring term is typical, with a potentially longer period for resources with slow development rates. Preservation projects do not require short-term monitoring.

‡ Funded projects are expected to protect priority resources "in perpetuity," which requires an entity with the resources and expertise to ensure long-term management and stewardship. A financing mechanism (e.g., endowment, trust, or long-term financing plan) is required to ensure adequate funding is available over time, though all the funds needed for establishment do not need to be included in MNRCP request.


Seven Mile Stream
Spruce Mountain Conservation Area
Seven Mile Stream
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
Beginning With Habitat Focus Area
Conserved Lands *
MNRCP Award (2009 &10)
In Lieu Fee Impact
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Miles
N
Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

MNRCP Project Description
SPRUCE MOUNTAIN CONSERVATION AREA

FULL PROPOSAL TO MAINE NATURAL RESOURCE CONSERVATION PROGRAM
September 2011

Executive Summary:

- **Project Sponsor** *(name, organization, address phone, email)*
  Jonathan P. LaBonte, Executive Director, Androscoggin Land Trust; P.O. Box 3145, Auburn, ME 04212; 207-782-2302; jlabonte@androscogginlandtrust.org

- **Project Location** *(town, county, physical address)*
  Jay, Franklin County; at northern end of Ski Slope Road; Jay Tax Map 1, Lot 51

- **Summary Project Description** (*project context, goals, type of conservation, method*)
  The Androscoggin Land Trust (ALT) and the Town of Jay have reached agreements with Verso Paper Corp., Maine's Department of Conservation, and Otis Ventures LLC that will permanently protect from development a total of 1,295 acres of forest, wetlands, and open space in Canton and Jay, linking to 2.3 miles of new multi-use recreational trails and a new Androscoggin River access point in Jay and Livermore Falls. This "Expanding the Androscoggin Greenway Project" (EAGP") will conserve, through ALT's acquisition in fee of 1,250 acres and a conservation easement on 15 acres, land long owned by the pulp and paper industry. We will manage these parcels for community forest benefits, in compliance with Forest Stewardship Council (FSC) standards. A 186-acre block of this land lies on the Androscoggin River's western bank, just north of the Spruce Mountain Ski Slope. It includes a roughly three-acre emergent wetland at the confluence of two small drainages that the former industrial owner, prior to Verso Paper, converted to a "sulfite pond" used to store spent sulfite pulping chemicals (i.e., calcium or magnesium sulfites). We seek to restore this wetland, which has reverted from its artificially fluctuating condition caused by the pumping in and out of the sulfite waste liquids to a state that we speculate is similar to its pre-disturbance condition. However, the banks of its inlet area (just to the north) are eroding and in need of stabilization. The slope of the wetland's eastern shore must be reduced to stabilize it, and dumped debris must be removed. We also will seal in place remaining conduits and pipelines, to ensure that water does not leave the wetland and alter its hydrology. This restoration project, directly adjacent to a recreational trail system and near the ski slope, will have a high local profile; we plan to use it to educate the public about the benefits of environmental conservation and restoration. Nesting bald eagles have resided on this property since 2004. Maine Department of Fisheries and Wildlife biologist Charles Todd informs us that this project will accomplish the first full protection of a bald eagle nesting territory through fee ownership in the entire Androscoggin River corridor. This project has a high degree of readiness. We anticipate that if it is funded by MNRCP, we could complete it in 2012.

- Estimated Project Cost:
  - Total Project Cost: $486,438.
  - MNRCP Fund Request: $440,852

Resource Priority of Project Site:

- Within or adjacent to existing public or private conservation lands (*name & owner*): adjacent to existing 10-acre Spruce Mountain Conservation Area, owned by ALT.
- Within or adjacent to other natural resource priority areas (*name & brief description*): incorporated by reference in Canton/Jay Focus Area in *Conservation Plan for the Androscoggin River Corridor: Canton-Jay to Durham-Lisbon, Maine* (2006, prepared for ALT by Conservation Partners, LLC).
- Contains natural resources of significant value and/or rarity (*habitats, species*): active bald eagle nesting territory

- **Type of Conservation** (*complete the following table*):

Natural Resource Type		Restored acres	Enhanced acres	Preserved acres	Created acres	Total acres
Freshwater Resources	Freshwater wetland, emergent (PEM)	3	0	0	0	3
	Freshwater wetland, forested (PFO)	0	0	0	0	0
	Freshwater wetland, shrub-scrub (PSS)	0	0	0	0	0
	River, stream or brook	0	0	0	0	0
	Significant wildlife habitat, vernal pool (*indicate number of pools if necessary*)	0	0	0	0	0
	Significant wildlife habitat, vernal pool critical terrestrial habitat	0	0	0	0	0
	Significant wildlife habitat, Inland Waterfowl and Wading Bird Habitat	0	0	0	0	0
Coastal Resources	Coastal wetland, Marine subtidal (M1)	0	0	0	0	0
	Coastal wetland, Marine intertidal (M2)	0		0	0	0
	Coastal wetland, Estuarine subtidal (E1)	0	0	0	0	0
	Coastal wetland, Estuarine intertidal (E2)	0	0	0	0	0
	Significant wildlife habitat, Tidal Waterfowl and Wading Bird Habitat	0	0	0	0	0
	Significant wildlife habitat, Shorebird Feeding & Staging Areas	0	0	0	0	0
	Upland buffer (non wetland habitat)	0	0	183	0	183
	Project Total	**3**	**0**	**183**	**0**	**186**

Potential to Meet MNRCP Goals:

- Topographic maps of the property from the early 20th century show a wetland on this site, although we do not know what type of wetland it was. Currently an approximately 3-acre wetland dominated by emergent species exists on the site.
- We anticipate that this project will provide these functional benefits: education/scientific value, floodflow alterations, nutrient removal/transformation, recreation, groundwater recharge/discharge, retention/storage of floodwater/surface water, shoreline/sediment stabilization, retention of sediment, visual quality/aesthetics, and wildlife habitat.
- The desired future condition of the property is as a permanently conserved parcel with a fully functional emergent wetland on site. By restoring the existing wetland by removing current threats to water quality, as described in greater detail below, we expect to improve the overall quality and function of this wetland.

- Potential threats to resources on and adjacent to this property, if ALT were not to protect it, include continued erosion of the banks of the wetland and adjacent watercourses, hydrologic loss in the wetland through failed remnant piping, continued stress to nesting bald eagles from human activity, and residential development and unsustainable forest management practices under new ownership.
- According to Beginning with Habitat data, the parcel is within a 1,300-acre large undeveloped block of forest habitat. The permanent protection of this parcel would conserve all of the 200 acres of the block immediately along the Androscoggin River and, more importantly, establish a critical link for wildlife from the rest of the block to the river, ensuring a corridor for species movement. The wetland and eagle nesting area currently are buffered by upland habitat on and adjacent to the project property, including the existing 10-acre Spruce Mountain Conservation Area.
- This property's current use is for forestry and recreation. The Spruce Mountain Ski Club maintains a small wooden structure east of the subject wetland area, which it uses for staging cross country ski races on the property outside of the wetland. The area surrounding this property is used for conservation, forestry, and a downhill ski facility.
- ALT plans to manage this property for multiple uses, including sustainable forestry and recreation, guided by a Land Management Plan that will incorporate a Forest Management Plan to be developed by Integrated Forest Management of Turner, Maine. This Forest Management Plan will adhere to Forest Stewardship Council standards; this compliance will protect a wide range of natural resource values, including water quality and wetland function.
- The specific techniques and methods that we plan to use to conserve the habitat in this project are:
  - <u>RESTORATION</u>, through:
    - Study of local hydrology at the wetland site by a hydrogeologist, to verify that there is sufficient local hydrology to support the continued presence and function of the existing emergent wetland and to assess likely changes to the area's hydrology to be caused by planned project activities.
    - Survey of existing wetland vegetation by a wetland scientist, to better understand its functions and values and provide a baseline for vegetation composition for comparison in future monitoring. This will include an invasive species assessment.
    - Removal of debris dumped on the wetland's eastern bank, including household appliances.
    - Removal of degraded metal material formerly associated with industrial use of the wetland site, including chain link fence to its south and west, and iron ladder parts and other debris below the low concrete dam at the southern end of the wetland.
    - Sealing *in situ* conduits and pipelines and existing concrete-lined pits through which they run adjacent to the wetland area, to ensure that water will not leave the wetland through pipes formerly used to pump sulfite-laden water in and out of the site, altering its hydrology. This, and the debris removal, also will remedy hazardous safety conditions.
    - Stabilization of the banks of the inlet area of the wetland, at its northern end, where erosion is removing soil that is being deposited in the existing wetland), and on both its eastern and western sides, which are eroding less, but will be subject to increased erosion over time if they are not stabilized. We will accomplish this with the least possible amount of earth moving necessary to achieve banks of sufficiently low slope to guard against erosion.
    - Planting of native ground cover appropriate to the site on disturbed soil surfaces, to hold soil.
  - <u>PRESERVATION</u>, through:

- Purchase of fee interest in the 186-acre block that includes and buffers the wetland we seek to restore and the active bald eagle nesting territory. We will permanently conserve this entire property and add it to our adjacent existing 10-acre Spruce Mountain Conservation area.

- This project enjoys strong support from the Maine Department of Inland Fisheries and Wildlife (largely for its planned protection of bald eagle habitat), the Maine Department of Conservation's Bureau of Parks and Lands (which sponsored our Land for Maine's Future Program funding application), Verso Paper Corp. (the current landowner), the Town of Jay, recreational user groups, and other local entities. Parties that will be involved in our work on this site will include the Department of Inland Fisheries and Wildlife, Verso, and the Spruce Mountain Ski Club.

Landscape Context:

- This project property is directly adjacent to the existing 10-acre Spruce Mountain Conservation Area owned by the Androscoggin Land Trust, separated from this Androscoggin riverfront parcel by a railroad bed. It lies directly across the river from two other properties to be conserved by the Expanding the Androscoggin Greenway Project, the 30-acre French Falls site that Verso Paper Corp. will donate to the Town of Jay, and the Androscoggin River Access and Multi-Use Trails that the State of Maine and ALT will develop. The permanent conservation of this property and the restoration and protection of the wetland's ecological integrity will advance and enhance ALT's expansion of our model of linking conservation of landscapes and regional recreation that we developed with the National Park Service in the initial Androscoggin Greenways plan in the1990s.
- Bald eagles have nested on this property each year since 2004. The nest on this property is the lowest producing nesting site in the region, quite possibly due to the current use of a trail within clear sight of the nest by pedestrian and motorized traffic, whose disturbance of the nesting birds might be causing them to leave their eggs unattended for periods of time sufficient for them to cool to the point that they are not viable. ALT's purchase of the property will enable us to relocate the traffic onto alternate trails and reduce stress on the nesting eagles.
- We anticipate that this project will have no adverse impacts to any protected natural resources. To the contrary, it will, as discussed above, permanently protect bald eagle nesting habitat on the project property, and reduce human and vehicular presence in direct sight lines of the current nesting site.

Project Readiness

- This property's current owner, Verso Paper Corp. (6775 Lenox Center Court, Suite 400, Memphis, TN 38115-4436), is willing to convey fee title to the Androscoggin Land Trust for the completion of this project, as documented in the attached letter dated March 24, 2011, which was submitted to the Land for Maine's Future Program. The subject property is identified on the letter as Parcel Numbers 25 and 26.
- No permits have been secured yet for the work to be performed in this project. We anticipate that Maine DEP Natural Resource Protection Act ("NRPA") permits may be required, and we will apply for them in the event that the Maine Natural Resources Conservation Program grants the funding necessary for the project to proceed. ALT has been granted legal access to the property through its lease from Verso Paper Corp. on the northernmost 126 acres of this property. ALT will own fee title to the property as this project proceeds.

- **Proposed Project Schedule** (the following tasks remain to be accomplished to complete this project)
  1. Property transfer to ALT: As soon as possible, ideally in 2012, depending on funds availability and LMF due diligence.
  2. Phase 1 site environmental investigation: September-October 2011 (partially completed)
  3. Phase 2 site environmental investigation: November – December 2011
  4. Final restoration project design: January 2012 – April 2012
  5. Contractor selection: May – June 2012
  6. Project field construction activities: July – August 2012
     a. Inlet stabilization & vegetation
     b. Waste removal
     c. Site grading & vegetation
     d. Structure stabilization (pipeline & bunker grouting, steel recycling, etc.)

  Note: specifics related to project erosion & sedimentation control, rip-rap design, vegetation to be established, will be determined during the project design phase according to appropriate engineering specifications.
- The anticipated short-term monitoring plan for wetland restoration is to complete annual botanical surveys and testing for water quality for the wetland for the first five years as part of a greater management plan for the property to be drafted once ALT owns the property in fee.
- ALT's Director of Land Protection & Stewardship will develop this project's long-term stewardship and monitoring plan. Once the property is permanently conserved, ALT will draft a management plan for it that will include a long-term stewardship plan. Annual monitoring of the property to test for changes in vegetation type or water quality will be conducted by ALT staff, contractors, or volunteers. After purchasing the property, ALT will maintain it in perpetuity, or transfer it at a later date with a conservation easement to a suitable owner. Our Director of Land Protection & Stewardship or volunteer stewards will conduct annual monitoring. We will finance our long-term monitoring of the property through a stewardship fund created for the purpose; we intend for this fund to be minimum of $10,000.

MNRCP Project Budget: SPRUCE MOUNTAIN CONSERVATION AREA

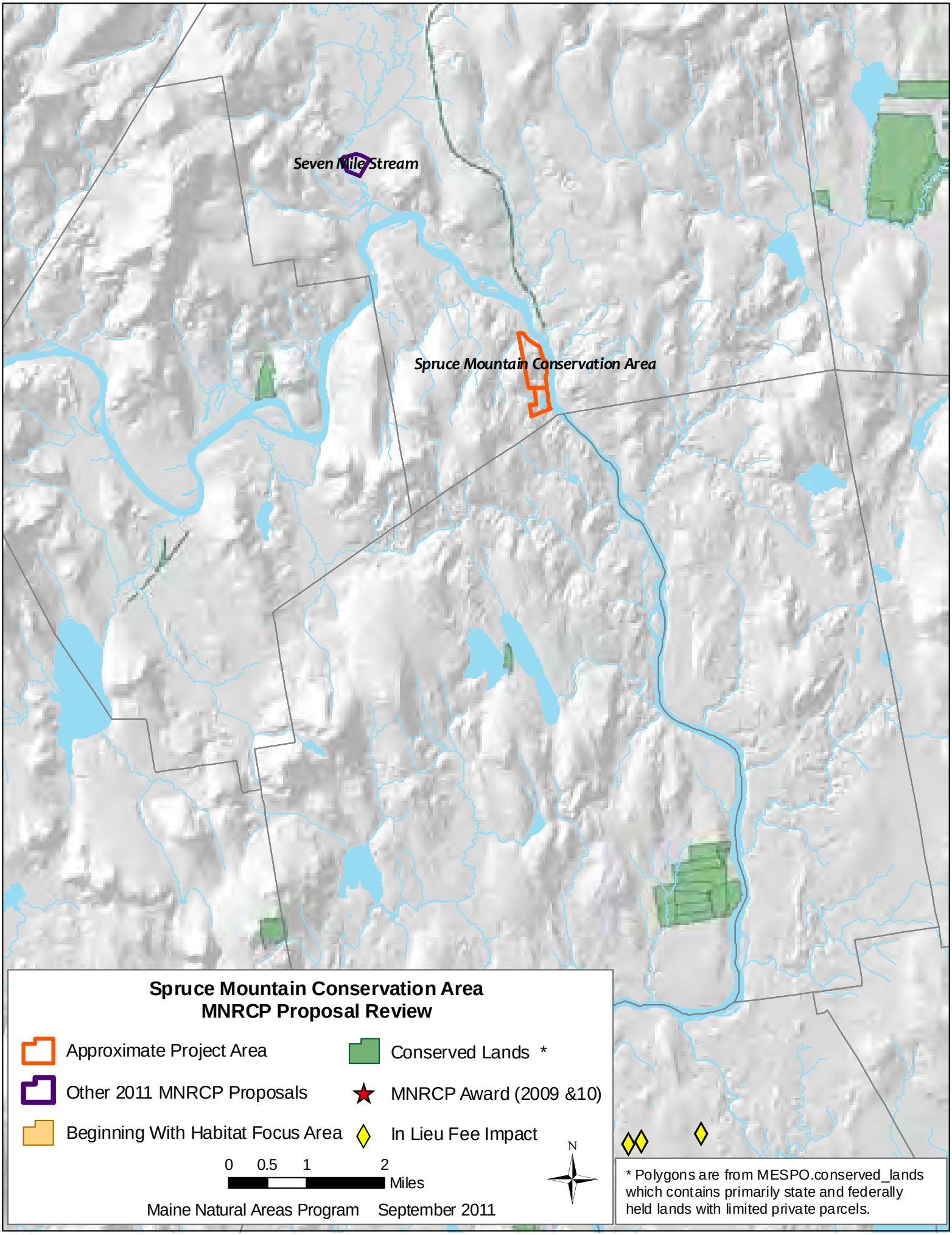
Identify costs as actual incurred or estimated. Describe the basis for any estimated costs.

Acquisition and Associated Costs	
Value of fee lands or conservation easements to be purchased* (opin of value)	$353,500.
Appraisal costs (est. prorated from Expanding Andro. Greenway LMF bgt)	4,375.
Title, legal and closing costs (est. prorated from Exp. Andro. GW LMF bgt)	3,125.
Land survey (est. prorated from Expanding Andro. Greenway LMF bgt)	1,250.
Environmental hazard survey (est. prorated from Exp. Andro. GW LMF bgt)	688.
Baseline documentation *(easement only)*	0.
Long-term management/stewardship planning (est. based on ALT experience)	1,000.
Natural resource survey	0.
Restoration, Enhancement, or Creation Costs	
Restoration planning	15,000.
Personnel	0.
Site Work	75,000.
Contractual	20,500.
Equipment	0.
Supplies	0.
Other	0.
Monitoring and Long-Term Management Costs	
Short-term monitoring costs† (est. based on ALT experience)	2,000.
Long-term management/stewardship costs‡ (est. based on ALT experience)	10,000.
Total Project Cost:	486,438.
Total Maine Natural Resource Conservation Program (MNRCP) Request:	440,852.
Other Funding Sources and Amounts: Land for Maine's Future Program Verso Paper Corp.: $10,500. Wetlands/Hydrology Contractor: $8,000.	27,086.

* Land Acquisition or Conservation Easement Costs must based on an Appraisal completed within the past two years, in accordance with the Uniform Standards of Professional Appraisal Practice (USPAP). A copy of the final appraisal must be provided and consist of a complete appraisal and a self contained appraisal report.

† For restoration, enhancement or creation, a five-year monitoring term is typical, with a potentially longer period for resources with slow development rates. Preservation projects do not require short-term monitoring.

‡ Funded projects are expected to protect priority resources "in perpetuity," which requires an entity with the resources and expertise to ensure long-term management and stewardship. A financing mechanism (e.g., endowment, trust, or long-term financing plan) is required to ensure adequate funding is available over time, though all the funds needed for establishment do not need to be included in MNRCP request.


Seven Mile Stream
Spruce Mountain Conservation Area
Spruce Mountain Conservation Area
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
Beginning With Habitat Focus Area
Conserved Lands *
MNRCP Award (2009 &10)
In Lieu Fee Impact
0 0.5 1 2
Miles
N
Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

Outline for MNRCP Project Description

Completely describe the proposed project. Make sure to clearly cover the following, as appropriate, depending on whether the project includes restoration, enhancement, preservation or creation. Use headings as outlined below.

Executive Summary:

- Project Sponsor: Georges River Land Trust
  8 North Main Street
  Rockland, ME 04841
  c/o Annette Naegel
  Conservation Program Manager
  Email: Annette@grlt.org (207) 594-5166

- Project Location: Warren, Knox County, Oyster River Road

- Summary Project Description (*project context, goals, type of conservation, method*): This ±100 acre parcel including forested wetlands and an emergent estuarine intertidal wetland will double the conservation acreage (200 acres total) within an identified Georges River Land Trust (GRLT) focus area, noted for its high value wildlife habitat for bald eagle, other birds, amphibians, insects, fish and shellfish. The rare spartina saltmarsh (state ranked S3) also functions as important habitat for decomposers and consumers within the wetland complex. This site has been heavily harvested causing a decline in biological diversity and impacts on the watershed of the onsite wetlands. Natural regeneration of the forested wetlands and upland forest will improve diversity and habitat condition and can be best accomplished through permanent conservation. Georges River Land Trust intends to hold the fee title to this property and manage it for its habitat values.

- Estimated Project Cost:
  - Total Project Cost - $258,500
  - MNRCP Fund Request - $245,000

- Resource Priority of Project Site:
  - **Within or adjacent to a Beginning with Habitat Focus Area**: Adjacent to the St. George River and Associated Ponds Focus Area
  - **Within or adjacent to existing public or private conservation lands**: Adjacent to the 57 acre Weaver Conservation Easement held by the Georges River Land Trust (GRLT**)**
  - **Within or adjacent to other natural resource priority areas:** Within the Warren Tidal Marshlands Focus Area of GRLT, identified because of the abundant wildlife values and rare salt-hay saltmarsh community along the banks of the St. George River.
  - **Contains natural resources of significant value and/or rarity**: Coastal wading bird and waterfowl habitat (BWH) and rare natural community, Spartina Saltmarsh (ranked S3).

- Type of Conservation (*complete the following table*):

Natural Resource Type	Restored acres	Enhanced acres	Preserved acres	Created acres	Total acres
Freshwater wetland, forested (PFO)			16.5		
River, stream or brook (50 ft corridor)			5		

	Coastal wetland, Estuarine intertidal (E2)			8		
	Significant wildlife habitat, Tidal Waterfowl and Wading Bird Habitat			6		
	Upland buffer (non wetland habitat)			64.5		
	Project Total			**100**		

Potential to Meet MNRCP Goals:

- **Describe the original habitat type and the current habitat conditions on the property with a determination of protected natural resources based on either aerial photo interpretation or, if available and applicable, a wetland delineation conducted in accordance with the Corps of Engineers 1987 Delineation Manual or subsequent USACE-approved method.**

The original habitat type of the project fits within the priority resource types of the Central Interior and Midcoast MNRCP region, namely estuarine intertidal, freshwater wetland forested and river/stream. The property trends southwest downslope from 60 meters to its lowest point along the river. The property includes nearly 900 feet of shorefront along the St. George River, comprised of coastal wetland, estuarine intertidal habitat (E2) (approx. 8 acres). The Spartina Saltmarsh natural community on the river includes both low and high marsh zones; the high marsh includes salt pannes and pools. Several drainages flanked by bulrush (*Bolboschoenus maritimus*) are evident, though their impact to the marsh is minimal. Along the marsh, mature white pines provide nesting sites for bald eagles that are known to nest about a mile to the northwest. Over 100 eagles have been reported to fly down this section of river on a daily basis in the winter. Approx. 6 acres of significant tidal waterfowl and wading bird habitat exist on the property. The property also includes forested wetland habitat (PFO) (approx. 16.5 acres) in the lower third of the property. The soils are hydric and more hydrophytic vegetation begins to appear towards the bottom of the slope. A single small tidal tributary flows into the river along the southeastern boundary line and a perennial stream runs through a ravine along the northwestern edge of the property, likely flowing into the adjacent wetland (which does not appear on the USGS topographic maps). A historic trolley car rail bed runs across the upper reach of the small tributary to the river. The remnants of a bridge remain crossing this tributary, making it an interesting historic feature on the property. Much of the upland forest and portions of the forested wetland habitat were heavily harvested six years ago affecting the biological diversity and watershed for the wetlands. The current condition of the forested wetland and upland forest are naturally revegetating and comprised of shrub vegetation and early successional forest. In the upland the dominant species are red oak (*Quercus rubra*), yellow birch (*Betula alleghaniensis*), paper birch (*B. papyrifera*) and fir (*Abies balsamea*), with white pine (*Pinus strobus*) in the understory. The protected natural resource base will be 100 acres and specifically include the wetland community types noted above.

- Assess the functional benefits the project will provide using the following list as a guide:

Freshwater & Coastal Functions	
Ecological Functions/Values	**Rationale**
Groundwater recharge/Discharge	Freshwater capable of recharging groundwater; saltmarsh receives groundwater seepage from adjacent

	uplands
Floodflow alterations	Freshwater capable of absorbing floodwater and/or overland flow; saltmarsh has potential for storm water and/or flood storage
Fish & shellfish habitat	Fresh water not applicable; Saltmarsh: HIGH VALUE: fish and shellfish habitat
Retention of sediment/toxicants	Freshwater vegetation can trap sediments from flooding, overland flow, and excessive runoff, protecting adjacent marsh; saltmarsh-no evidence of sediments or toxicants on site but wetland has capacity to trap sediment and any potential runoff thereby protecting the St. George River water quality
Nutrient removal/Transformation	Freshwater vegetation can trap any nutrients from upland flow, has ability to convert to higher tropic levels; can prevent nutrients from entering saltmarsh; saltmarsh capable of trapping nutrients and transforming into other forms or trophic levels, preventing excessive nutrients from entering the St. George River
Production export	Freshwater diverse vegetation provides foraging opportunities for mammals, amphibians, insects and birds; saltmarsh: HIGH VALUE: vegetation provides habitat for decomposers and multiple levels of consumers
Shoreline/Sediment stabilization	Freshwater helps provide stability at base of slope; saltmarsh may buffer/stabilize adjacent banks from heavy erosion/undercutting by water
Wildlife habitat	Freshwater: HIGH VALUE; contributes to potential bald eagle habitat, provides habitat for other mammals, amphibians, and songbirds; saltmarsh: HIGH VALUE: important wildlife habitat for birds, insects, fish, shellfish; identified as tidal wading bird and waterfowl habitat (BWH)
Recreation	Freshwater: HIGH VALUE: potential for wildlife observation, hunting, environmental education; easy access via old logging road and trails; saltmarsh: potential for wildlife observation, access to river, hunting and boating
Education/Scientific value	Freshwater and saltmarsh: easy access for educational purposes; multiple educational opportunities exist
Uniqueness/Heritage	Freshwater: HIGH VAUE: historic trolley bed and bridge from early 1900's; saltmarsh: HIGH VALUE: appears mostly undisturbed, significant opportunities for wildlife observation, supports recreational activities, provides local habitat values
Visual quality/Aesthetics	Freshwater: scenic views into marsh; foliage turns bright colors in the fall; saltmarsh: HIGH VALUE: appears undisturbed, aesthetically pleasing
Endangered species habitat	None identified
MNAP Natural Community Type	Spartina Saltmarsh

- **Describe the proposed future condition of the property and the "functional lift" the project proposes to provide (e.g., proposed change in habitat quality, contribution to functioning biological systems, water quality, level of degradation, etc.).**

Protecting this productive salt-hay saltmarsh will ensure the habitat remains viable for tidal wading birds and waterfowl. In addition, this property is adjacent to already protected marsh, and conserving it would help ensure the health of the larger ecosystem which extends along either side of the river for approximately 3 miles and includes 105 acres. Through permanent conservation, natural reforestation will occur in the forested upland and palustrine forested wetland areas of the property that have been degraded by aggressive logging activities, providing additional "functional lift" to the river and coastal wetlands by minimizing erosion and sedimentation, providing additional forage opportunities for wildlife and improving overall habitat. Natural regeneration of this site will increase biological diversity as early successional species mature, and harvested tree species colonize the site. Maintenance of the wetland buffers through permanent conservation will also reduce the risk of degradation resulting from land disturbance activities on adjacent properties.

- **Describe the level and type of threats to resources on and adjacent to the property. Note that preservation projects must anticipate the threat of degradation to the site in the next 20 years.**

This preservation project will eliminate the threat of development on this property and potential impacts to the significant resources it includes. The property has been actively listed for sale on the open real estate market and the woodlands were cut in anticipation of selling the land for a subdivision or development. If not conserved, the property will very likely be converted to house lots. Warren is one of the fastest growing towns in Knox County and specifically the population increased 25% between 2000 and 2010. The growth in housing units is also significant over the past twenty years [15%]. This trend is anticipated to continue over the next 20 years as projections for growth in Maine are expected to focus in the midcoast, where rural lands will continue to be converted to suburban lands due to lower taxes, less regulation, and more affordable prices. Preservation of this property will reduce impacts on the adjacent conservation easement property by reducing the potential impacts of sediment and pollutants runoff, construction and occupation disturbance, and indirect light pollution. [Note: Information is based on analysis of U.S. Census data collected by the State Planning Office, the Brookings Report and the Midcoast Regional Planning Commission.]

- **Describe the current and proposed buffers on the project site, and the degree to which they protect or support identified resource functions and ecological connectivity to other conservation areas or undeveloped large blocks of habitat**.

The buffer to the estuarine intertidal wetland is presently mixed woodland, shrubby vegetation and open fields. As the woodland revegetates to white pine and red oak in the upper canopy, greater protection will be afforded to the intertidal and wetland communities specifically by preventing floods during storm events, conserving water during dry seasons, slowing down runoff into the streams, wetlands and the river, preventing non-point pollution and controlling erosion. The protected property will add these functional values to the existing protected woodland buffer that is adjacent to this property, named the Weaver easement.

* **Describe the current use of the property (e.g., any structures or improvements) and the land use activities in the area surrounding the property (e.g., residential, forest management, commercial, agriculture, etc.**).

There are no structures on the property and access is by woods roads created during the forest harvest. The surrounding land use includes residential, forest management and commercial agriculture (vineyard). The vineyard is located on the Weaver easement property, which is adjacent to this project property. Nearly 76% of the land area within 1/2-mile radius of the project property is forested. The property lies within a mile-wide corridor along the river that provides significant buffer protection to the river and its resource values.

- **Describe the proposed use of the property and any proposed management (e.g., describe in detail any proposal for "forestry management" or "wildlife management" and how this management will affect existing and proposed aquatic or other natural resources**).

The proposed use of the property will include limited access for the public, defined in breadth and scope as a result of a natural resource inventory and management plan developed once the property is secured. The property's conservation values include the remains of a trolley track, where a railway ran between Union and Thomaston, from 1902 to 1932. As appropriate, access to the track for an interpretive trail will be explored. As the forest has recently been heavily harvested, there are no immediate plans to conduct further harvesting, but prudent forest management could involve vegetation management to control invasives and enhance biological diversity. In the next 20 years, additional forest management may be considered in order to diversify strand structure to benefit wildlife and other resource values. The forest management objectives would be determined by a forest management plan created by a licensed professional forester, which would take into account the protection of the resource values identified in this proposal. Limited public access would also include use of the site for environmental education purposes either through public opportunities hosted by GRLT or in partnership with local schools.

- **Describe the specific techniques and methods that will be used to conserve the habitat**.

GRLT proposes to acquire the property in fee and permanently conserve the habitat. The Land Trust has been operating since 1987 and has 2,600 acres in permanent conservation, including nearly 600 acres held in fee on 13 properties. We understand that award recipients are required to record a Notice of Project Agreement to title on the property, which serves as a type of deed restriction. There is limited opportunity for restoration as the harvesting conducted within the forested wetlands and within 250 feet of the river left the ground relatively undisturbed. Natural regeneration allowed through permanent protection will restore the wetland buffer and habitat values. Within the early successional forest and meadow areas, non-native honeysuckle (*Lonicera morrowii)* exists primarily along the trail and purple loosestrife (*Lythrum salicaria*) is found is small clumps, which can be managed through manual removal. Tire-dumping close to Route 131 has been reported by neighbors but not yet discovered. Removal of tires on the upland will eliminate further toxins from entering the ecosystem on site.

- **Describe the level of support and involvement of other relevant agencies, organizations, and local community**.

Not applicable

Landscape Context:

- **Describe the proximity / benefits to statewide focus areas for land conservation (Beginning with Habitat Focus Area) or habitat preservation identified by a state agency, or other regional or municipal plans**.

This project is within one mile of the BWH identified focus area for land conservation, namely St. Georges River and Associated Ponds. The values of this property mirror the values identified in the focus area namely habitat for a rich diversity of wildlife, fish and shellfish, and provides opportunity for continuous protection as the habitats along the river transition from freshwater systems, where BWH identified a focus area to brackish and salt tidal marsh. The property is within the Warren Tidal Marshlands Focus Area targeted for protection by GRLT. This focus area was identified because of the abundant wildlife values and rare salt-hay saltmarsh community.

- **Describe the adjacency / proximity to other public or private protected properties and how this project will enhance overall conservation (e.g., refuges, management areas, preservation, parks, conservation organization properties, mitigation banks, or other protected restoration sites).**

- This project is adjacent to the Weaver conservation easement held by GRLT, which is 57 acres of agricultural fields, upland forest, wetlands and saltmarsh. This project will enhance overall conservation by creating a larger block of undeveloped land and protected buffer along the rare salt-hay saltmarsh community and class A water quality St. George River. Prior to harvesting on this property (both in 2004 and in the late 1990's) the stand type was likely Oak Pine Forest, similar to the adjacent Weaver easement and therefore larger stands of this community type would be more valuable as nesting habitat for some passerine bird species and cavity nesters. Within the GRLT focus area, 125 acres have been conserved, and this project would double the conservation acreage.

- **Describe the proximity / benefits to important species in Maine such as habitat for wetland Rare, Threatened, Endangered Species, or Species of Special Concern; Habitat for Species of Greatest Conservation Need; S1 & S2 Wetland Natural Communities; and/or within or buffering brook trout, Atlantic sea-run salmon or other diadromous fish runs and habitats**.

The property protects important resources of statewide significance namely Spartina (Salt-hay) Saltmarsh community (S3) and coastal wading bird and waterfowl habitat as well as priority resource types identified by MNRCP, specifically estuarine intertidal habitat (E2) and forested wetlands (PFO). Over 100 bald eagles have been reported to fly down this section of river on a daily basis in the winter, and nesting sites are known from within one mile upstream. Protecting the riverfront will enhance water quality for migrating alewives on the St. George River.

- **Describe any potential adverse impacts to any protected natural resource, such as upstream or downstream aquatic resources, ecologically sensitive areas and wildlife habitat and discuss any potential effect the mitigation project may have on any species listed as either federal or state threatened or endangered that may be found in the vicinity of the project. These impacts should be avoided to the greatest degree possible**.

No adverse impacts.

Project Readiness

- **New requirement:** Provide documentation of landowner willingness to participate in the proposed project, including conveying a conservation easement or fee title to the property (for projects not on existing conservation lands). Include landowner's name and address.

Attached is a letter of intent from the Anderson family who are willing to work with the Georges River Land Trust in order to purchase the title of the property for permanent conservation.

- **List permits needed (federal, state, and local) and which, if any, have already been secured. Describe the extent of legal access to the property.**

Permits are not applicable to this application. There is clear access to the property as it is located on State Route 131.

- **Outline tasks / steps to be taken in completing the project, including time schedule. Please also include key tasks / steps that have already been completed and the date of completion.**

The tasks outlined ahead for this protection project include the following:

1. Review by the Land Protection Committee regarding the conservation merit of this project (completed August 2010)
2. Decision of the Anderson Family to work with Georges River Land Trust to sell their property through the MNRCP program. (completed June 2011)
3. Preliminary review by the Board of Directors to proceed with acquisition (completed July 2011)
4. Application to MNCRP (Sept 2011)
5. Decision to move forward contingent upon purchase fees available through MNRCP program (January 2012)
6. Appraisal of the fee property (January 2012)
7. Purchase and Sales Agreement (February 2012)
8. Survey of fee property boundaries (February 2012)
9. Environmental Assessment (April 2012)
10. Title review and Insurance (April 2012)
11. Final deed (based on title review and survey) (May 2012)
12. Fully executed Purchase and Sales Agreement (July 2012)
13. Executed Notice of Project Agreement (July 2012)
14. Draft settlement statement (August 2012)

- **Specify tangible outputs (work products and deliverables), including time schedule. Please also include key outputs that have already been completed and the date of completion**.

See above

- **Outline the anticipated <u>short-term monitoring plan</u> for restoration, enhancement and creation projects. A five-year monitoring term is typical, with a potentially longer period for resources with slow development rates. Please note that if the project is approved for funding, a detailed monitoring plan with success criteria will need to be submitted prior to receipt of funding. Preservation projects do not require short-term monitoring plans.**

While this is a preservation project, GRLT can provide copy of the natural resource inventory and management plan, establish photo points to document natural regeneration of the forest, provide annual monitoring reports, and photographic documentation of any remedial actions taken such as invasive species removal, tire removal.

- **New requirement**: A <u>long-term stewardship and monitoring plan</u> must be developed for all projects prior to the award of MNRCP funds. Describe the anticipated process for developing the long-term stewardship plan for the project and provide information on who will maintain the property in perpetuity, general easement terms (if applicable), and who will conduct any monitoring. Describe anticipated costs in long-term maintenance of the project site and long-term monitoring of any easement conditions. Provide a detailed description of the financing mechanism (stewardship endowment, trust or other method) for funding the long-term stewardship of the project site.

Should this property be conserved, a management plan will be developed and be included in GRLT's successful stewardship program, which uses a combination of staff and volunteer support to monitor and maintain all properties held in fee or easement by the Land Trust. The management plan will contain XX. Although stewardship is currently primarily funded as part of the annual operating budget, GRLT has a growing stewardship fund with a goal to be self-sustaining within 10 or fewer years. The annual stewardship budget for GRLT represents approx. 17% of the $300,000 operating budget. Presently the organization has $130,000 for ongoing stewardship, monitoring and legal defense. Future funds for stewardship will be secured through donor solicitation, grants, and allocation of major gifts.

The project includes estimated costs based on inquiries with technical providers and review of the sales data of undeveloped acreage over the last 18 months in Knox County. The long-term management costs are based on a budget prepared for the property.

MNRCP Project Budget

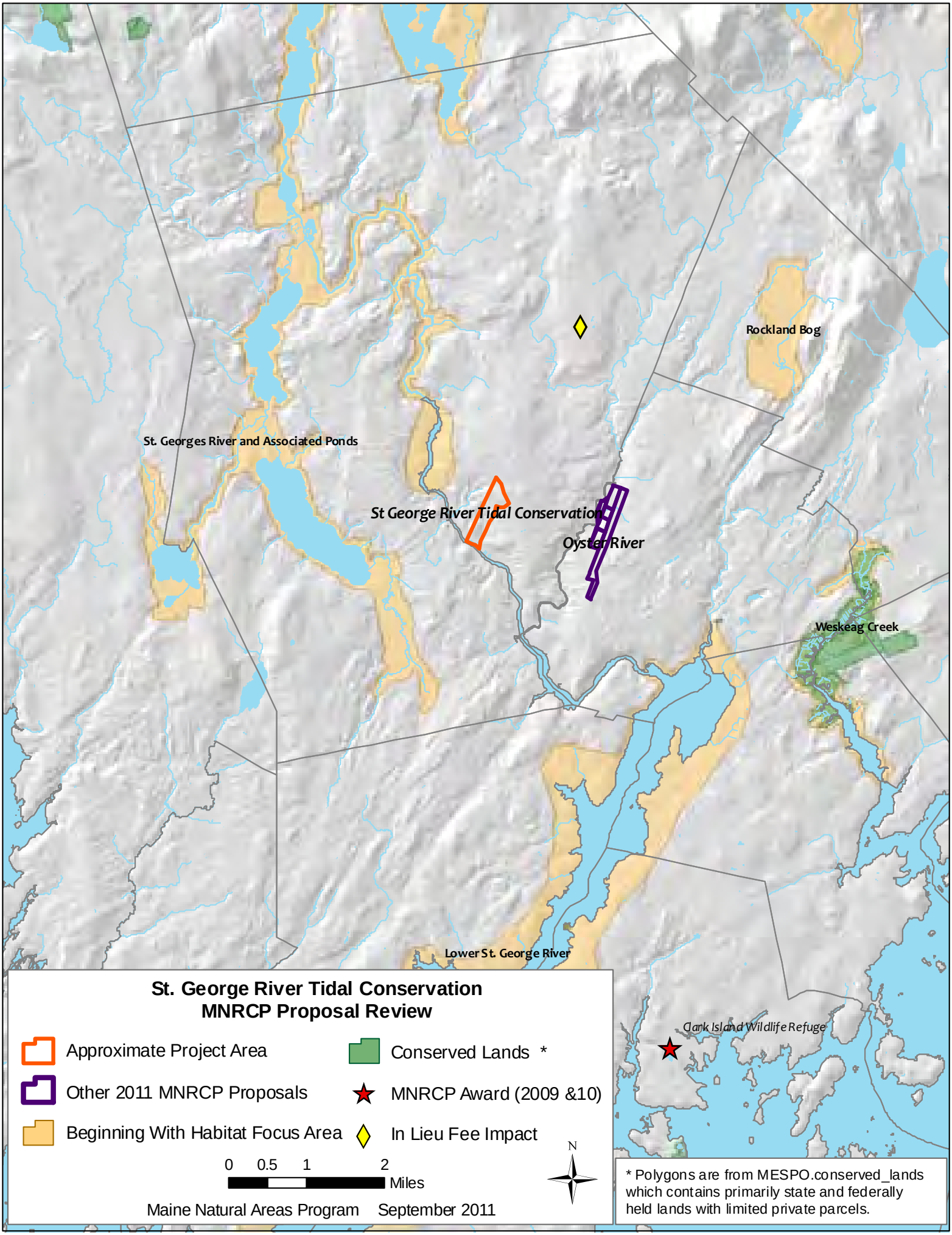
Identify costs as actual incurred or estimated. Describe the basis for any estimated costs.

Acquisition and Associated Costs	
Value of fee lands or conservation easements to be purchased*	225,000
Appraisal costs	1,000
Title, legal and closing costs	2,000
Land survey	8,500
Environmental hazard survey	1,500
Baseline documentation *(easement only)*	0
Long-term management/stewardship planning	3,500
Natural resource survey	500
Restoration, Enhancement, or Creation Costs	
Restoration planning	
Personnel (manual invasive removal)	500
Site Work	
Contractual (dump truck to remove tires)	1,000
Equipment	
Supplies	
Other	
Monitoring and Long-Term Management Costs	
Short-term monitoring costs†	NA
Long-term management/stewardship costs‡	15,000
(to cover Stewardship Fund annual costs of $600 + legal defense)	
Total Project Cost:	258,500
Total Maine Natural Resource Conservation Program (MNRCP) Request:	245,000
Other Funding Sources and Amounts:	13,500

* Land Acquisition or Conservation Easement Costs must based on an Appraisal completed within the past two years, in accordance with the Uniform Standards of Professional Appraisal Practice (USPAP). A copy of the final appraisal must be provided and consist of a complete appraisal and a self-contained appraisal report.

† For restoration, enhancement or creation, a five-year monitoring term is typical, with a potentially longer period for resources with slow development rates. Preservation projects do not require short-term monitoring.

‡ Funded projects are expected to protect priority resources "in perpetuity," which requires an entity with the resources and expertise to ensure long-term management and stewardship. A financing mechanism (e.g., endowment, trust, or long-term financing plan) is required to ensure adequate funding is available over time, though all the funds needed for establishment do not need to be included in MNRCP request.


Rockland Bog
St. Georges River and Associated Ponds
St George River Tidal Conservation
Oyster River
Weskeag Creek
Lower St. George River
Clark Island Wildlife Refuge
St. George River Tidal Conservation
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
Beginning With Habitat Focus Area
Conserved Lands *
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Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

Maine Natural Resource Conservation Program Full Proposal

Application Date: 9/15/2011

Executive Summary

Project Title**:** Sucker Brook West Shore

Project Sponsor**:** Greater Lovell Land Trust, Inc., Tom Henderson, Executive Director 925-1056, tomgllt@earthlink.net P.O. Box 181 Center Lovell, Me. 04016

Project Location**:** Stow and Lovell Maine, Oxford County Union Hill Road

Summary Project Description**:** The Greater Lovell Land Trust proposes the acquisition, for preservation and the long term stewardship of 351 acres in the *Sucker Brook Headwaters-Focus Area for Land Conservation* and 50 acres in the *Horseshoe Pond Highlands-Focus Area for Land Conservation,* as identified in the strategic *Conservation Plan for the Kezar River, Kezar Lake and Cold River Watersheds.* The complete plan can be viewed at www.gllt.org, "Consrvation Plan". This project supports our ambitious regional vision for landscape scale habitat preservation extending from the floodplains of the Saco River to the White Mountain National Forest through the Kezar Lake Outlet, Lower Bay and Sucker Brook wetland system. Acquisition of these three parcels increases forest and wetland preservation in this seven-mile long wetlands complex from 1,254 acres to 1,655 acres. The GLLT proposes to become the owner and long-term steward of these three properties, advancing our goal for the preservation of the functional integrity of this significant wetlands complex.

The project would provide permanent protection to a significant wetland complex of brooks, marshes, forested swamps and shrub swamp land types in the Bradley Brook and Sucker Brook systems. Wetland types include *scrub shrub, lacustrine limnetic, emergent and forest* for a total of 66 acres of wetland and 335 acres of forested buffer. These ecosystems provide high valued breeding and migratory habitat for several species that are rare, threatened, endangered or in decline. In addition to waterfowl, these ecosystems provide particularly high value habitat for other rare, threatened, endangered or declining non-game and other migratory birds.

Estimated Project Cost: (see attached budget) The total estimated cost of the project is $330,500. The agreed upon purchase price is $300,000 and the GLLT has received quotes for legal services, appraisal and survey cost totaling $16,400. All other costs are estimates based upon expenditures for previous projects.

Total Project Cost----------$330,500
MNRCP Fund Request----------$261,000
GLLT Funds from Bequest/Donor------$ 69,500

Resource Priority of Project Site: The Sucker Brook West project seeks to preserve over 65 acres of significant wading bird and waterfowl habitat in close association with other preserved lands. The project area is in close proximity to the *Kezar Fen-BwH Focus Area* at the south end

of Lower Bay. The GLLT owns a 265 acre parcel in the *Kezar Fen Focus Area*. The project area is adjacent to the *Sucker Brook Outlet Reserve*—a 249 acre reserved purchased by the GLLT with funding support from the Land for Maine's Future program and the U.S Fish and Wildlife Service-Small NAWCA Grant Program. Other protected lands in this wetlands complex include 247 acres of GLLT Reserves at Lower Bay, 331 acres of conservation easements held by the GLLT at Lower Bay, a 101 acre GLLT Preserve at the Sucker Brook headwaters and 61 acres of conservation easements, held by the GLLT at the Sucker Brook headwaters. The Sucker Brook West Shore project significantly advances the GLLT habitat connectivity goals in throughout this ecosystem and dovetails perfectly with other targeted properties whose protection is the subject of continuing negotiations.

The Sucker Brook West Shore project area includes 351 acres located in the "*Sucker Brook Headwaters—Focus Area for Land Protection Efforts*" as identified by the community based *Conservation Plan for the Kezar River, Kezar Lake and Cold River Watershed* and 50 acres in the *Horseshoe Pond Headwaters—Focus Area for Land Conservation Efforts,* as identified by said *Plan.* The *Town of Lovell Comprehensive Plan* states that the "Sucker Brook Floating Bog…supports bird life and aquatic mammals requiring an environment unspoiled by encroachment of man. The area is in need of protection from further development."

Type of Conservation

Natural Resource Type		**Restored acres**	**Enhanced acres**	**Preserved acres**	**Created acres**	**Total acres**
Freshwater Resources	Freshwater wetland, emergent (PEM)			2.13		2.13
	Freshwater wetland, forested (PFO)			23.88		23.88
	Freshwater wetland, shrub-scrub (PSS)			30.23		30.23
	River, stream or brook			9.55		9.55
	Significant wildlife habitat, vernal pool (*indicate number of pools if necessary*)					
	Significant wildlife habitat, vernal pool critical terrestrial habitat					
	Significant wildlife habitat, Inland Waterfowl and Wading Bird Habitat			65*		
	Upland buffer (non wetland habitat)			335.2		335.2
	Project Total			**401**		**401**

(*) The wetland acres accounted for also rank as significant Wading Bird and Waterfowl habitat by the Maine Dept of IF&W and are listed on the table but accounted for only once in the total.

Potential to Meet MNRCP Goals

A field assessment was conducted by Boyle Associates to verify wetland types/extent and to provide an assessment of the functions and values of each. The report by Boyle Associates is attached for your reference. The report concludes the following:
1) *The wetlands provide or have the potential to provide the following functions and values: groundwater recharge/discharge, floodflow alteration, fish and shellfish habitat, sediment/toxicant retention, nutrient removal, production export, sediment and shoreline stabilization, wildlife habitat, and recreation. The principal functions served by the wetlands are floodflow alteration, groundwater recharge/discharge, fish and shellfish habitat, sediment, toxicant, and pathogen retention, wildlife habitat, and recreation.*
2) *All of these above-listed habitats are of exemplary quality and are important in the context of preservation of this parcel.*
3) *Kezar Lake remains one of Maine's cleanest and clearest lakes, with above average water quality compared to most other lakes in Maine. Sucker Brook and its associated wetland systems play an important role in maintaining the high water quality within the lake.*
4) *The landscape surrounding the parcel is undeveloped and large corridors of contiguous habitat can be found. Various species can easily travel from one wetland system to the next, with little impediment, all along the brook.*

Water quality is further protected by the forested buffers that contain numerous intermittent and unnamed tributaries coursing through the upland forest and flowing into Bradley, Howard and Sucker Brook.

The property is owned by the Kezar Corporation, a local development firm that has developed other properties in close proximity in recent years. The GLLT believes that its conserved lands adjacent to the parcel make it attractive to potential developers. The property is in a region of Lovell and Stow that is traditionally working forest, though conversion to residential housing has been steady for two decades. There are no structures or improvements on the subject property other than logging trails.

The Sucker Brook West project is located in both the *Central and Western Mountains* and the *Southern Maine Ecoregions*(see attached map). This wetland complex and watershed flows south into the *Southern Maine Ecoregion.* The GLLT is uncertain as to the proximity of this project to a permitted impact.

The GLLT will develop a forest and wildlife management plan for the long term stewardship of the property. Such plans will be professionally prepared with guidance from state agencies in regards to species specific recommendations for eastern box turtle and potentially others. The GLLT manages the adjacent Sucker Brook Outlet Reserve under recommendations from the Maine Dept. of IF&W and LMF project sponsor, the Maine Department of Conservation.

Landscape Context

The Sucker Brook West Shore project is in close proximity to the *Kezar Fen-BwH Focus Area* at the south end of Lower Bay where the GLLT owns 265 of preserved land. In addition, the project area is adjacent to the *Sucker Brook Outlet Reserve*—a 249 acre reserved owned and managed by the GLLT. The GLLT has preserved total of 1,254 acres, to date within the Sucker Brook/Lower Bay Focus Area for Conservation. This wetland complex contains natural resources of significant value or rarity of habitats and species. The resource includes significant wading bird and waterfowl habitat and high value breeding and migratory habitat for the following rare, threatened and declining species: *American Bittern, American Black Duck, Little Blue Heron, Osprey, Pied-billed Grebe, and Wood Duck.*

The property provides particularly high value habitat for other rare, threatened, endangered or declining non-game and other migratory birds including:

- Shorebirds: *common snipe, solitary sandpiper, American woodcock*
- Waterbirds: *greater scaup, little blue heron, American bittern, American black duck, osprey, pied-billed grebe, and wood duck.*
- Raptors: *northern goshawk and northern harrier*
- Songbirds and Others: *bay breasted warbler, blackburnian warbler, Canada warbler, Cape May warbler, chestnut sided warbler, Louisiana waterthrush, northern flicker, veery, whip-poor-will, wood thrush, black-throated blue warbler and olive-sided flycatcher.*

The adjacent Sucker Brook Outlet Reserve is one of six sites in Maine known to have a population of *eastern box turtle*, a state threatened species and *musk turtle* a species of statewide concern.

Project Readiness

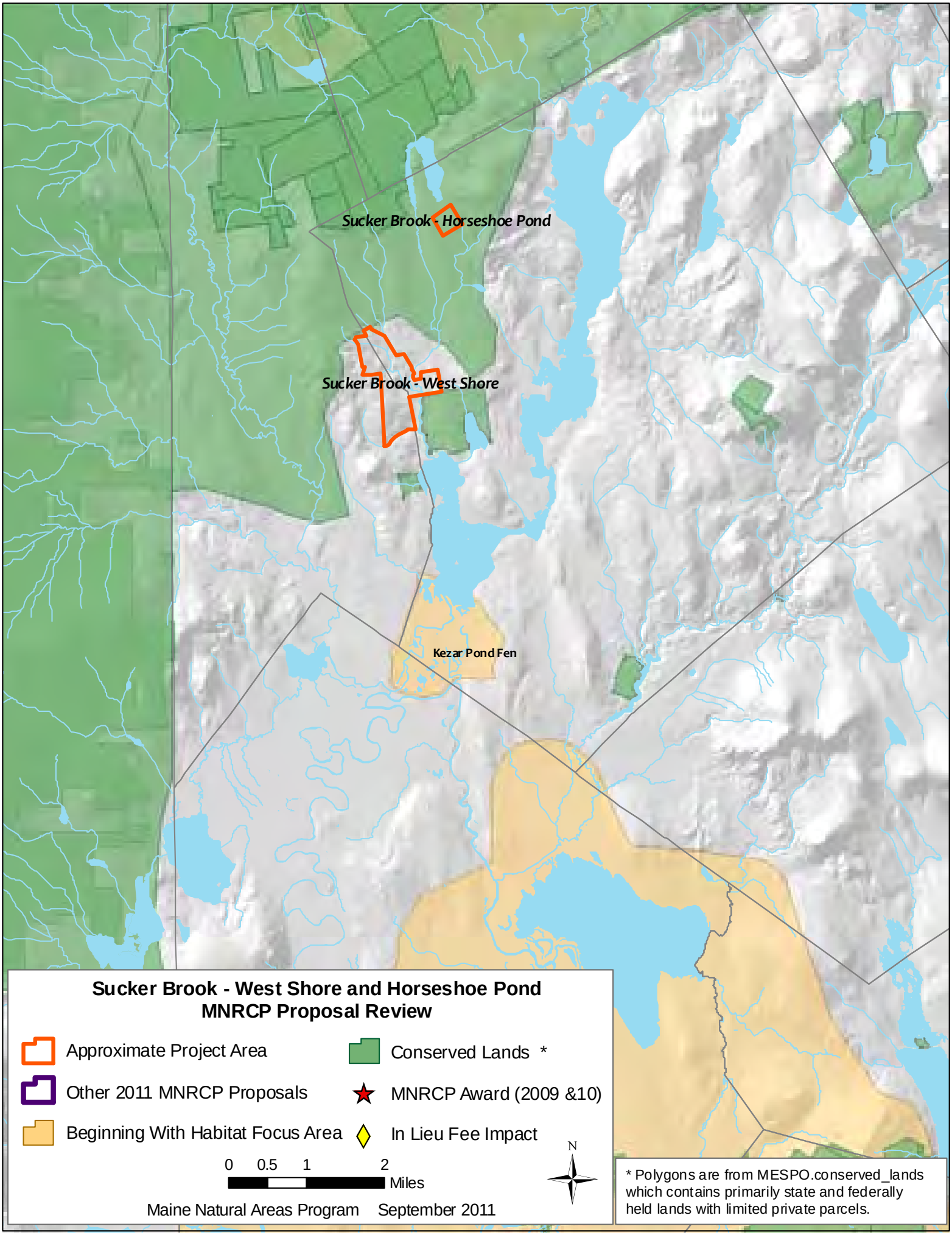
The GLLT is under Purchase and Sales Agreement (see attached) with the Kezar River Corporation, a local development firm to purchase three parcels, known as Lot 14 on Stow Town Map 4, Lot 17 on Lovell Town Map R03 and Lot 3 on Lovell Town Map R05. The project budget is based upon a purchase price of $300,000 and quotes for contractor services such as survey, appraisal and legal fees. The project is highly feasible, pending successful application to the MNRC Program. The GLLT has partial funding in hand to support this acquisition and seeks assistance from MNRCP to ensure full funding is available for a prompt transaction in 2012.

The GLLT worked with the MNAP to map critical habitats and wetland resources included in this grant request. We contracted with Boyle Associates to assess wetland types and their functional benefits and their report is included. The GLLT will contract for a hazard waste assessment, boundary survey and title search prior to grant awards. The anticipated closing date for the fee transfer is April 1, 2012 pending the satisfactory completion of all due diligence.

Other

The Sucker Brook region is a popular recreational destination for canoeing, kayaking, bird watching, wildlife viewing, and fishing and hunting guide services. The local economy is natural resource based employment and tourism. The Lovell Comprehensive Plan articulates the value of this system to "Quality of Place", stating "the Sucker Brook Floating Bog…supports bird life and aquatic mammals requiring an environment unspoiled by encroachment of man. This area is in need of protection from further development."

The GLLT recognizes that it is part of the local economic engine. Its lands produce forest products and provide for high quality recreational experiences and the continuance of traditional uses such as hunting, fishing and snowmobiling. Its extensive network of public recreational trails is featured in the *Maine Birding Trail Guide* as quality destinations for birding. The GLLT is participating in the *Maine Trail Finder* program, a website designed for "one-stop" shopping for non-motorized recreational trails.


Sucker Brook - Horseshoe Pond
Sucker Brook - West Shore
Kezar Pond Fen
Sucker Brook - West Shore and Horseshoe Pond
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
Beginning With Habitat Focus Area
Conserved Lands *
MNRCP Award (2009 &10)
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Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

Suckfish Brook Watershed Preservation Project

Project Sponsor: Town of Falmouth
271 Falmouth Road
Falmouth, ME 04105
207-878-8933
openspace@maine.rr.com

Project Location: Town of Falmouth, Cumberland County
Mast Road, Falmouth

Summary Project Description:

The Mast Road Conservation Corridor project will permanently preserve ±87 acres of wetlands and upland forest that constitute a large portion of the headwaters of Suckfish Brook, a major tributary of Highland Lake. The project includes ±21 acres of emergent wetlands, including a northern peat bog, a 2.5 acre beaver pond, ±30 acres of forested wetlands and ±34-acres upland forest. It contains one of the very few northern peat bog habitats found in the greater Portland area and the beaver flowage is one only a handful of ponds in our community. The upland portion of the property is threatened by residential development, which would in turn threaten the fragile recovery of Highland Lake from its recent eutrophied condition. [Only last year was the lake removed from the DEP's list of "most threatened lakes."] The owner of the two parcels has received a purchase offer from a potential developer, but prefers to see the land conserved if possible. That owner is a willing seller; the Town Council has given concept approval to the acquisition; the appraisal, survey and natural resource inventory are complete; and the project would be ready to close within eight months of MNRCP approval. The town has acquired a purchase option for this parcel, which lies within a ±250 acre area targeted in Falmouth's open space plan for permenant protection. Given its unique habitat and watershed protection values, the parcel is a high priority for acquisition by the town's Conservation Commission.

The project will also restore a heavily eroded tote road on the upland forest portion of the property. Poor wood harvesting practice in past years has created an emerging intermittent stream channel leading from the top of the eastern boundary to Suckfish Brook. Continued erosion of this area, plus some erosion around the culverts in the stream is causing siltation in brook, thus reducing its habitat value, particularly for spawning brown trout and white suckers.

Estimated Project Cost:

Total cost:	$327,500	
MNRCP request:	188,800	(58%)
Town of Falmouth	74,000	(22%)
Bargain sale value	65,000	(20%)

Resource Priority of Project Site:

The project parcels are in close proximity to existing conservation land owned by the Falmouth Land Trust. They lie within one of eight natural resource conservation area identified as priorities for protection in the town of Falmouth's 2006 open space plan, *The Greening of Falmouth*. And they contain a rare Pitch Pine – Heath Barren plant community.

Type of Conservation:

Natural Resource Type	Restored acres	Enhanced acres	Preserved acres	Created acres	Total acres
Freshwater wetland, emergent (PEM)			21		21
Freshwater wetland, forested (PFO)			30		30
Freshwater wetland, shrub-scrub (PSS)					
River, stream or brook			2.5		2.5
Significant wildlife habitat, vernal pool					
Significant wildlife habitat, vernal pool critical terrestrial habitat					
Significant wildlife habitat, Inland Waterfowl and Wading Bird Habitat					
Other upland forest	1		32.5		33.5
Project Total =	1		87		87

Potential to Meet MNRCP Goals

Conservation Value

The project will result in the acquisition and permanent protection of two abutting parcels of land that constitute a major portion of the headwaters of Suckfish Brook. The first, R09-048-001, is 52.5 acres in size and almost entirely forested wetlands or northern peat bog. The northern peat bog community type is particularly rare in southern coastal Maine, and is the only known such plant community in this area. The second, R09-055 is 34.6-acres in size. The lower portion of the property includes a beaver pond and part of the adjacent peat bog. The northern portion is an upland hardwood forest. The R09-048 (upland) property includes a corridor that abuts Mast Road, providing access to the parcel. A right of way to the R09-055 (bog) property is also part of the purchase.

The watershed protection these properties afford Highland Lake is particularly noteworthy. Nearly all the precipitation that falls on the west side of Blackstrap Ridge between Mast Road and Duck Pond Road – a land mass of some 600 acres – eventually flows through this area on its way to the lake via Suckfish Brook. The floodwater retention, erosion control and nutrient filtering benefits the property provides contribute significantly to the water quality of the lake. The Highland Lake Watershed Association agrees and is in full support of this proposal (see attached letter).

A complete description of the property prepared by Maine Natural Areas Program ecologist Kristen Puryear is attached, including the functional benefits the project will provide.

Future Condition / Functional Lift

The vast majority of the property will be preserved in its natural state, with a small area (±1 ac) that includes an eroded woods road restored to prevent continued siltation of Suckfish Brook. The "functional lift" will include improving the quality of Suckfish Brooks by reducing siltation and improving water quality in Highland Lake by preventing development of the upland portion of the property and the non-point pollution that would accompany such development.

Historic Use

The forested portions of the properties to be acquired were last logged over 10-15 years ago. Several old woods roads are still visible on the land, including one that leads directly down the slope from the utility line across Suckfish Brook and out to the Mast Road. Two large cast iron culverts have been placed in the brook. These are the only structures on the property and are in good repair, but the fill around them is eroding into the brook. This area, and the upper portion of this tote road need restoration to remedy the siltation problem. This project includes the funds necessary to for that restoration. The result over time will be improved habitat for fish that spawn in Suckfish Brook, including brown trout and white suckers.

The result of the logging in the forested wetland portion is a mixed age, mixed growth forest with a dense understory. The upland forest portion is a nearly pure hardwood stand consisting of red oak, beech, red maple, white oak, white ash and some white pine.

A relatively small portion of the peat bog was apparently mined for peat early in the last century, although not in the area covered through this acquisition. Local lore has it that a team of mules was lost during this operation, thus bringing an end to the mining venture.

Various pieces of debris have been left in the woods near Suckfish Brook. This debris – old culverts, a flatbed trailer, and assorted metal debris – will be removed as part of the restoration effort.

Borders & Buffers

Properties bordering the proposed project area pose no threat to the quality of these wetlands. On the west (Mast Road side), nearly all of the houses that can be built on abutting land have been built on lots that area often quite deep. The back portion of these lots is either bog or forested wetlands, unsuitable for development (see Map I).

To the east, the CMP utility line runs the entire length of this edge of both properties, thus blocking or at least buffering development in that direction.

The bog continues south into the town of Westbrook and is buffered the same way that it is in Falmouth.

Threat of Development

The threat of development on the northern portion of the property is quite real. The elderly landowners are liquidating their various land holdings in the area, and while conservation is a desired outcome for this particular parcel, the property will be sold one way or the other. A developer has already made an offer on the upland portion of the portion of the property, an offer that is now in abeyance while the owners give the town a chance to acquire it as open space. A letter to that effect from the owners' representative is included in the Appendix.

Proposed Use of the Property, Conservation Methods

Once acquired, the property will be managed for its wildlife habitat, for recreation (we envision a trail around the entire area that will include bridged sections through the bog (see Map 2), and for light forestry to maintain the hardwood forest. The regeneration of young hardwood trees will also provide an ongoing food supply for the local beaver population, a supply they are in danger of outstripping. A draft of the easement to be held by the Falmouth Land Trust is attached. All forest harvesting done on town land must be supervised by a licensed certified forester, conducted by a certified logger, and be done according to American Tree Farm standards.

Restoration Plan

After consultation with the Natural Resource Conservation Service, and with Chase Excavation Company, it was recommended that the best way to remedy the erosion problem that exists on R09-55 would be as follows:

- Use a mini-excavator to level out the least eroded areas of the woods road, then fill the deeply eroded areas with rip-rap (large rocks).
- Construct drainage channels in low lying areas at intervals along the drainage area that will catch and divert run off water and spread it out over the surrounding woods.
- Cover the treated areas with Jute Matte, a material designed to hold the soil in place and allow new growth to establish itself.

The various debris materials will also be removed from the property as part of the restoration work.

Level of Support

This project has the full support of the Falmouth Town Council, the Falmouth Land Trust and the Highland Lake Association. FLT Trustees have agreed to hold the easement.

Landscape Context

The acreage targeted for protection through this project lies within one of eight areas identified as a priority for acquisition in Falmouth's open space plan, *The Greening of Falmouth* (see Map 3). All eight areas are locations in which it is still possible to preserve large tracts of unfragmented habitat. Protecting such large blocks of land for their habitat and recreational value is the number one goal identified in that plan.

Over the past five years, and with the help of the MNRCP, the town has made great progress in conserving land in these areas. Over 1,100 acres of municipal land are now held in designated conservation status, with another 1,000+ acres held by the Falmouth Land Trust.

The area that is now the primary focus for the Falmouth Conservation Commission's attention is the Mast Road corridor within which the project properties lie. Our aim is to protect over 250 contiguous acres in this area on either side the utility line from Mast Road to the Westbrook town line. Fifty acres in this area have already been easement protected as a result of the town's conservation subdivision ordinance provisions (see Map 1). Three other parcels are key to reaching that goal.

Parcel C is a 50-acre tree farm owned by a conservation minded family. While the family fully supports the idea of protecting their land, they are not yet in agreement about the best way to do that (the owner has five children, hence the need for deliberation). Regardless of their final decision, the owner of that land has agreed to allow public access to the trail system he has already established on the property, trails we hope to tie into a larger network (see Map 2).

Parcel E, comprised of three separate lots, is a 53-acre Christmas tree farm owned by a local nursery business east of the utility line that offers spectacular views of the Presidential Range. The family owners of that business area conservation minded and have been approached about placing an easement on the land that would prevent its future development. Talks are still underway in that regard. The owners of this parcel have also agreed to allow public access to their property on trails we would establish as part of the larger trail network indicated on Map 2.

Rare Species

Although not extensive enough to map, a small Pitch Pine – Heath Barren community exists in a portion of the bog.

Potential Adverse Impacts

This project will have no adverse impact on habitat, wildlife or other natural resources.

Project Readiness

Landowner Willingness

A copy of a letter from Claire Langlois, the owners' daughter who holds their Power of Attorney and who has been the owners' representative for this project is attached. A survey has been done for both properties, as have current appraisals.

Permits Needed

Permits will be needed from the town of Falmouth and the Department of Environmental Protection to proceed with the restoration work on the site. They will not be applied for until the sale is finalized. Permits will also be needed for any trails we construct within the wetland areas. They will not be applied for until those trail plans are finalized.

Project Task/Timeline/Outputs

Task	Time Frame
1. Conduct Phase I hazardous materials survey.	April 2012
2. Finalize project agreement	June 2012
3. Finalize terms of the easement.	June 2012
4. Close Sale	July 2012
5. Remove junk material from the property.	August 2012
6. Complete erosion control work.	October 2012
7. Monitor erosion control work.	Spring & Fall 2013 and yearly thereafter.
8. Construct trail system	Summer 2013, 2014
9. Conduct a BioBlitz on the property to document is flora and fauna.	Summer 2014

Short-Term Monitoring Plan

All Falmouth conservation properties are monitored twice a year by assigned property stewards using a protocol designed for that purpose. In this case, particular attention will be paid by the town's open space ombudsman to the restored eroded area to monitor the degree to which it has stabilized that area. Should additional erosion problems develop on the site, the town will take whatever actions are needed to remedy the problem.

Long Term Stewardship & Monitoring Plan

Once acquired, a management plan is created for all Falmouth conservation properties by its open space ombudsman, and then approved by the Conservation Commission's open space sub-committee and the town's land management team. Each plan includes a description of the property, including its known history; photographs; a summary of the conservation values being protected; a summary of the easement provisions / restrictions that are in force; a list of the management goals for the property; possible future acquisition opportunities for abutting properties; and a description of the management activities that will be carried out on the property, including a time line, budget and identification of the responsible party(ies).

The Falmouth Land Trust, as the holder of the conservation easement, conducts a baseline survey of property right after that easement is executed. This survey documents the existing condition of the property at the time of its acquisition and becomes the basis for the monitoring they do thereafter on an annual basis.

Advice on appropriate management activities is garnered from various natural resource agencies, including the Department of Inland Fisheries & Wildlife, Maine Forest Service, and the Biological Diversity Institute.

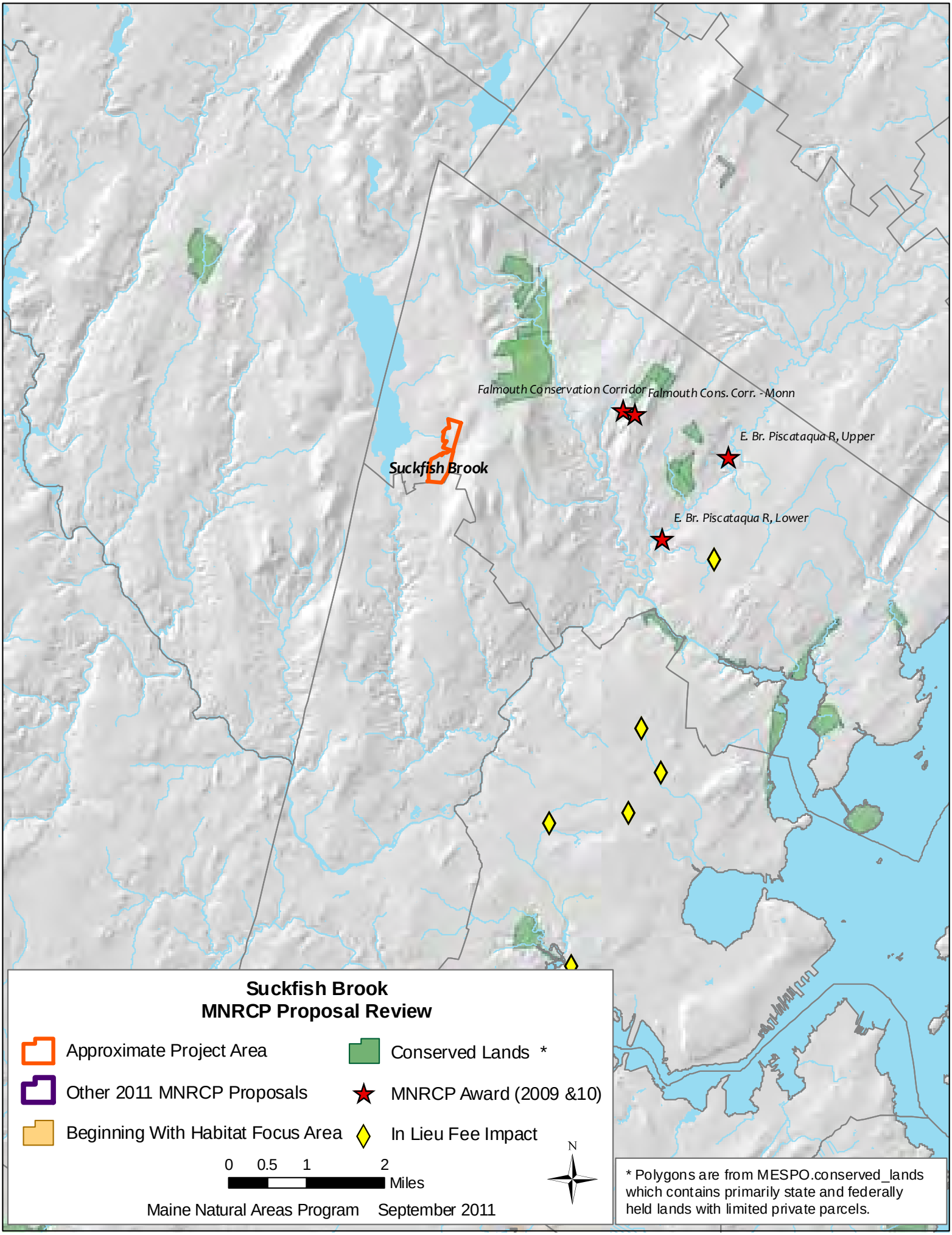
Building trails and establishing trailheads with signage and parking will be one of the first management tasks. Falmouth Conservation Corps volunteers do all of our trail building work, including bridge and kiosk construction.

All our large conservation properties also have forest management plans, developed by a professional forester. A forest management plan will be done for this property by Southern Maine Forestry Services.

Finally, a BioBlitz will be organized in the summer of 2014 to further document the flora and fauna found on the property during that time of year. A BioBlitz is an intense biological inventory that attempts to identify all the living macro-organisms in a given area over a 24-hour period. Community volunteers, led by professional biologists and botanists, collect, classify and identify all species within their area of specialty (birds, fungi, mollusks, ferns, insects, trees, mammals, etc.). The results of the BioBlitz will be used to further inform the management plan for the property.

Project Budget

Acquisition & Associated Costs	Total	MNRCP	Town	Donated
Value of fee lands or conservation easements to be purchased				
R08-048-001	245,000	155,000	35,000	55,000
R08-055	20,000	0	10,000	10,000
Re-appraisal costs	1,000	1,000		
Title, legal & closing costs	5,000	0	5,000	
Land survey	4,500	4,500		
Environmental hazard survey	3,000	3,000		
Baseline documentation	3,000		3,000	
Long-term management stewardship planning	2,000		2,000	
Natural resource survey	0	0		
Restoration, Enhancement, or Creation Costs				
Restoration planning	500		500	
Personnel				
Site work				
Contractual	10,300	10,300	0	
Equipment				
Supplies				
Other				
Monitoring & Long-Term Management Costs				
Short-term monitoring costs	0	0	0	
Long-term management / stewardship costs				
Stewardship fee	15,000	15,000	0	
Trails	15,000	0	15,000	
Forestry plan	1,500	0	1,500	
BioBlitz	2,000	0	2,000	
	327,800	188,800	74,000	65,000
		58%	22%	20%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Suckfish Brook
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
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Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

MNRCP Project Description

Upper Cathance River Wetlands Conservation Project: Perry Tract

Executive Summary:

- *Project Sponsor*: Angela Twitchell, Brunswick Topsham Land Trust, 108 Maine Street, Brunswick, ME 04011, 207-729-7694, btlt@gwi.net
- *Project Location*: Town of Topsham, Sagadahoc County, Bradley Pond Road
- *Summary Project Description*: This project consists of acquiring a 150-acre parcel on Bradley Pond Road that includes significant forested and scrub-shrub wetland acreage (125 acres) within the headwaters of the Cathance River and approximately 2,200 feet of frontage on the river itself. The Perry property includes inland wading bird and waterfowl habitat mapped as Significant Wildlife Habitat by the Maine Dept. of inland Fisheries and Wildlife, and a Streamshore Ecosystem mapped as an exemplary occurrence by the Maine Natural Areas Program. Selective forestry has taken place throughout the interior of the property.

  The 150-acre Perry property will be acquired in fee by the Brunswick-Topsham Land Trust (BTLT). The property is part of the larger Upper Cathance River Wetlands Conservation Project and would bring the total conserved lands in the project area to 490 acres including the abutting 163 acres Bradley Pond Farm Preserve (easement held by the BTLT). The Upper Cathance River Wetlands Project encompasses the headwaters of the Cathance River which is significant because it is one of the six rivers that drain into Merrymeeting Bay and therefore the Upper Cathance River Wetlands Conservation Project is an important piece of the puzzle that makes up the Merrymeeting Bay/ Kennebec Estuary conservation initiative. The BTLT has entered into a purchase and sales agreement with the Perry's and anticipates a February 2012 closing.

- *Estimated Project Cost*:
  - Total Project Cost: $106,000
  - MNRCP Fund Request: $70,000

- *Resource Priority of Project Site*:
  - Within or adjacent to a Beginning with Habitat Focus Area: Tidal portions of the Cathance River are included within the Kennebec Estuary Focus Area of Statewide Ecological Significance given the rare freshwater intertidal plant communities supported by the Cathance. This property will protect significant headwaters of this system northwest of the focus area boundary.
  - Within or adjacent to existing public or private conservation lands: The 163-acre Bradley Pond Preserve immediately abuts the Perry tract to the north; and is just one property removed from the 85-acre Jonaitis Easement to the south. To date, BTLT has protected approximately 490-acres in the upper Cathance River.
  - Within or adjacent to other natural resource priority areas: The project lies within the Brunswick-Topsham Land Trust's Upper Cathance River focus area, and within a focus area of the Town of Topsham's Natural Areas Plan.
  - Contains natural resources of significant value and/or rarity: The project area includes mapped Significant Wading bird and Waterfowl Habitat, and a mapped exemplary Streamshore ecosystem.

- Type of Conservation (*complete the following table*):

Natural Resource Type		**Restored acres**	**Enhanced acres**	**Preserved acres**	**Created acres**	**Total acres**
	Freshwater wetland, emergent (PEM)			1.6		
	Freshwater wetland, forested (PFO)			122		
	Freshwater wetland, shrub-scrub (PSS)			6.5		
	River, stream or brook			2,200 feet of frontage		
	Significant wildlife habitat, vernal pool (*indicate number of pools if necessary*)					
	Significant wildlife habitat, vernal pool critical terrestrial habitat					
	Significant wildlife habitat, Inland Waterfowl and Wading Bird Habitat			27		
Coastal Resources	Coastal wetland, Marine subtidal (M1)					
	Coastal wetland, Marine intertidal (M2)					
	Coastal wetland, Estuarine subtidal (E1)					
	Coastal wetland, Estuarine intertidal (E2)					
	Significant wildlife habitat, Tidal Waterfowl and Wading Bird Habitat					
	Significant wildlife habitat, Shorebird Feeding & Staging Areas					
	Upland buffer (non wetland habitat)			19.9		
	Project Total			**150**		

Potential to Meet MNRCP Goals:

- Describe the original habitat type and the current habitat conditions on the property with a determination of protected natural resources based on either aerial photo interpretation or, if available and applicable, a wetland delineation conducted in accordance with the Corps of Engineers 1987 Delineation Manual or subsequent USACE-approved method: Aside from selective logging conducted in the past 10 years, this site has remained relatively undisturbed and supports the wetland and upland natural community types expected based on physical setting, soil types, and disturbance regime. Site characteristics were documented by the Maine Natural Areas Program in June 2010 and summarized in the attached Site Visit Summary.

- Assess the functional benefits the project will provide using the following list as a guide:

1) For Forested Wetlands on Perry Property:

Ecological Function/Value	Rationale*
Education/scientific value	Proximity to conservation land and other wetland types provides multiple educational opportunities. Parking nearby can accommodate groups of people.
Floodflow alterations	Evidence of flooding from Cathance River, broad low wetland capable of storing floodwater from adjacent uplands or water bodies
Nutrient removal/transformation	High Value: Within watershed of agricultural areas; dense vegetation and fine grained sediments trap potential nutrients and protects water quality of Cathance River.
Production export	High Value: Wildlife food sources abundant, high vegetation density, higher trophic level consumers utilizing wetland
Retention of sediment/toxicants	Fine grained mineral soils/organic soils capable of trapping sediments and protecting water quality of Cathance River.
Uniqueness/Heritage	Provides multiple functional benefits, includes an exemplary ecosystem and significant wildlife habitat.
Visual quality/asesthetics	Views appear undisturbed; foliage turns bright colors in fall.
Wildlife habitat	High Value: Large unfragmented wetland, adjacent to other wetland types, abundant and diverse vegetation. Red Maple Sensitive Fern Swamp, Spruce Fir Cinnamon Fern Forest, Streamshore Ecosystem. Completion of this project will help to permanently protect a Significant Inland Wadingbird and Waterfowl Habitat and secure habitat for multiple Species of Greatest Conservation Need.
Recreation	Opportunities for cross country skiing, wildlife observation, and hunting. Public access will be allowed on this property.
Groundwater recharge/discharge (*Freshwater*)	Capable of receiving groundwater discharge or recharging local aquifers.
*Principle functions and values are indicated as "High Value"	

2) For Scrub Shrub Wetlands on Perry Property:

Ecological Function/Value	Rationale*
Education/scientific value	Proximity to conservation land and other wetland types provides multiple educational opportunities. Parking nearby can accommodate groups of people.
Floodflow alterations	Within floodplain of river, typically flooded in spring and saturated through year
Fish and Shellfish Habitat	Source of organic material, nutrients, that could benefit fish population
Nutrient removal/transformation	High Value: Within watershed of agricultural areas; dense vegetation and fine grained sediments trap potential nutrients and protects water quality of Cathance River.
Production export	High Value: Wildlife food sources abundant, high vegetation density, higher trophic level consumers utilizing wetland
Retention of sediment/toxicants	Fine grained mineral soils/organic soils capable of trapping sediments and protecting water quality of Cathance River
Sediment Shoreline Stabilization	Maintains stable streambanks, preventing erosion into Cathance River
Uniqueness/Heritage	Provides multiple functional benefits, includes an exemplary ecosystem and significant wildlife habitat.
Visual quality/asesthetics	Views appear undisturbed; foliage turns bright colors in fall; view of different wetland types.
Wildlife habitat	High Value: Large unfragmented wetland, adjacent to other wetland types, abundant and diverse vegetation. Mixed Graminoid – Shrub Marsh. Completion of this project will help to permanently protect a Significant Inland Wadingbird and Waterfowl Habitat and secure habitat for multiple Species of Greatest Conservation Need.
Recreation	Opportunities for wildlife observation, hunting; easily accessible by canoe. Public access will be allowed on this property.
Groundwater recharge/discharge (*Freshwater*)	Capable of receiving groundwater discharge or recharging local aquifers.
*Principle functions and values are indicated as "High Value"	

- <u>Describe the proposed future condition of the property and the "functional lift" the project proposes to provide (e.g., proposed change in habitat quality, contribution to functioning biological systems, water quality, level of degradation, etc.):</u>

Acquisition of the150-acre parcel and elimination of forest harvests will reduce future threats to the site's wetland communities and allow the communities to achieve full functional value. In addition, the elimination of the possibility for further residential development on the upland portions of the property will provide significant buffer to the wetlands. The following summarizes existing site functions and values and identifies likely functional lift resulting from increased protection:

1) Education/scientific value: This property will be permanently protected and publicly accessible. Given the Perry tract's proximity to Bradley Pond preserve, the site will expand the outdoor

classroom potential of BTLT's conservation efforts within this diverse wetland-dominated landscape.

2) Floodflow alterations: The shrub-dominated shoreline communities of the Cathance River and the broad, low forested communities within the interior of the Perry Tract regularly receive flood waters from seasonal river flows.
3) Fish & shellfish habitat: Wetlands on site buffer fish habitat within the Cathance, but do not support fish or shellfish habitat directly.
4) Nutrient removal/transformation: The Perry tract occurs within an agricultural use dominated watershed; dense vegetation and fine grained sediments trap potential nutrients and protects water quality of Cathance River. This function is likely to increase in importance over time as residential development expands within the area.
5) Production export: Dense vegetation contributes to production export functions on the Perry Tract. The capacity of the site to perform this function is not expected to change significantly.
6) Recreation: The site will be publicly accessible.
7) Groundwater recharge/discharge: On-site wetlands contribute significant groundwater to the Cathance River. It is likely that wetlands provide localized recharge value. Neither function is likely to change as a result of protection efforts.
8) Retention/storage of floodwater/surface water: Wetlands on-site are capable of receiving and detaining floodflows from the Cathance River. This function is not expected to change, but will increase in importance with continued residential build out along the Cathance River corridor.
9) Shoreline/sediment stabilization: Dense shrub-dominated vegetation along the Cathance River functions in stabilizing riverine sediments and trapping suspended particles during flood events.
10) Retention of sediment/toxicants: Wetlands on-site are capable of receiving and detaining floodflows from the Cathance River and trap suspended particles. This function is not expected to change, but will increase in importance with continued residential build out along the Cathance River corridor.
11) Uniqueness/Heritage: Wetlands on the Perry Tract contribute to the mapped exemplary streamshore ecosystem in the upper Cathance River drainage.
12) Visual quality/asesthetics: The site is primarily forested and does not offer significant vistas from any public viewing location. Protection will allow previously harvested forest stands to return to older successional stages.
13) Wildlife habitat: Completion of this project will help to permanently protect a Significant Inland Wadingbird and Waterfowl Habitat and secure habitat for multiple Species of Greatest Conservation Need.

- <u>Describe the level and type of threats to resources on and adjacent to the property. Note that preservation projects must anticipate the threat of degradation to the site in the next 20 years</u>: Rural areas of Topsham continue to provide attractive residential development opportunities given the strategic location between Augusta and Portland, and easy access to I-295. Several homes have been constructed along Bradley Pond road over the past decade, and uplands on this site could potentially support several additional homes. Although the expansive wetland system associated with Bradley Pond and the upper Cathance River is likely not directly threatened as a result of state and local wetland protection laws, incremental impacts to wetlands as well as the continued loss of upland buffers does contribute to degradation of wetland water quality, likeliness of invasive species establishment, and loss of connectivity for wildlife. This project will not only preserve a large patch of wetland habitat, but also secure upland buffers and increase connectivity to other secured lands.

- Describe the current and proposed buffers on the project site, and the degree to which they protect or support identified resource functions and ecological connectivity to other conservation areas or undeveloped large blocks of habitat: The Perry Tract will directly abut 163-acres of conservation land to the north and provide a core protected area within one of Topsham's largest remaining unfragmented forest habitat blocks. Together, the Perry property and Bradley Pond Preserve will total over 300 acres of conservation land capable of protecting interior forest habitat conditions and buffering wetland integrity over the long-term. The Brunswick-Topsham Land Trust and the Town of Topsham have both identified this area of town as a focus area for local conservation efforts. We anticipate that the acreage of protected land will only grow with time thereby augmenting the functional capacity and habitat values of the efforts to date.
- Describe the current use of the property (e.g., any structures or improvements) and the land use activities in the area surrounding the property (e.g., residential, forest management, commercial, agriculture, etc.): The Perry property is undeveloped and no structures are present. Selective timber harvests took place throughout the site during the past 10 years. The surrounding land use is primarily rural residential in character. Limited commercial forestry is ongoing on surrounding properties as are agricultural uses, primarily hay and pasture land maintenance.
- Describe the proposed use of the property and any proposed management (e.g., describe in detail any proposal for "forestry management" or "wildlife management" and how this management will affect existing and proposed aquatic or other natural resources): The land trust has no plans for active forest management on this property and will allow previously harvested areas to return to late successional conditions that are an under-represented stand type in this portion of the mid-coast.
- Describe the specific techniques and methods that will be used to conserve the habitat: The Perry property will be owned in fee by the Brunswick-Topsham Land Trust. The land trust has professional staff as well as a team of qualified volunteers who conduct regular stewardship and monitoring activities. A management plan for this site will be drafted soon after closing and monitoring of habitat condition will occur annually.
- Describe the level of support and involvement of other relevant agencies, organizations, and local community: The Maine Outdoor Heritage Fund has contributed funding for this project. The Town of Topsham has also endorsed the project as a significant step in implementing the Topsham Natural Areas Plan vision. The Cathance River Education Alliance and Topsham Conservation Commision are partners with the Brunswick-Topsham Land Trust on this project.

Landscape Context:

- Describe the proximity / benefits to statewide focus areas for land conservation (Beginning with Habitat Focus Area) or habitat preservation identified by a state agency, or other regional or municipal plans: The project area buffers a significant portion of the Cathance River above head of tide. The Kennebec Estuary Focus Area of Statewide Ecological Significance currently extends from head of tide to Merrymeeting Bay and beyond. Completion of this project will eliminate potential for significant land conversion in the direct contributing watershed for rare freshwater tidal natural communities and several rare plant species occurrences, some of which are globally rare, in tidal portions of the Cathance River. Additionally, the Perry Tract occurs within a high value forest block as identified by the Sagadahoc Region Rural Resources Initiative, the property occurs in a focus area identified by Topsham's Natural Areas Plan, and this site

lies within the Brunswick Topsham Land Trusts Upper Cathance River Focus Area as identified in our strategic conservation plan. The site is also located just upstream from the boundary designating the Kennebec Estuary Focus area of Statewide Significance.

- Describe the adjacency / proximity to other public or private protected properties and how this project will enhance overall conservation (e.g., refuges, management areas, preservation, parks, conservation organization properties, mitigation banks, or other protected restoration sites): The Perry Tract is located within BTLT's Upper Cathance River Focus Area where to date we have successfully conserved approximately 490 acres. Completion of this project will result in a contiguous block of conserved land that exceeds 300 acres. An unfragmented block of this size will provide functional habitat for most terrestrial vertebrate species known to inhabit forests of Sagadahoc County. In addition, the conservation of the headwater wetlands of the Cathance River will contribute to the overall health of waters flowing into Merrymeeting Bay and therefore contributes to the broader efforts to conserve the Statewide Focus Area of Merrymeeting Bay/Kennebec Estuary (whose boundary lies just downstream from the Perry property).
- Describe the proximity / benefits to important species in Maine such as habitat for wetland Rare, Threatened, Endangered Species, or Species of Special Concern; Habitat for Species of Greatest Conservation Need; S1 & S2 Wetland Natural Communities; and/or within or buffering brook trout, Atlantic sea-run salmon or other diadromous fish runs and habitats: No rare, threatened, or endangered plant or animal species have been found on the property to date. Given the size of the site and diversity of habitat types represented, several Species of Greatest Conservation Need are likely to benefit including: American woodcock, Baltimore oriole, barred owl, black-and-white warbler, black-billed cuckoo, black-throated green warbler, blue-gray gnatcatcher, Canada warbler, chestnut-sided warbler, great-crested flycatcher, northern parula, purple finch, rose-breasted grosbeak, scarlet tanager, veery, willow flycatcher, wood thrush, and yellow-bellied flycatcher.
- Describe any potential adverse impacts to any protected natural resource, such as upstream or downstream aquatic resources, ecologically sensitive areas and wildlife habitat and discuss any potential effect the mitigation project may have on any species listed as either federal or state threatened or endangered that may be found in the vicinity of the project. These impacts should be avoided to the greatest degree possible: Due to the fact that this project does not involve active restoration components, this section in not applicable.

Project Readiness

- **New requirement:** Provide documentation of landowner willingness to participate in the proposed project, including conveying a conservation easement or fee title to the property (for projects not on existing conservation lands). Include landowner's name and address:

  Landowners: Jack and Donna Perry, 40 Bradley Pond rd., Topsham, ME 04086

  SEE ATTACHED. SIGNED PURCHASE AND SALE AGREEMENT AS PROOF OF LANDOWNER WILLINGNESS TO PARTICIPATE IN PROJECT.

- List permits needed (federal, state, and local) and which, if any, have already been secured. Describe the extent of legal access to the property: No permits are necessary for the completion of this project.

- Outline tasks / steps to be taken in completing the project, including time schedule. Please also include key tasks / steps that have already been completed and the date of completion: On February 15, 2011 the BTLT signed a purchase and sale agreement with the Perrys that will give BTLT until February 28, 2012 to raise the $75,000 agreed upon purchase price (appraised value) of the Perry property and close on the acquisition of the property. To date an appraisal has been completed, a survey is in the work and due to be completed by September 30, 2011, and $18,000 has been raised for the project to date.

- Specify tangible outputs (work products and deliverables), including time schedule. Please also include key outputs that have already been completed and the date of completion:

  The most tangible output will be the acquisition of the property by the BTLT which will take place by February 2012. In addition, the BTLT will draft a management plan for the property by July 2012 and begin annually monitoring of the property in 2012.

  Success of this project will be measured through the following:
  - Increased recreational utilization of the Upper Cathance River by area residents leading to an increased awareness of and appreciation for the Cathance River and its rich ecological resources;
  - Permanent conservation of 125 acres of Upper Cathance River Wetlands and 25 acres of upland buffer;
  - Increased public support for future conservation of the Cathance River and Merrymeeting Bay.

- Outline the anticipated short-term monitoring plan for restoration, enhancement and creation projects. A five-year monitoring term is typical, with a potentially longer period for resources with slow development rates. Please note that if the project is approved for funding, a detailed monitoring plan with success criteria will need to be submitted prior to receipt of funding. Preservation projects do not require short-term monitoring plans: Due to the fact that this project does not involve active restoration components, this section in not applicable.

- **New requirement**: A long-term stewardship and monitoring plan must be developed for all projects prior to the award of MNRCP funds. Describe the anticipated process for developing the long-term stewardship plan for the project and provide information on who will maintain the property in perpetuity, general easement terms (if applicable), and who will conduct any monitoring. Describe anticipated costs in long-term maintenance of the project site and long-term monitoring of any easement conditions. Provide a detailed description of the financing mechanism (stewardship endowment, trust or other method) for funding the long-term stewardship of the project site: The BTLT is applying for Land Trust Accreditation in November 2011, as part of complying with the Land Trust Alliance's Standards and Practices, the BTLT annually monitors all of its fee and easement holdings. I have attached a copy of the BTLT's Stewardship policy and the spreadsheet that we use to estimate long-term stewardship funding needs. The stewardship funds required for this purpose are $11,400. We are including these funds in our total project costs and will be raising them upfront as part of our fundraising efforts.

Format for MNRCP Project Budget

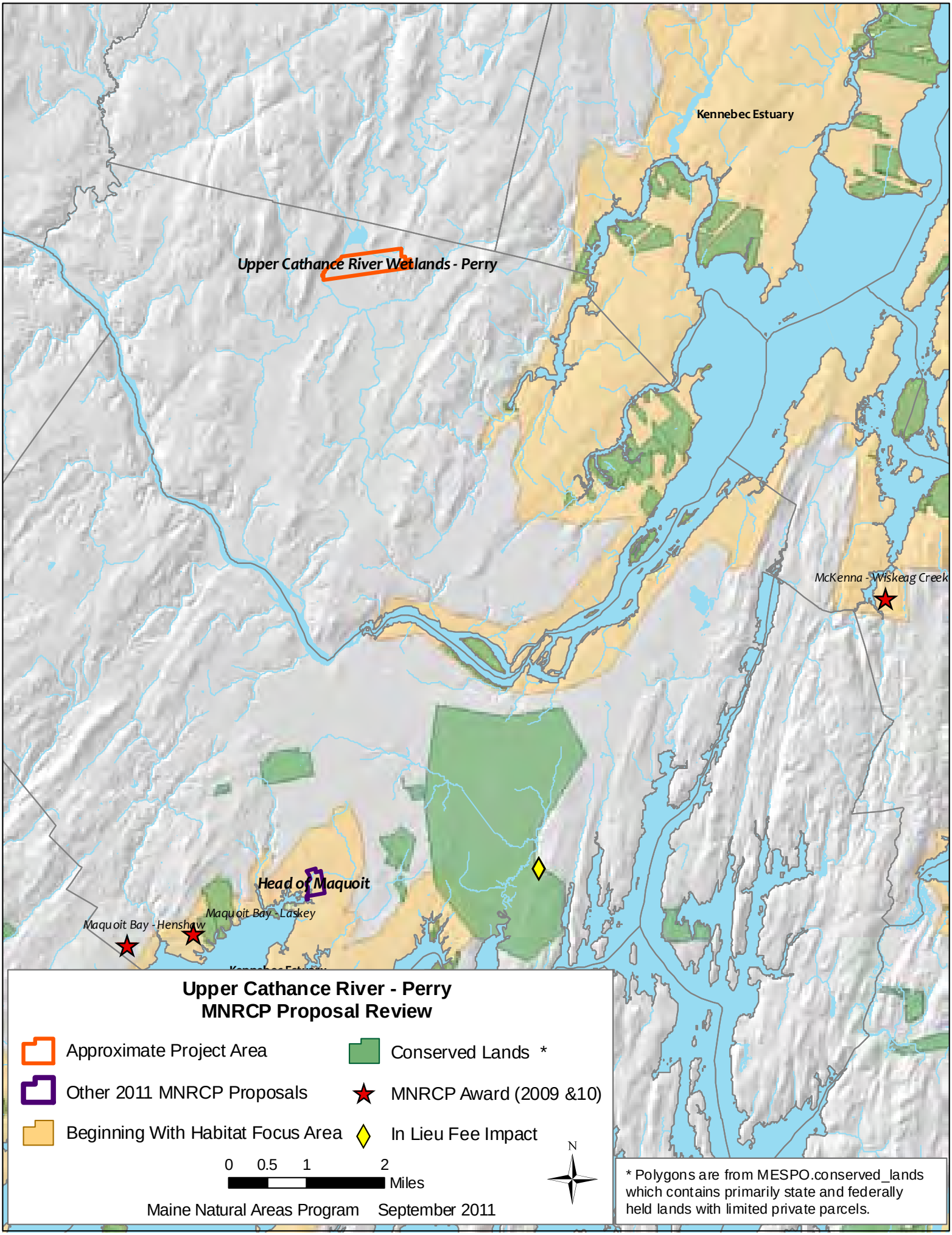
Identify costs as actual incurred or estimated. Describe the basis for any estimated costs.

Acquisition and Associated Costs	
Value of fee lands or conservation easements to be purchased*	$75,000
Appraisal costs	$3,500
Title, legal and closing costs	$5,000
Land survey	$9,000
Environmental hazard survey	$2,100
Baseline documentation *(easement only)*	In House
Long-term management/stewardship planning	See below
Natural resource survey	In house or MNAP
Restoration, Enhancement, or Creation Costs	**NA**
Monitoring and Long-Term Management Costs	
Short-term monitoring costs†	n/a
Long-term management/stewardship costs‡	$11,400
Total Project Cost:	$106,000
Total Maine Natural Resource Conservation Program (MNRCP) Request:	**$70,000**
Other Funding Sources and Amounts:	$36,000*
*$18,000 raised to date from the MOHF	

* Land Acquisition or Conservation Easement Costs must based on an Appraisal completed within the past two years, in accordance with the Uniform Standards of Professional Appraisal Practice (USPAP). A copy of the final appraisal must be provided and consist of a complete appraisal and a self contained appraisal report.

† For restoration, enhancement or creation, a five-year monitoring term is typical, with a potentially longer period for resources with slow development rates. Preservation projects do not require short-term monitoring.

‡ Funded projects are expected to protect priority resources "in perpetuity," which requires an entity with the resources and expertise to ensure long-term management and stewardship. A financing mechanism (e.g., endowment, trust, or long-term financing plan) is required to ensure adequate funding is available over time, though all the funds needed for establishment do not need to be included in MNRCP request.


Kennebec Estuary
Upper Cathance River Wetlands - Perry
McKenna - Wiskeag Creek
Head of Maquoit
Maquoit Bay - Laskey
Maquoit Bay - Henshaw
Upper Cathance River - Perry
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
Beginning With Habitat Focus Area
Conserved Lands *
MNRCP Award (2009 &10)
In Lieu Fee Impact
0 0.5 1 2
Miles
N
Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

Maine Natural Resource Conservation Program – Full Proposal
September 15, 2011
Varnum Farms Project – Sebec and Dover-Foxcroft, Maine

Executive Summary:

- **Project Sponsor**

Maine Farmland Trust (MFT)
97 Main Street
Belfast, ME 04915
(207) 338-6575
nyoung@mainefarmlandtrust.org

The Maine Department of Inland Fisheries & Wildlife (MDIF&W) and the Maine Department of Agriculture, Food, and Rural Resources (MDAFRR) are both principal partners and co-sponsors of this project.

- **Project Location**

Towns of Sebec and Dover-Foxcroft (mostly in Sebec), Piscataquis County
1769 River Road (plus several other addresses along River Road)

Summary Project Description

Varnum Farms is a 2,075-acre landscape-scale conservation project that includes productive farmlands (838 acres), working woods (1,237 acres), and ecologically rich riverine and wetland habitat (8.5 miles of Piscataquis River frontage and 662 acres of wetlands). This conservation project is unique because the property encompasses a broad diversity of extraordinary conservation values:

- The farm's excellent soils and historically productive fields can support a wide range of agricultural operations.
- Its well-stocked, sustainably managed woods are a model for successful small woodland management;
- Recreational features include critically important sections of ITS snowmobile trails and the opportunity for public boat access to the Piscataquis River; and
- A wide array of ecological features located within the Alder Stream Focus Area and an important expansion to an existing 20,000+ acre conservation area to the south.

While all of these resources have exceptional public value, this proposal will focus on the ecological aspects of the project which are of greatest interest to MNRCP.

The Varnum Farms Project will be accomplished with MFT's "Buy/Protect/Sell" program through which a property is purchased by MFT, permanently protected by a conservation easement and then the restricted property is sold to a new owner. The conservation easement will encompass the entire property except for three small lots with existing houses on them, and a 1-acre boat access site on the Piscataquis River that will be sold in fee to MDIF&W. The Buy/Protect/Sell program is one of MFT's primary strategies for conserving Maine's farmland.

MFT recognized early on that the Varnum Farms Project was far more than a farmland protection effort. In fact, in 2002, the Maine Department of Inland Fisheries & Wildlife sought to purchase the property to create a new state wildlife management area because of its exceptional habitat values. Consequently, MFT asked MDIF&W to be a partner in the project and to help design a proposed conservation easement over the entire ownership that will: 1) conserve the working farm and forest lands; 2) protect its important ecological and wildlife values; and 3) guarantee public recreational access to highly valued recreational resources. As a result of MDIF&W's involvement, the proposed conservation easement places a major emphasis on protecting habitat, water quality and ecological functions. MDIF&W requested that the Varnum Farms Project restore wooded buffers along 6.3

miles of river frontage and around a critical wetland complex that have traditionally been managed as agricultural field in order to reestablish riparian habitat and improve water quality. The easement terms that MDIF&W has proposed also call for wildlife habitat enhancement along 2.2 miles of wooded upland buffers along the river and over one mile along the wetland complex, as well as enhanced management of a designated farm field to benefit grassland bird species.

MFT will be the holder of the conservation easement with MDAFRR and USDA holding third-party enforcement rights. The easement has been structured to ensure that MDIF&W will remain involved in the ongoing stewardship of the property through development of forest and agricultural management plans and oversight of the Habitat Protection Areas.

- **Estimated Project Cost**
  - Total Project Cost: $2,850,000 (this includes purchase of the property which will be resold after restricted by a conservation easement)
  - Total Conservation Funding Required: $1,135,000
  - MNRCP Fund Request: $200,000

- **Resource Priority of Project Site**
  - **Within or adjacent to a Beginning with Habitat Focus Area**
    Yes. The river-side portion of the property (948 acres) is located within the Alder Stream Focus Area.
  - **Within or adjacent to existing public or private conservation lands**
    Yes. The project would provide a northward expansion of a large contiguous complex of conservation lands (approximately 20,000 acres) extending south from the property to the Bud Leavitt Wildlife Management Area.
  - **Within or adjacent to other natural resource priority areas**
    Yes. The property includes 8.5 miles of frontage on the Piscataquis River, determined by the Maine Rivers Study (1982) to be a river of "Outstanding Statewide Significance."
  - **Contains natural resources of significant value and/or rarity**
    Yes. Key ecological features of the Varnum Farm property include:
    - 8.5 miles of riverine habitat with documented occurrences of wood turtle and creeper mussel and bald eagles -- all species of special concern. Waterfowl, including wood duck, goldeneyes and black ducks, identified as Species of Greatest Conservation Need by MDIF&W, have also been documented along this stretch of the river. This section of the Piscataquis includes rearing habitat for the endangered Atlantic salmon.
    - Wetlands and riparian areas along the river provide: a) crucial nesting habitat for wood turtles and migration habitat for lesser yellowlegs (species of special concern); b) filter run-off for maintaining high water quality; and c) food and travel corridors for riparian species. The river riparian area may also include a significant silver maple floodplain forest community (requires MNAP field check).
    - Fields provide extensive grassland habitat for a wide variety of birds including whip-poor-will and eastern meadowlark, both species of special concern. A designated field area will be managed for these species. According to MNAP, large expanses of grassland habitat are in decline regionally.
    - 662 acres of wetlands (NWI) on the property with 78 acres designated by MDIF&W as Significant Inland Wading Bird & Waterfowl habitat.
    - Forests including mature stands of oak that provide mast for deer, turkey and other wildlife and large pines that provide roosting habitat for eagles and turkeys.

- **Type of Conservation**

Natural Resource Type		Restored acres	Enhanced acres	Preserved acres	Created acres	Total acres
Freshwater Resources	Freshwater wetland, emergent (PEM)			35		35
	Freshwater wetland, forested (PFO)			475		475
	Freshwater wetland, shrub-scrub (PSS)			140		140
	Riverine (R2UBH)			7		7
	Freshwater Pond (PUBF			5		5
	River, stream or brook			8.5 miles of Piscataquis River 5.2 miles of stream (both sides)		18.9 miles of front-age
	Riparian Buffer along river and key wetland complex	87	89	176		176
	Grassland Bird Habitat		25	25		25
	Other Uplands			1,212		1,212
	Significant wildlife habitat, vernal pool (*indicate number of pools if necessary*)			Not yet inventoried		Not known
	Significant wildlife habitat, vernal pool critical terrestrial habitat			Not yet inventoried		Not known
	Significant wildlife habitat, Inland Waterfowl and Wading Bird Habitat			78 (counted above)		78
Project Total		**87 acres**	**114 acres**	**2075 acres**		**2075 acres**

Potential to Meet MNRCP Goals:

- **Describe the original habitat type and the current habitat conditions on the property with a determination of protected natural resources based on either aerial photo interpretation or, if available and applicable, a wetland delineation conducted in accordance with the Corps of Engineers 1987 Delineation Manual or subsequent USACE-approved method.**

The Varnum Farms project area consists of 1,237 acres of forest lands, 838 acres of agricultural fields. Total wetland acreage on the property as indicated by NWI maps is 662 acres (as more specifically described above). The property has not been fully inventoried for vernal pools or other ecological features. (it is scheduled for MNAP site visit.) Records of significant habitat and natural communities are derived from the Maine Natural Areas Program and MDIF&W data bases. The property has been managed for many generations as a working farm and woodlot. It was operated as a dairy farm until a few years ago and is currently being leased for hay and crop production. Like many farms of this era, fields and pasture were cleared right down to the river to take advantage of the productive river-bottom soils. Approximately 75% of the 8.5 miles of riparian lands along the river have been cleared for agricultural use. The forest lands have been managed with a sensitive and sustainable hand over the decades resulting in a well-stocked (>20 cords/acre) mixed-wood forest with mature stands of oak that provide abundant mast for wildlife and large pines that provide roosting habitat for eagles and other bird species.

- **Assess the functional benefits the project will provide using the following list as a guide**:
  - **Groundwater Recharge/Discharge:** By prohibiting development over 2,075 acres, the project will prevent impervious surfaces and maintain groundwater recharge capacity of the land. In particular, preserving forested wetland basins offer groundwater recharge opportunities.
  - **Floodflow Alteration:** Much of the river-side portion of the project area is in the floodplain of the Piscataquis River. No existing flood control structures currently exist and the proposed conservation easement will prohibit structures that will interfere with natural water flow.
  - **Fish and Shellfish Habitat:** There is documented occurrence of the creeper mussel (a species of special concern) in the Piscataquis River off the shore of the project area. This section of the Piscataquis River provides rearing and spawning habitat for the endangered Atlantic salmon and supports a native brook trout population. By reducing sedimentation and run-off, water quality and riverine habitat will benefit.
  - **Sediment/Toxicant Retention:** The proposed restoration of a wooded shoreland buffer along the Piscataquis River and a major wetland complex will greatly reduce sedimentation and potential run-off of fertilizers and pesticides into surrounding water bodies resulting from agricultural activities. Similarly, easements requirements for an NRCS soil conservation plan and a forest management plan that requires best management practices will further protect surface and ground waters.
  - **Nutrient Removal:** In addition to the restoration of buffers, the preservation of 662 acres of wetlands will maximize the nutrient removal capacity of the land and protecting surface and groundwater quality.
  - **Sediment/Shoreline Stabilization:** Restoring forested buffer along Piscataquis River will stabilize shoreline preventing future bank erosion and slumping.
  - **Wildlife Habitat:** The property contains over 662 acres of wetlands with 78 acres designated by MDIF&W as Inland Wading Bird and Waterfowl Habitat. Wetlands on site range from mature forested wetland basins, riparian floodplain communities, scrub-shrub, emergent, and wet meadows that support grassland birds.
  - **Recreation:** The proposed conservation easement will provide public access to the non-agricultural lands for hiking, fishing, hunting, and nature observation. In addition, the project will guarantee continued use of two major ITS snowmobile trails and provide a new boat access site to the Piscataquis River.
  - **Educational/Scientific Value:** This project provides an excellent opportunity to conduct experiments and research on optimizing ecological and wildlife values alongside working farm and forest lands.
  - **Uniqueness/Heritage:** This expansive project has been designed to preserve the region's traditional working farm and forest enterprises, employment and lifestyle, while also preserving its natural and outdoor recreation heritage. Few conservation projects encompass the diversity of farm, forest, recreational and ecological values as fully as Varnum Farms.
  - **Visual Quality/Aesthetics:** The project will preserve the scenic rural landscape along over six miles of the River Road (on both sides of the road in some areas) as well as the undeveloped shoreline as viewed by paddlers along an 8.5 -mile stretch of the Piscataquis River. Varnum Farms represents one of the largest farms in the region and will play an important role in maintaining the rural character of the Sebec/Dover-Foxcroft communities.
  - **Endangered Species Habitat:** This section of the Piscataquis River includes critical rearing habitat for the endangered Atlantic salmon.

- **Describe the proposed future condition of the property and the "functional lift" the project proposes to provide (e.g., proposed change in habitat quality, contribution to functioning biological systems, water quality, level of degradation, etc.).**

  The property has been traditionally managed as a working farm and woodlot. While continued agricultural and timber production is desired, the proposed conservation easement, restoration and habitat enhancement initiatives will provide significant benefits to wildlife and ecological functions. The functional lift provided by the proposed project includes the following:

- Restoration of forested buffers along the Piscataquis River and key wetlands creating new riparian habitat and establishing a forested travel corridor along 8.5 miles of river.
- Improving habitat qualities of existing forest buffers through strict forestry standards.
- Improving water quality through the establishment of the forested buffers and ensuring best management practices for farming and forestry.
- Ensuring high quality grassland bird habitat on 25 acres of fields by requiring agricultural practices beneficial to nest birds (e.g., late season mowing).
- Ensuring maintenance of quality forest and forested wetland habitat through forest management planning requirements.

- **Describe the level and type of threats to resources on and adjacent to the property. Note that preservation projects must anticipate the threat of degradation to the site in the next 20 years.**

  The threats to the Varnum Farms property are two-fold. The first threat is fragmentation and development. With over eight miles of public road frontage paralleling 8.5 miles of scenic river frontage and well drained soils, the property is ideally configured for extensive subdivision and development over time. Though development pressure is not currently as severe in this region as other parts of Maine, it is increasing. Moreover, even a modest amount of new development occurring in the wrong parts of this property could detract significantly from its multiple conservation values. The second threat is that future farm and woodlot managers will manage the land with environmentally inferior practices. The appraiser from J.W. Sewall Company who appraised the property indicated that if put on the open market, the forest lands would likely be purchased by a timber liquidator attracted to its well-stocked woodlands. Similarly, without the requirements of the conservation easement, a farmer is unlikely to re-establish wooded buffers along the river and wetlands since this reduces available acreage of high-quality farm soils. If managed poorly, the agricultural lands could have a major adverse impact on the surrounding water resources.

- **Describe the current and proposed buffers on the project site, and the degree to which they protect or support identified resource functions and ecological connectivity to other conservation areas or undeveloped large blocks of habitat.**

  As stated above, the current shoreland and wetland buffers on the property do not adequately protect surrounding water resources nor provide the desired habitat connectivity. There is currently little or no forested buffer along 6.3 miles of Piscataquis River frontage and a key wetland complex. Based upon recommendations provided by MDIF&W regional biologist, Douglas Kane, a minimum of 100' forest buffers will be restored between agricultural fields and these resources. In addition, Kane has requested that existing forested buffers be managed according to strict standards (exceeding standard shoreland zoning standards) within 250' of the river and designated wetlands.

- **Describe the current use of the property (e.g., any structures or improvements) and the land use activities in the area surrounding the property (e.g., residential, forest management, commercial, agriculture, etc.).**

  The easement property currently includes two modest residences and a number of barns and other agricultural accessory structures all clustered together along the road on one small section of the property. The property is located in a sparsely-populated rural portion of the Town of Sebec about three miles east of "downtown" Dover-Foxcroft. Most surrounding lands are farms or working woodlots. Most of the lands on the opposite shore of the Piscataquis River have been protected as a wilderness preserve.

- **Describe the proposed use of the property and any proposed management (e.g., describe in detail any proposal for “forestry management” or “wildlife management” and how this management will affect existing and proposed aquatic or other natural resources).**

As mentioned above, the property has been managed for many generations as a working farm and woodlot. The proposed conservation easement will allow for sustainable farming and forestry except within designated Habitat Protection Areas where ecological protection is given priority. The easement allows for the property to be split into a north and south farm divided by the River Road. Once the conservation easement is in place, MFT intends to sell Varnum Farms to a new farmer (or possibly two farmers if a single buyer cannot be found) looking to acquire affordable farm and forest lands and prepared to manage it in an environmentally sound manner (Note: Until such time that MFT can find the right buyer(s), it will lease the land to local farmers.). The easement calls for MDIF&W to be involved in the development of a conservation plan for the Habitat Protection Areas, and to review farm and forest management plans. Because of the easement provisions, future farm and forest management should result in improved aquatic and terrestrial habitat.

- **Describe the specific techniques and methods that will be used to conserve the habitat.**
  - **If restoration, enhancement or creation is proposed, an assessment of the local hydrology must be done including demonstration that the local hydrology will be sufficient to support the project and an assessment of likely project-related changes to the hydrology in the area. Include the type and location of all soil disturbing activities and structures; a construction schedule; and a planting plan that includes a list of non-invasive, native species to be used; planting density; planting methods and schedule; and planting plan success criteria.**

    The restoration and enhancement elements of the Varnum Farms project do not require any construction or earth movement. Restoration activities focus on the re-establishment of forested buffers on farmed fields along 6.3 miles of the Piscataquis River and 1.2 miles around an important wetlands complex. It is anticipated that natural regeneration of woody vegetation will play a primary role in the establishment of the buffers which are generally on lands with gentle topography. However, over the first five years, MFT intends to work with MDIF&W and NRCS to design and implement a targeted tree planting program to accelerate the establishment of buffers in certain sensitive areas and to achieve desired habitat objectives in others. This proposal includes funding to support the design and implementation of this initial tree planting effort which could be expand in the future if desired. The conservation easement will allow the easement holder (MFT) or MDIF&W to plant seedlings and take other actions to assist in the establishment of the buffer. The enhancement constituent of the project involves two elements: 1) management of existing 25 acres of farm fields as grassland bird habitat utilizing bird-friendly management practices such as late-season haying and a prohibition on row crops, orchards, etc.; and 2) strict standards for forest management with 250' of the Piscataquis River and a major wetland complex aimed at improving habitat values in these riparian areas.

  - **If the project is preservation by conservation easement, summarize proposed terms of the easement and who will hold the easement. Provide a draft conservation easement or fee agreement.**

    Two conservation easements will be placed on the property; one for the lands north of the River Road (1,126.5 acres) and one for the lands south of the road (948.2 acres). Detailed outlines of both conservation easements are included in Attachment 3.

- **Describe the level of support and involvement of other relevant agencies, organizations, and local community.**

As mentioned previously, MDIF&W and MDAFRR are primary partners in this project and the Maine Natural Areas Program has provided a strong letter of support. The Maine Bureau of Parks & Lands Off-Road Vehicle Division, along with two local snowmobile clubs are strong supporters of the project because it will guarantee access to important snowmobile trails. The District Conservationist for the USDA's Natural Resource Conservation Service (NRCS) endorsed the project

and NRCS is expected to help fund the project through their Farm and Ranchland Protection Program. The Piscataquis County Soil & Water Conservation District has also put its support behind the project. The Northeast Wilderness Trust, which has led conservation efforts south of the river, is enthusiastic about the protection of these lands. Finally, several leading local residents have stepped forward and offered their support of the project.

Landscape Context:

- **Describe the proximity / benefits to statewide focus areas for land conservation (Beginning with Habitat Focus Area) or habitat preservation identified by a state agency, or other regional or municipal plans.**

  The 948 acres of the project area lying to the south of River Road, including the entire Piscataquis River frontage, lie within the Alder Stream Focus Area, a site of statewide ecological significance identified by the state's Beginning with Habitat Program. The focus area extends across the Piscataquis River and includes a matrix of permanently protected conservation lands beginning on the opposite shore. Successful completion of the Varnum Farms project will result in a major step forward in achieving the objectives of the State Wildlife Action Plan in this area.

  Similarly, a portion of the project area falls within the Atkinson Tier 1 (highest value) forest matrix block designated by The Nature Conservancy. The section of the Piscataquis River lying within this matrix block is designated as an S1 portfolio river segment (highest priority).

- **Describe the adjacency / proximity to other public or private protected properties and how this project will enhance overall conservation (e.g., refuges, management areas, preservation, parks, conservation organization properties, mitigation banks, or other protected restoration sites).**

  As depicted on the map in Attachment 2.D, the Varnum Farms project area lies immediately across the Piscataquis River from the 2,700-acre Alder Stream Preserve owned by the Northeast Wilderness Trust (NWT) which is part of a contiguous matrix of conservation lands extending south to MDIF&W's Bud Leavitt Wildlife Management Area and encompasses some 20,000 acres of forest, wetlands, and farmlands (additional conservation acquisitions of about 3,000 acres that are currently in process by NWT). There are a variety of fee and easement holders within the area including the NWT, Sweet Water Trust, Forest Society of Maine and MDIF&W. With the conservation of the Varnum Farms lands, this conservation landscape is expected to grow to over 25,000 acres.

- **Describe the proximity / benefits to important species in Maine such as habitat for wetland Rare, Threatened, Endangered Species, or Species of Special Concern; Habitat for Species of Greatest Conservation Need; S1 & S2 Wetland Natural Communities; and/or within or buffering brook trout, Atlantic sea-run salmon or other diadromous fish runs and habitats.**

  Varnum Farms encompasses 8.5 miles of Piscataquis River frontage. This stretch of the river provides habitat for the creeper (a freshwater mussel species), wood turtle and bald eagle, all Species of Special Concern identified by MDIF&W. The upland edge and wetlands adjacent to the river provide nesting habitat for wood turtles and migratory habitat for lesser yellowlegs, a Species of Special Concern. Waterfowl, including wood duck, goldeneyes and black ducks – all listed as Species of Greatest Conservation Need by MDIF&W – have been documented along this stretch of the river.

  This stretch of the Piscataquis River also provides critical rearing habitat for the endangered Atlantic salmon. Successful completion of the Penobscot River Restoration Project will re-open passage into the Piscataquis River watershed for alewife, blueback herring and eels. This section of the river is stocked by MDIF&W with yearling brook trout in the spring and yearling brown trout in the fall.

Regarding significant natural communities, Andy Cutko, an ecologist with the Maine Natural Areas Program states:

> "Floodplain forests (silver maple), a rare natural community type in Maine, have been documented by the Maine Natural Areas Program on stretches of the Piscataquis across the river from the Varnum Farm. It appears that there may be additional floodplain forest on the eastern end of the Varnum Farm property as well; those areas will hopefully be surveyed by MNAP this upcoming summer."

Farm fields within the project area provide habitat for a wide variety of grassland birds including whip-poor-will and eastern meadowlark, both Species of Special Concern. According to MNAP, "large expanses of grassland habitat are in decline regionally, and modifying management of some of the farm fields to accommodate the nesting period of grassland birds would be a significant wildlife benefit."

- **Describe any potential adverse impacts to any protected natural resource, such as upstream or downstream aquatic resources, ecologically sensitive areas and wildlife habitat and discuss any potential effect the mitigation project may have on any species listed as either federal or state threatened or endangered that may be found in the vicinity of the project. These impacts should be avoided to the greatest degree possible.**

  Since this is a conservation/preservation project, there are no potential adverse impacts to natural resources. The restoration component of the project will re-establish forested buffer along the river and wetlands will not involve and construction or ground disturbance and therefore will have no adverse consequences. Similarly the enhancement of grassland and forest buffer habitat should have only beneficial effects.

Project Readiness

- **Provide documentation of landowner willingness to participate in the proposed project, including conveying a conservation easement or fee title to the property (for projects not on existing conservation lands). Include landowner's name and address.**

  MFT has entered into a purchase and sales agreement to purchase the Varnum Farms property (see Attachment 1, full agreement available upon request).

- **List permits needed (federal, state, and local) and which, if any, have already been secured. Describe the extent of legal access to the property.**

  None of the proposed restoration and enhancement activities require permits. The property has many miles of frontage on both sides of the River Road, a public road.

- **Outline tasks / steps to be taken in completing the project, including time schedule. Please also include key tasks / steps that have already been completed and the date of completion.**

  March, 2011: MFT entered into purchase and sales agreement to purchase the Varnum Farms property.

  Spring, 2011: MFT submitted funding applications to the Land for Maine's Future Program and federal Forest and Ranchland Protection Program. MFT and MDIF&W developed proposed easement terms including proposed habitat restoration and enhancement initiatives.

  Summer, 2011: MFT initiated due diligence requirements including property survey, environmental hazards assessment and title work. MFT received preliminary funding approval from the Land for

Maine's Future Board and Farm and Ranchland Protection Program. Appraisal work finalized. Other funding applications submitted.

Fall, 2011: Completion of all due diligence. Draft final easement terms.

December, 2011: MFT to purchase property.

2012: Conservation easements to be sold as soon as possible after fee purchase -- most likely in the second or third quarter of 2012. Once easements are in place, MFT will seek to sell restricted fee lands to a selected new farmer/woodlot owner(s) which is anticipated to occur by the end of 2012.

2012 – 2017: Restoration plan to re-establish buffers along river and wetland to be developed and implemented.

- **Specify tangible outputs (work products and deliverables), including time schedule. Please also include key outputs that have already been completed and the date of completion.**

  See response to previous question.

- **Outline the anticipated <u>short-term monitoring plan</u> for restoration, enhancement and creation projects. A five-year monitoring term is typical, with a potentially longer period for resources with slow development rates. Please note that if the project is approved for funding, a detailed monitoring plan with success criteria will need to be submitted prior to receipt of funding. Preservation projects do not require short-term monitoring plans.**

  The monitoring plan for the Varnum Farms project will be incorporated into the easement monitoring plan. The near-term elements of this plan include: a) development of a conservation plan for the designated Habitat Protection Areas (including all restoration and enhancement areas) by MFT and MDIF&W; b) development of a farm conservation plan by NRCS and the landowner with input from MDIF&W; and c) development of a forest management plan by the landowner's forester with input and review by MDIF&W and MFT.

  In addition, MFT and MDIF&W (with the assistance of a qualified consultant) will develop a restoration plan for establishing riparian buffers and habitat with tree planting in targeted areas and monitor the implementation and outcome of these efforts.

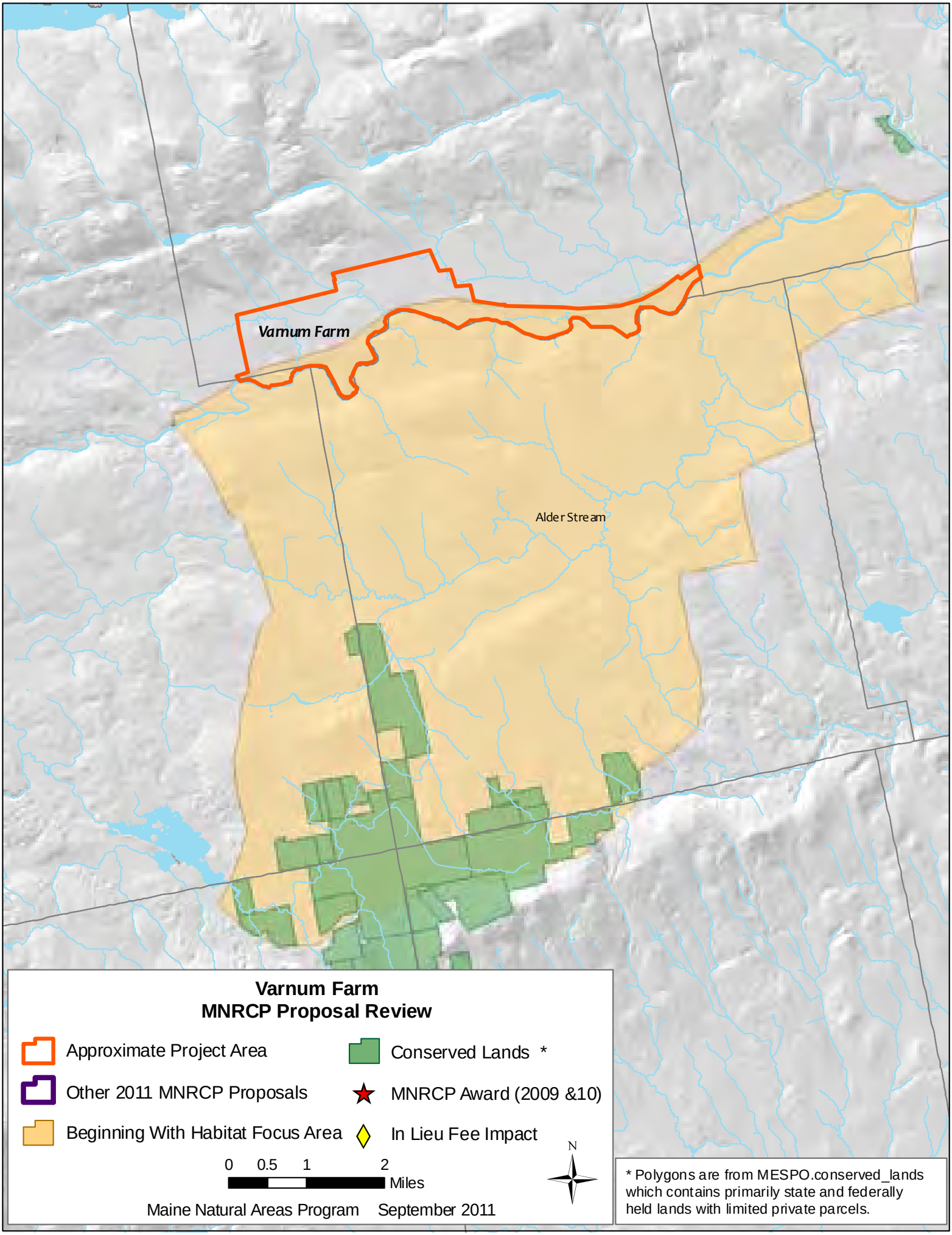
- **A <u>long-term stewardship and monitoring plan</u> must be developed for all projects prior to the award of MNRCP funds. Describe the anticipated process for developing the long-term stewardship plan for the project and provide information on who will maintain the property in perpetuity, general easement terms (if applicable), and who will conduct any monitoring. Describe anticipated costs in long-term maintenance of the project site and long-term monitoring of any easement conditions. Provide a detailed description of the financing mechanism (stewardship endowment, trust or other method) for funding the long-term stewardship of the project site.**

  The proposed conservation easement will be monitored in perpetuity by MFT (as well as the state and federal agencies through third-party enforcement rights). A detailed outline of the conservation easement terms, which were developed in consultation with MDIF&W biologists, is provided (see Attachment 3). The costs of property maintenance will be borne by the property's future landowners. The cost of easement monitoring will be provided for through the establishment of a $60,000 stewardship fund which is included in the project budget. If additional planting of buffers is needed after five years, additional funds will be solicited from NRCS and other sources.

MNRCP Project Budget

Acquisition and Associated Costs	
Value of fee lands or conservation easements to be purchased	$740,000
Appraisal costs	$20,000
Title, legal and closing costs (inc. transfer taxes)	$20,000
Land survey	$40,000
Environmental hazard survey (Phase I and II)	$10,000[1]
Baseline documentation *(easement only)*	$6,000
Long-term management/stewardship planning	$60,000
Consultant Fees (project management/easement drafting)	$20,000
Property Carrying Costs (taxes, insurance, debt service)	$144,000[2]
Restoration, Enhancement, or Creation Costs[3]	
Restoration planning (develop planting plan)	$2,500
Personnel	0
Site Work	0
Contractual (tree planting)	$10,000
Equipment	0
Supplies	0
Other	
Monitoring and Long-Term Management Costs	
Short-term monitoring costs (oversee implementation of planting plan)	$2,500
Long-term management/stewardship costs	$60,000
Total Project Cost:	**$1,135,000**
Total Maine Natural Resource Conservation Program (MNRCP) Request:	$200,000
Other Funding Sources and Amounts:	$935,000[4]

[1] Phase I EHA has been completed with recommendations for Phase II actions which are currently underway.
[2] MFT is purchasing fee interest in property (with financing) in December, 2011 and will sell restricted fee interest in property to new farmer(s) after conservation easements have been conveyed and buyers have been found. Based upon MFT's past experience with Buy/Protect/Sell projects, it is essential to budget for an estimated one-year holding period. Financing is calculated at 5% interest.
[3] The restoration component of the project involves restoring wooded buffers along the Piscataquis River and key wetlands. It is anticipated that much of this can be accomplished through natural regeneration. However, some targeted planting to achieve wildlife objectives will be designed and implemented which is reflected in this budget. Depending upon the results, planting could be expanded with additional funding in the future. The enhancement component (grassland management and forest buffer management) do not require investments at this time.
[4] Preliminary funding commitments have been received from Land for Maine's Future Program ($370,000) and Farm and Ranchland Protection Program ($360,000). Funding from other sources is being actively pursued.


Varnum Farm
Alder Stream
Varnum Farm
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
Beginning With Habitat Focus Area
Conserved Lands *
MNRCP Award (2009 &10)
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Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

Wallamatogus - Great Heath Project

Executive Summary

- **Project Sponsor:** Blue Hill Heritage Trust, P.O. Box 222, Blue Hill, ME 04614. Tel: 207.374.5118. Email: bbhtdirector@myfairpoint.net. Contact Person: James W. Dow, Executive Director

- **Project Location:** Town of Penobscot (off the Pierce Pond Road), Hancock County

- **Summary Project Description:** This project presents an opportunity for MNRCP to help protect a large area of high quality wetlands at a relatively low cost. Specifically, this project seeks to preserve (through the purchase of a fee simple interest) the outstanding wetland values of a 273 acre parcel that includes most of the Great Heath, a large peatland ecosystem comprised of a mosaic of wetland communities and a variety of palustrine wetland types that have been identified as decreasing and of high priority for protection by the US Fish and Wildlife Service. The parcel also includes an extensive undeveloped forested upland buffer on the eastern side of the Heath. The project also includes restoration of a small area at the northern edge of the Heath where wetland vegetation has been impacted by an ATV/snowmobile trail.

  This parcel is adjacent to another 273 acre parcel that was fully protected by the Project Sponsor in late 2010 with the completion of its purchase and the creation of a second layer of protection via a conservation easement granted to a neighboring land trust. This adjacent parcel provides a large area of upland buffer land on the eastern side of the Heath, protects a portion of the Heath's wetland communities and is a natural and important complement to the project site. Together these two parcels are central elements in a 3200 acre 'conservation focus area' (the core of a 11,000 acre unfragmented habitat block) that is a priority for protection by the Project Sponsor because of the area's multiple conservation values.

  The threats to this wetland system are real and growing. This project will protect the conservation values of the project site (and of the larger conservation focus area) from the deleterious effects of parcelization and extensions of road networks, a process that is steadily underway. This project will also permanently remove the potential for destruction of the wetland values by the mining of the extensive peat resource.(The exploitation of the peat as a pelletized fuel source was the current owner's primary reason for acquiring the property during a previous "energy crisis" in this country.)

  The project parcel has been surveyed and appraised.It has access from a public road. Title work has been done. The project sponsor recently secured an exclusive purchase option for this parcel at its appraised value of $165,000, with an option exercise date of June 30, 2012. This project will protect a large area of significant wetlands, complement and expand existing conservation land funded privately and is postured for quick completion. The MNRCP has the opportunity to provide the financial support necessary to make it happen.

  (Note: The parcel that is the subject of this project was one of two parcels that formed the project area of a full proposal submitted to MNRCP in 2010, which scored highly but was not funded. Since then the Project Sponsor has aggressively pursued this project, completing the funding and protection of one of the two parcels and advancing the protection of the second parcel to the point of securing a purchase option. This revised proposal focuses solely on the second of the two parcels included in the 2010 proposal.)

- **Estimated Project Cost:**
  - Total Project Cost: $187,000
  - MNRCP Fund Request: $150,000

- **Resource Priority of Project Site:**

  Within or adjacent to a Beginning with Habitat Focus Area: Within the watershed of the Bagaduce River "Beginning with Habitat" focus area.
  Within or adjacent to existing public or private conservation lands: Adjacent to a similarly sized parcel owned and managed for conservation by Blue Hill Heritage Trust that has a "second layer of protection" through a conservation easement held by The Conservation Trust of Brooksville, Castine and Penobscot.
  Within or adjacent to other natural resource priority areas: The project area is a central part of a 3200 acre "conservation focus area" identified in a strategic conservation plan for Blue Hill Heritage Trust's service area completed by Janet McMahon in June 2009.
  Contains natural resources of significant value and/or rarity: Raised level bog ecosystem, bluejoint meadow, white cedar woodland (per Maine Natural Area Program site visit), Inland wading bird and waterfowl habitat. Great Heath was identified by MNAP as a conservation priority in a 1998 regional landscape analysis. All 168+/- wetland acres have been identified by the USFWS as "decreasing" in a recent wetland trend analysis.

- Type of Conservation (Note: acreage apportionments are estimates, using GIS data sets from the USFWS Gulf of Maine Coastal Program and Maine DIFW; total project acreage is based on a survey plan of the project site):

Natural Resource Type		Restored acres	Enhanced acres	Preserved acres	Created acres	Total acres
Freshwater Resources	Freshwater wetland, emergent (PEM)			25		
	Freshwater wetland, forested (PFO)			78		
	Freshwater wetland, shrub-scrub (PSS)	2		62		
	River, stream or brook			2 (4638 ft)		
	Significant wildlife habitat, vernal pool *(indicate number of pools if necessary)*			2		
	Significant wildlife habitat, vernal pool critical terrestrial habitat					
	Significant wildlife habitat, Inland Waterfowl and Wading Bird Habitat			(25;overlap w PEM)		
Coastal Resources	Coastal wetland, Marine subtidal (M1)					
	Coastal wetland, Marine intertidal (M2)					
	Coastal wetland, Estuarine subtidal (E1)					
	Coastal wetland, Estuarine intertidal (E2)					
	Significant wildlife habitat, Tidal Waterfowl and Wading Bird Habitat					
	Significant wildlife habitat, Shorebird Feeding & Staging Areas					
	Upland buffer (non wetland habitat)			102		
	Project Total					**273**

Potential to Meet MNRCP Goals:

- Describe the original habitat type and the current habitat conditions on the property with a determination of protected natural resources based on either aerial photo interpretation or, if available and applicable, a wetland delineation conducted in accordance with the Corps of Engineers 1987 Delineation Manual or subsequent USACE-approved method.

The project site includes most of the Great Heath, a large wetland complex that is relatively pristine (the only human disturbance is a snowmobile trail/ATV trail and bridge that crosses its northern most section). This parcel was visited by staff from the Maine Natural Areas Program in October 2009 and again in August 2010. The "Site Visit Summary" from the October 2009 visit (Attachment H) describes the condition of this parcel as follows: "The Great Heath is a large complex of emergent, scrub shrub, and forested wetland types including Bluejoint Meadow, Spruce Larch Wooded Bog, Sheep Laurel Dwarf Shrub Bog, and Northern White Cedar Swamp. Together these natural communities make up a Raised Level Bog Ecosystem. These peat lands receive water from precipitation (more significant in the center of the peat land) and from runoff from surrounding uplands. Although this ecosystem is not considered rare in Maine (it is ranked S4), it is relatively uncommon. Because of the excellent condition, forested landscape context, presence of a rare wetland type (Bluejoint Meadow), and diversity of wetland types that support several functions and values, the heath qualifies as a high quality example... The emergent wetland supports several functions and values, however the primary ones include: wildlife habitat (osprey nests, contributes to Inland Waterfowl and Wading Bird Habitat, abundant wildlife sign), recreation (for wildlife observation, hiking, and currently gets ATV/snowmowbile use), and uniqueness/heritage (part of an exemplary ecosystem with diverse wetland types, high wildlife value, and is a rare natural community type).... Scrub shrub wetland is dominant in the interior of the Great Heath ecosystem. The principle functions and values identified here include: wildlife habitat (osprey nests, abundant mammal sign, bird habitat) and uniqueness/heritage (part of an exemplary ecosystem with diverse wetland types, high wildlife value)... Principle functions and values for the forested wetlands include: wildlife habitat (abundant animal trails and animal sign), recreation (great opportunities for wildlife observation, hunting, and hiking through a scenic area), and uniqueness/heritage (part of an exemplary ecosystem with diverse wetland types, high wildlife value, and high aesthetic quality)"

The wetland values of the project site were recently analyzed by the USFWS's Gulf of Maine Coastal program for a collaborative "Bagaduce River Watershed Project", a newly developed strategic protection project that identifies several projects worthy and available for protection, including this project site. This trend analysis identified all of the wetland acres on the project site as "decreasing" types of fresh water wetlands. (See Attachment G.)

- Assess the functional benefits the project will provide using the following list as a guide:

Freshwater & Coastal Functions	
Education/scientific value	Retention/storage of floodwater/surface water
Floodflow alterations	Shoreline/sediment stabilization
Fish & shellfish habitat	Retention of sediment/toxicants
Nutrient removal/transformation	Uniqueness/Heritage
Production export	Visual quality/aesthetics
Recreation	Wildlife habitat
Groundwater recharge/discharge (*Freshwater*)	

This project will protect and preserve the functioning of the existing and largely undisturbed natural systems in the project area, including the functions provided by all naturally occurring wetlands (such as those listed above). It will also preserve outdoor recreational opportunities

(hiking, hunting, cross-county skiing, nature observation), provide research and educational opportunities for local schools and post-secondary institutions. The Great Heath is a unique element in the local landscape warranting protection as part of our natural heritage.

- Describe the proposed future condition of the property and the "functional lift" the project proposes to provide (e.g., proposed change in habitat quality, contribution to functioning biological systems, water quality, level of degradation, etc.).

The goal of this project is to protect the project site in perpetuity as undeveloped conservation land in its relatively natural state, allowing the natural systems and processes found on these lands (and on the abutting conservation land) to continue to function with minimal human impact. The protection of the wetland complex accomplished by this project will contribute to the continued functional well-being of the Bagaduce River ecosystem (a "Beginning with Habitat" Focus Area); it is within the Bagaduce watershed and a source of freshwater input into that system.

- Describe the level and type of threats to resources on and adjacent to the property. Note that preservation projects must anticipate the threat of degradation to the site in the next 20 years.

The principal near-term threats to the resources on the project site are residential development, habitat fragmentation by property subdivision and associated road development and damage by unmanaged recreational vehicle use. All of these threats currently exist and are steadily changing the project area, each year reducing the opportunity for meaningful ecosystem scale conservation. The residential development tends to be either large lot subdivisions or small remote camps with access roads that attract additional development while fragmenting habitat. To the west, the abutting conservation land recently acquired by the Project Sponsor was part of one large lot subdivision with other lots having been developed. To the north, a camp lot with a long access road brings human activity to the edge of the project site. To the east, hunting camp lots with access roads are pushing closer to the project site with a cluster of full-time residences nearby along the Pierce Pond Road. To the south, development around and near Pierce Pond steadily increases. The project site is steadily being surrounded by human uses that will collectively impact its functionality as a natural system. Currently, because it has an absentee owner without conservation interest, there is no active management to protect the outstanding natural values of this land. That would change if this project is funded

A longer term threat is also an historical threat. The project site was purchased by its current owner 30 + years ago after the energy crisis of the 1970's as a source of peat for the production of peat pellets to be used for heating fuel. A study done for the owner indicated that the property would yield nearly three million cubic yards of peat. (A section of this report is attached as Attachment J). Regulatory permits to mine the heath were never issued; however, the threat of mining can reasonably be expected to return with future energy crises and the changes in political and regulatory regimes that often accompany such crises. This project would remove this threat forever.

- Describe the current and proposed buffers on the project site, and the degree to which they protect or support identified resource functions and ecological connectivity to other conservation areas or undeveloped large blocks of habitat.

The land recently acquired by the Project Sponsor that abuts the project site provides a large upland buffer on the western edge of the project site. The project site itself includes a

significant area of upland buffer on the eastern edge of the wetland acreage. Other land along the eastern side of the Great Heath outside the boundaries of the project site is predominantly undeveloped forestland, affording additional buffering for the natural functions of the wetland system. The project site and the abutting conservation land are at the core of an 11,000+/- acre unfragmented habitat block and are key parcels in a "conservation focus area" identified in a conservation planning report prepared for Blue Hill Heritage Trust (see Attachment I). It is a priority of the Project Sponsor to expand the amount of protected land in this area.

- Describe the current use of the property (e.g., any structures or improvements) and the land use activities in the area surrounding the property (e.g., residential, forest management, commercial, agriculture, etc.).

The project site is a relatively undisturbed natural area, which is used occasionally by hunters and cross country skiers. An atv/snowmobile trail exists across its northern most section. The area immediately to the west is now a protected natural area. In the general surrounding area, there is dispersed residential development, small scale timber harvesting and commercial blueberry production. Directly south there is a "great pond" (Pierce Pond) that has a public access launch site for small boats.

- Describe the proposed use of the property and any proposed management (e.g., describe in detail any proposal for "forestry management" or "wildlife management" and how this management will affect existing and proposed aquatic or other natural resources).

The proposed use of the project is as a protected natural area, with limited, low-impact recreational and educational uses that are compatible with the primary natural resource conservation purpose. A management plan will be created that has this conservation purpose as its guiding principle. In particular vehicular recreational vehicle will prohibited in and around wetland areas through active oversight and management.

- Describe the specific techniques and methods that will be used to conserve the habitat.

The Project site will be preserved through the purchase of the fee simple interest. It will be managed as conservation land by the Project Sponsor, a community based non-profit land conservation organization trust with 25 years of experience in land stewardship that currently owns or holds conservation easements on 5800 acres of land on the Blue Hill Peninsula and has a professional staff as well as a corps of community volunteers.

The restoration aspect of this project will address an existing snowmobile/ATV trail across the north section of the project site that has impacted a small area of the wetland. This will receive immediate management attention, with a primary goal of preventing future impacts while allowing the vegetation to recover. This approach will be "time intensive" rather than "material intensive", directed toward changing the use pattern that caused the damage. This will involve identifying users and working with abutting landowners, as well regular monitoring of the site. The goal will be to close the trail as currently located, re-directing the trail, if need be, to a new route that will not damage wetland resources. The need for vegetative restoration of the compacted areas will be explored with MNAP staff and other professional consultants. This restoration activity can be done with limited costs. (A line item is included in the budget to cover staff time costs associated with this undertaking.)

- Describe the level of support and involvement of other relevant agencies, organizations, and local community.

As a community-based organization, the Project Sponsor relies on the involvement of community members in its work. A neighboring land trust, The Conservation Trust of Brooksville, Castine and Penobscot (TCT), was a primary partner in the acquisition of the abutting conservation land and fully supports this project and will assist when needed. Maine Natural Areas Program (MNAP) staff have visited the site twice and have provided information about the outstanding natural features of the wetland system. The Maine Coast Heritage Trust, a state-wide land conservation organization, has worked with the Project Sponsor to organize a wider area conservation srtategy ("Bagaduce River Watershed Project"), which includes protection of this project site. Community members will be engaged in the stewardship of the conservation land as well as benefit from the recreational and education opportunities that it will provide as conservation land.

Landscape Context:

- Describe the proximity / benefits to statewide focus areas for land conservation (Beginning with Habitat Focus Area) or habitat preservation identified by a state agency, or other regional or municipal plans.

This project is located within the watershed of the Bagaduce River Focus Area and functions as a freshwater source for that system. The project site is a central element in the Wallamatogus Mountain Focus Area identified in a strategic conservation plan for the Blue Hill Peninsula. (See Attachment I)

- Describe the adjacency / proximity to other public or private protected properties and how this project will enhance overall conservation (e.g., refuges, management areas, preservation, parks, conservation organization properties, mitigation banks, or other protected restoration sites).

This project is the second step in the implementation of a conservation plan for the Wallamatogus Mountain Focus Area, one of several focus areas identified as worthy of conservation in its service area. The first step was the acquisition and protection of the abutting 273 acre parcel in 2010 by the Project Sponsor and a partner. It will also advance a newly developed collaborative conservation strategy, the "Bagaduce River Watershed Project", that has identified several projects in the watershed worthy and available for protection, including this project site. By itself, it will add a new and diverse element to the portfolio of conservation lands managed by the Project Sponsor for the benefit of the local communities that it serves. It is located near a state-owned public water access site on Pierce Pond, a "great pond" under Maine law, which is fed in part by the wetlands within the project site.

- Describe the proximity / benefits to important species in Maine such as habitat for wetland Rare, Threatened, Endangered Species, or Species of Special Concern; Habitat for Species of Greatest Conservation Need; S1 & S2 Wetland Natural Communities; and/or within or buffering brook trout, Atlantic sea-run salmon or other diadromous fish runs and habitats.

The Maine Natural Area Program site visit summary describes these. See Attachment H.

- Describe any potential adverse impacts to any protected natural resource, such as upstream or downstream aquatic resources, ecologically sensitive areas and wildlife habitat and discuss any potential effect the mitigation project may have on any species listed as either federal or state

threatened or endangered that may be found in the vicinity of the project. These impacts should be avoided to the greatest degree possible.

None

Project Readiness

- New requirement: Provide documentation of landowner willingness to participate in the proposed project, including conveying a conservation easement or fee title to the property (for projects not on existing conservation lands). Include landowner's name and address.

The landowner, Frank E. Cormo, 228 Stevens Road, Effingham, NH 03882, has granted the Project Sponsor a one year purchase option. A copy is attached as Attachment K.

- List permits needed (federal, state, and local) and which, if any, have already been secured. Describe the extent of legal access to the property.

No permits are required.

- Outline tasks / steps to be taken in completing the project, including time schedule. Please also include key tasks / steps that have already been completed and the date of completion.

Completed:

1. **Survey (by prior owner)**
2. **Preliminary Natural Resource Inventory (MNAP, October 2009 and August 2010)**
3. **Title work (June 28,2011**
4. **Appraisal (March 2, 1011)**
5. **Exclusive Purchase Option secured via purchase for $10,000. (June 30, 2011)**

To Be Completed (with estimated dates of completion):

1. **Fundraising for project costs: before June 30, 2012**
2. **Exercise of Purchase Option: June 30, 2012 or sooner if purchase funding is available.**
3. **Pre-closing due diligence (title update, environmental hazard survey, etc.): July, 2012**
4. **Closing: August 15, 2012, or sooner if purchase funding is available.**
5. **Preparation of management plan, including additional NRI work: if MNRCP funds are awarded this will occur prior to closing**

- Specify tangible outputs (work products and deliverables), including time schedule. Please also include key outputs that have already been completed and the date of completion.

See above

- Outline the anticipated short-term monitoring plan for restoration, enhancement and creation projects. A five-year monitoring term is typical, with a potentially longer period for resources with slow development rates. Please note that if the project is approved for funding, a detailed monitoring plan with success criteria will need to be submitted prior to receipt of funding. Preservation projects do not require short-term monitoring plans.

The restoration element of this project (the remediation of damage caused by an atv/snowmobile trail across a small section of the wetland) will involve regular monitoring throughout the year. This monitoring will help determine the need for active vegetative restoration as well as the effectiveness of efforts to change the recreational use route.

- **New requirement**: A long-term stewardship and monitoring plan must be developed for all projects prior to the award of MNRCP funds. Describe the anticipated process for developing the long-term stewardship plan for the project and provide information on who will maintain the property in perpetuity, general easement terms (if applicable), and who will conduct any monitoring. Describe anticipated costs in long-term maintenance of the project site and long-term monitoring of any easement conditions. Provide a detailed description of the financing mechanism (stewardship endowment, trust or other method) for funding the long-term stewardship of the project site.

The project site will be managed by the Project Sponsor in concert with the management of the abutting conservation land as a 546 acre management unit. The development of the long-term management plan for this project will replicate and build on the process by which a management plan was developed for the abutting conservation land: additional natural resource information will be gathered as needed (much is already in hand); Project Sponsor staff or a consultant will take the lead in drafting the plan; the Project Sponsor's Stewardship Committee and representatives from partner organizations will advise and review the drafting and approve the final plan. The central concept will be to preserve the natural values of the land while allowing low-impact public use that is compatible with the protection of those natural values. The Project Sponsor's staff will be responsible for the long term stewardship of the property and will be assisted by volunteers. The primary costs will involve staff time to implement the management plan, including regular monitoring, organizing and overseeing volunteer assistance, the costs of regular boundary maintenance, and local real estate taxes. (Blue Hill Heritage Trust chooses to place its properties in the "Open Space" tax category and thereby contribute to the cost of municipal fire and road services, rather than claim tax exemption.) Funding for the stewardship of the project site, as with all of Project Sponsor's conservation properties, will come from the organization's annual operating revenue and from distributions from its quasi-endowment established to help cover annual stewardship costs. That fund totaled approximately $840,000 as of August 31, 2011. Additional capital is added to that fund with each new acquisition, based on a calculation of expected annual needs. That amount is included in the project budget.

Project Budget

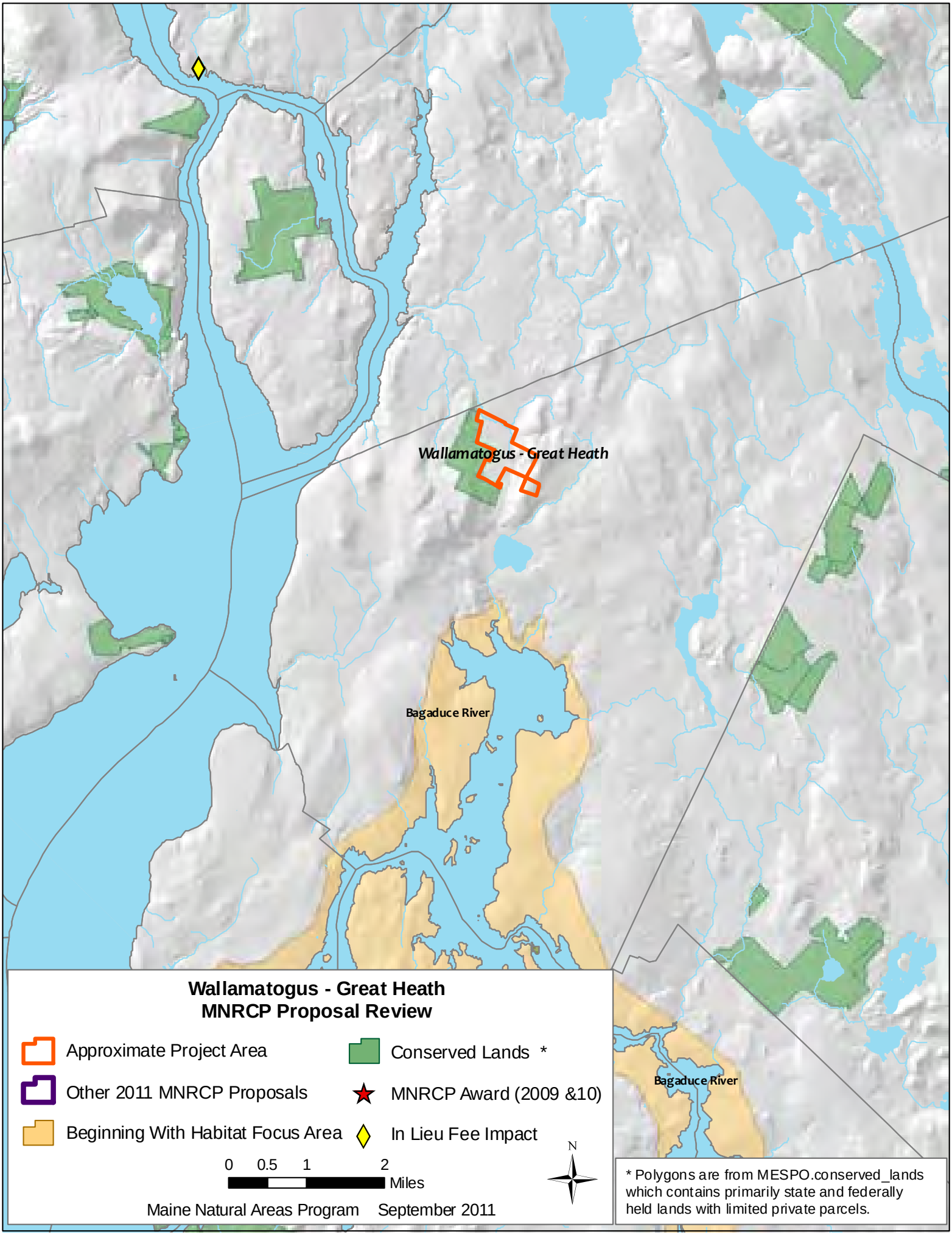
Identify costs as actual incurred or estimated. Describe the basis for any estimated costs.

Acquisition and Associated Costs	
Value of fee lands or conservation easements to be purchased[*] (appraised)	165,000
Appraisal costs (part incurred; part estimated for required updates)	2,500
Title, legal and closing costs (part incurred; part estimated)	2,000
Land survey	0
Environmental hazard survey (estimated)	500
Baseline documentation *(easement only)*	N/A
Long-term management/stewardship planning (estimated)	1000
Natural resource survey (estimated)	2500
Restoration, Enhancement, or Creation Costs	
Restoration planning (estimated)	1000
Personnel	
Site Work	
Contractual	
Equipment	
Supplies	
Other	
Monitoring and Long-Term Management Costs	
Short-term monitoring costs[†]	
Long-term management/stewardship costs[‡]	$12, 500
Total Project Cost:	187,000
Total Maine Natural Resource Conservation Program (MNRCP) Request:	150,000
Other Funding Sources and Amounts (private donations; $10K in hand).	37,000

[*] Land Acquisition or Conservation Easement Costs must based on an Appraisal completed within the past two years, in accordance with the Uniform Standards of Professional Appraisal Practice (USPAP). A copy of the final appraisal must be provided and consist of a complete appraisal and a self contained appraisal report.

[†] For restoration, enhancement or creation, a five-year monitoring term is typical, with a potentially longer period for resources with slow development rates. Preservation projects do not require short-term monitoring.

[‡] Funded projects are expected to protect priority resources "in perpetuity," which requires an entity with the resources and expertise to ensure long-term management and stewardship. A financing mechanism (e.g., endowment, trust, or long-term financing plan) is required to ensure adequate funding is available over time, though all the funds needed for establishment do not need to be included in MNRCP request.


Wallamatogus - Great Heath
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Bagaduce River
Wallamatogus - Great Heath
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
Beginning With Habitat Focus Area
Conserved Lands *
MNRCP Award (2009 &10)
In Lieu Fee Impact
0 0.5 1 2
Miles
N
Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

Executive Summary:

- Project Sponsor (*name, organization, address, phone, email*)

  GLS Woodlands, LLC 23 South Main Street, 3rd Floor
  Hanover, NH 03755.
  (207) 299-6328
  Kyle@oriontimberlands.com

- Project Location (*town, county, physical address*)

  GLS Plantation, Washington County,
  Coordinates: Lat 45° 15' 53.9922” Long -67° 45' 31.6794"

- Summary Project Description (*project context, goals, type of conservation, method*)

  West Branch Amazon Brook crossing repair/replacement: Restoring natural fish passage through the construction of a bridge and maintain a multiuse forest.

- Estimated Project Cost:
  - Total Project Cost: $32,000
  - MNRCP Fund Request: $26,000

- Resource Priority of Project Site:

  The site is within the pending West Grand Lake Community Forest (pending Maine D.O.C. Conservation Easement & Downeast Lakes Land Trust fee ownership); Adjacent to Farm Cove Community Forest (Downeast Lakes Land Trust) and Sunrise Easement (New England Forestry Foundation) and indirectly contiguous with additional conservation lands.
  It is also Part of 2001 Downeast Lakes Conservation proposal; Tributary to Big Musquash Stream and MNAP A-ranked Big Musquash Domed Bog Ecosystem; tributary to Big Lake and Saint Croix International Waterway.
  Contains habitat for an existing population of Eastern Brook Trout, supports water quality for downstream native landlocked salmon and other native species.

Type of Conservation:

Natural Resource Type		Restored acres	Enhanced acres	Preserved acres	Created acres	Total acres
Freshwater Resources	Freshwater wetland, emergent (PEM)					
	Freshwater wetland, forested (PFO)					
	Freshwater wetland, shrub-scrub (PSS)					
	River, stream or brook	3.14				3.14
	Significant wildlife habitat, vernal pool (*indicate number of pools if necessary*)					
	Significant wildlife habitat, vernal pool critical terrestrial habitat					
	Significant wildlife habitat, Inland Waterfowl and Wading Bird Habitat					
Project Total		**3.14**				**3.14**

Potential to Meet MNRCP Goals:

Original Habitat:

The original habitat was likely an unobstructed stream capable of brook trout passage. The stream is temporarily unobstructed at this time due to a culvert failure. Although fish are now able to pass, there is an ongoing risk of erosion through natural processes and recreational abuse. The road crossing must be replaced to maintain a multiuse forest.

Functional Benefits of the Project:

The project will provide flood flow alterations. Prior to the failure of the culvert, the flooding risk of land and forests upstream was high. A bridge will also provide renewed fish habitat. Prior to the failure of the culvert, fish passage was likely difficult or impossible depending on the stream flow. Lack of a suitable crossing has restricted recreational access for the public. Recreation access and opportunities will be restored with a bridge. Recreational abuses of the crossing will also be corrected (e.g. ATV crossings).

Proposed Future Condition:

The construction of the bridge will allow fish passage that has been obstructed for approximately 35 years. The previous culvert installation created unfavorable swimming conditions during normal water flow. Maintaining a functional crossing will preserve multiuse access to the larger Downeast Lakes area. Currently, a recreationist must travel an additional 15 miles to circumnavigate the crossing. ATVs and snowmobiles have virtually no other options.

Threats to Resources on and Surrounding Property:

Currently there are two types of threats to aquatic resources, both from erosion and deposition of sediment. First, erosion is occurring and will continue to occur until proper armament has been constructed or vegetation has been established. Significant amounts of soil have entered the stream during the flooding event that caused the culvert failure in December 2010, and the threat of more sediment entering the stream from the road banks through natural processes still exists. Second, vehicular damage has occurred, and will likely continue to occur, at the site as operators often ignore signs and barricades. Although this damage is committed by a select few, it is likely to continue until a permanent fix has been established.

Current and Proposed Buffers for Project Area:

All LURC rules and regulations are followed. Additionally, the management plan for GLS Woodlands calls for a 330ft low impact management zone to maintain proper brook trout habitat.

To the north, the stream is connected to land conserved by the New England Forestry Foundation, and to the south the stream connects with water bodies held by the Passamaquoddy Tribe and other large landowners. Very little development currently exists in the area.

Current Use of Property:

Forest management is the primary use of the property and other nearby lands. All harvesting is third party audited by the Forest Stewardship Council, indicating management complies with a set of environmental and social criteria. The property is nearly fully roaded. Some small private camp lots exist, but none are within 1 mile of the crossing. No other structures are in the vicinity.

Proposed use of Property:

Forest Management is proposed for the surrounding area. All harvesting is third party audited by the Forest Stewardship Council, and conforms to their standards, as well as our own self imposed standards. This includes a 330 ft low impact brook trout buffer. Details of the buffer are described below.

Brook Trout Streams	
Distance from NHW[1]	**Guidelines**
0-25 ft	• Minimum Canopy closure 70% • Single tree and small group selection • No equipment within zone except arm of harvester. • Goal is mature forest structure with recruitment snags, cavity trees, and large logs to maintain terrestrial aquatic habitat structure

25-100 ft.	• Minimum Canopy closure 65-70% • Single tree and small group selection • No collector skid trails and exposed mineral soil • Goal is mature forest structure with recruitment snags, cavity trees, and large logs to maintain terrestrial and aquatic habitat structure
100-330 ft.	• Canopy openings <14,000 sq. ft. with understory 5 ft. or higher and consistent with LURC PSL1 standards. • Mature, multi-storied stand conditions and a more or less continuous canopy are the goal.
Other	• RMZ boundary of areas subject to NRCS agreement will be marked for adjacent harvest operations

Method:

The bridge will be 45 feet in length and 16 feet wide. It will be constructed out of four I-beams, 8X8" hemlock stringers and 4X8" hemlock runners. The structure will rest on concrete block abutments set on top of stone and Geo-textile rip-rap. Backfill to the bridge will be of the best material available, hauling in screened material if necessary. The disturbed area will be a 20ft span from the edge of the brook on either side. Soil will be sloped away from the bridge if possible, with ditches terminating 30 feet away from the crossing, into undisturbed forest soil. If further soil stabilization is needed, planting native grasses will be considered.

The project will aim for a target stream width of 14'. The banks will be sloped as close to a 1:2 ratio as possible. As water rises, the width of the stream will also be able to widen. I-beams will be approximately 10' above normal water levels.

The Maine Department of Conservation Best Management Practices manual will be consulted for any unforeseen BMP issues that may arise.

Local Support:

GLS Woodlands is an LLC that was formed by the Lyme Timber Company of Hanover New Hampshire. Lyme has hired Orion Timberlands to perform forest management activities that occur on GLS Woodlands property.

GLS Woodlands has a unique relationship with the Downeast Lakes Land Trust (DLLT), an adjoining land owner. DLLT is raising funds to purchase the property in the coming years. Because of their close relationship, GLS Woodlands regularly consults with DLLT for forest management activities and local knowledge of history and wildlife. DLLT supports this proposal to restore recreational access while improving habitat for brook trout and other aquatic wildlife.

GLS Woodlands and Orion Timberlands are happy to work with local ATV and snowmobile clubs, and continue to welcome their responsible use of the property. Orion and GLS woodlands have also hosted a public forest management tour of the property to answer any questions the community has about forest management.

Landscape Context:

Proximity and Benefits to Statewide Conservation:

The formation of GLS Woodlands was the first step in conserving 21,700 acres of forest land, contributing to DLLT's larger vision of conserving 370,000 acres in the region. This will also complete a 1.4 million acre international wildlife corridor between Maine and New Brunswick. A conservation easement on the property will be held by the Maine Department of Conservation. In 2011 this project was the US Forest Service's #1 priority for the Forest Legacy Program. It's also locally supported by the town of Grand Lake Stream, who contributed $40,000 to the effort.

Proximity to other protected areas:

See above. Adjacent to 33,708-acre Farm Cove Community Forest (Downeast Lakes Land Trust) and 312,000-acre Sunrise Easement (New England Forestry Foundation) and indirectly contiguous with additional conservation lands.

Proximity and Benefits to Local Habitat:

Amazon Stream is well known brook trout habitat, and is part of the Saint Croix watershed, which contains salmon and other diadromous fish. LURC has designated the stream a P-SL-2 order stream. All LURC

regulations associated with a P-SL-2 stream will be followed. The 330ft brook trout buffer connects to a locally recognized deer wintering area, and will serve as a travel corridor.

Downstream, the Maine Natural Areas program has delineated an A-ranked Domed Bog Ecosystem (S-3) and an exemplary Sheep Laurel and Dwarf Shrub ecosystem (S-4) along Big Musquash stream, into which Amazon stream flows. Both systems support a wide array of plants and wildlife. Maine Division of Inland Fisheries and Wildlife also designate much of this area as high priority for waterfowl and wading bird habitat. All areas are mapped in the Forest Management Plan and management guides and restrictions are detailed below.

Maine Natural Areas Program Sites These are areas identified by Maine Natural Areas Program. MNAP GIS data were obtained from Orion Timberlands.
Domed Bog Ecosystem **Description:** State Rank S3, Excellent Viability, 3,278 acres. This extensive, non-forest ecosystem provides valuable plant and wildlife habitat. **Management Recommendation:** No active management or monitoring.
Sheep Laurel Dwarf Shrub Bog **Description:** • State Rank S4, Good Viability, 394 acres. This community forms the core of the domed bog ecosystem. **Management Recommendation:** • No active management or monitoring.

Several LURC designated P-WL wetlands exist upstream of the crossing. No wetlands will be adversely affected (drained) by the construction of the bridge.

Potential Adverse Impacts:

Sediment runoff, erosion, and hazardous material from equipment will be the biggest risks associated with this project. Siltation will be minimized by limiting the amount of material entering the brook during construction, using silt fencing, hay and geo-textile where appropriate. Timing of installation will also be important, taking advantage of low water levels and low seasonal sensitivity for brook trout, eggs and fry.

All contractors and foremen will have hazardous material training and will have spill kits on site, including absorbent booms. Leaking equipment will not be tolerated. No equipment will be permitted to enter the brook.

Project Readiness

Landowner willingness:

Sean Ross, the primary landowner representative has written a letter expressing GLS Woodlands' willingness to participate in the program. A copy of this letter is attached to this document.

Permits:

LURC must be notified before constructing or replacing any PSL-2 stream crossing. The current harvest notification covers this stream crossing, however LURC will be contacted again prior to any work being preformed.

Tasks to be completed:

1.) Temporarily stabilize stream banks, pull back road material (ASAP, September 2011)

2.) Pull back stream banks to final grade, and install rock armament and geo-textile. Collecting rock from the site and along road, trucking may be necessary. (July 2012)

3.) Installation of Cement block abutment above armament (July 2012)

4.) Installation of steel beams and hemlock timbers (July 2012)

5.) Back fill and stabilize as needed (July-August 2012)

Tasks completed by time of acceptance: Bridge design and bank stabilization.

Short term monitoring program (5 yr):

Annual inspections of the bridge include but are not limited to:

- ☐ Inspection of crossing approach. Look for erosion and sedimentation issues and ditch functionality
- ☐ Inspection of rip-wrap. Look for loose or missing rocks, and exposed or damaged Geo-textile
- ☐ Inspection of decking. Look for rot, loose boards, and protruding nails. Inspect for evidence of soil or material being brought from the approach and dropped through decking.
- ☐ Inspection of Concrete and I-beams. Look for cracks, excessive rust, weld failures, or other damage.

Note: No temperature monitoring is planned. Previous crossing did not cause a significant backwater for an unnatural temperature increase, nor was a temperature ever recorded prior to the washout.

Long Term Monitoring

Long term monitoring will likely be dictated by future interested parties. Currently the Maine Department of Conservation with funding from the Forest Legacy Program, Land for Maine's Future Program, and private funds raised by Downeast Lakes Land Trust is seeking a conservation easement for the property. The Maine Community Foundation will hold a $200,000 endowment to benefit the Department of Conservation's easement monitoring and stewardship. Furthermore, the Downeast Lakes Land Trust will likely purchase the property prior to a long-term monitoring program taking effect, and will at that point undertake long-term monitoring of the structure.

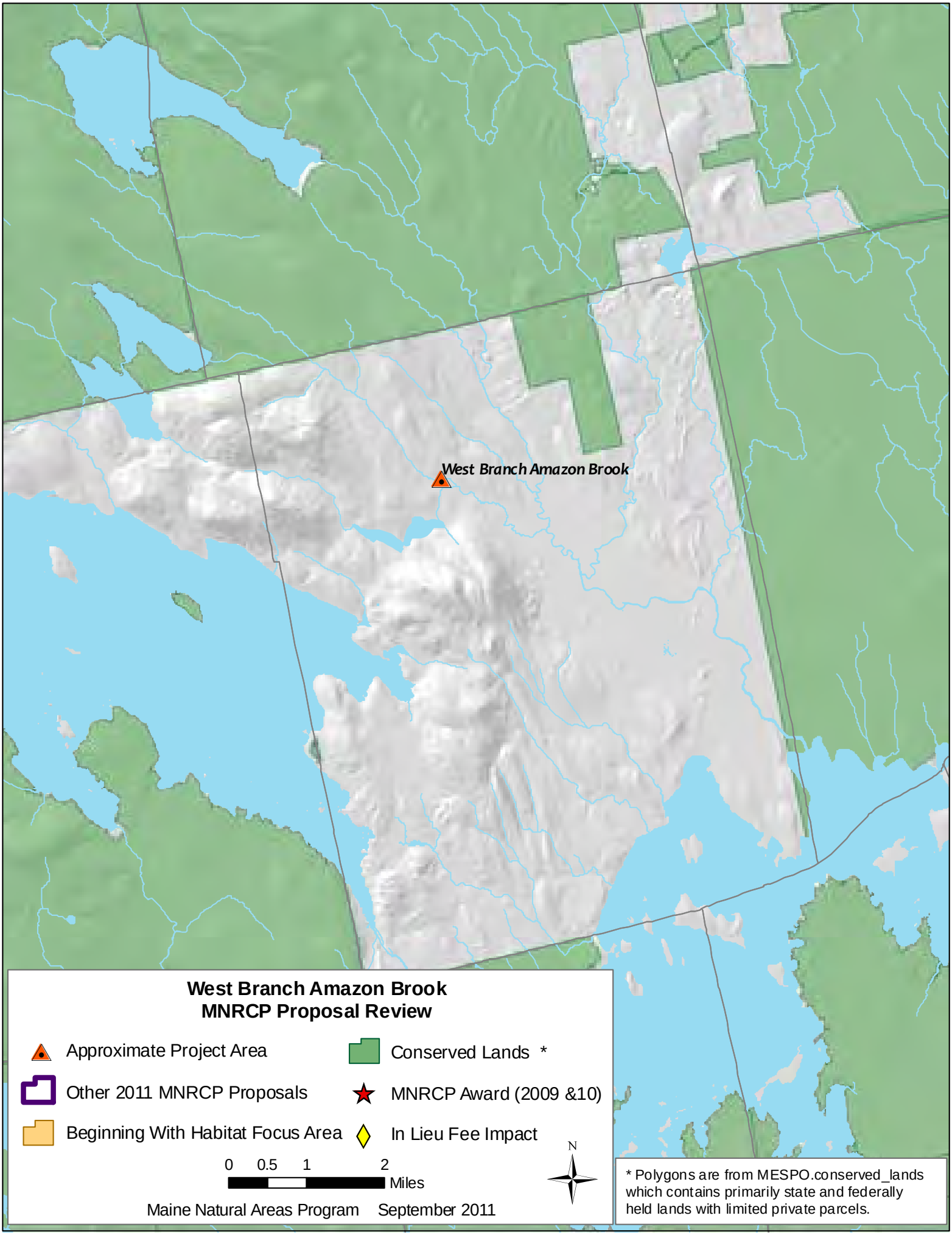
Long term planning will likely include a 10 year inspection by an engineer and replacing running boards. A 20 year inspection will likely include the replacement of 8X8 hemlock stringers.

No associated land acquisition costs

Restoration, Enhancement, or Creation Costs	
Restoration planning	$1,000
Personnel	$2,700
Site Work	$4,500
Contractual	$650
Equipment	$3,560
Supplies	$19,960
Other: Work Prior to application acceptance (bank stabilization)	$1,750

Monitoring and Long-Term Management Costs	
Short-term monitoring costs[2]	$85/year(5 yrs)
Long-term management/stewardship costs[3]	TBD

Total Project Cost:	$34,545
Total Maine Natural Resource Conservation Program (MNRCP) Request:	$26,000
Other Funding Sources and Amounts:	Land owner: $8,545


West Branch Amazon Brook
West Branch Amazon Brook
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Approximate Project Area
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In Lieu Fee Impact
0 0.5 1 2
Miles
N
Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.

Outline for MNRCP Project Description

Completely describe the proposed project. Make sure to clearly cover the following, as appropriate, depending on whether the project includes restoration, enhancement, preservation or creation. Use headings as outlined below.

Executive Summary:

- Project Sponsor: Gregg Caporossi, Trust for Public Land, 30 Danforth Street, Suite 106, Portland, ME 04101, (207) 772-7424 x. 2, gregg.caporossi@tpl.org
- Project Location Westport Island, Lincoln County, Tax Map 4, Lot 9

Summary Project Description

The Town of Westport Island is working in partnership with the Trust for Public Land to acquire 202.39 acres in fee simple on Westport Island. The property features 2,495 feet of frontage on the Sheepscot River, forested uplands, an extensive wetland/pond complex, and critical wildlife habitat. The property is heavily wooded and current development is limited to a single gravel road and a small cluster of 2 cabins and a boat house near the Sheepscot River shoreland. There are 5 major wetland complexes that are associated with the property (see Attachment 1 – Wetlands Map) and these have demonstrated value as mapped Inland Waterfowl and Wading Bird Habitat, in addition to serving a variety of other functions, including: groundwater recharge/discharge, floodwater and sediment retention, wildlife habitat, recreational opportunities and scenic qualities.

The Westport Landing property is privately owned and is listed for sale by LandVest. If sold, the property would likely be subdivided for residential development. Given this threat, the Trust for Public Land successfully negotiated an option to purchase the property in fee for the appraised Fair Market Value of $1.35 million. Under the terms of the agreement, TPL has the right to purchase the property through August 2012, at which time the option will expire. If the project partners are successful in our efforts to raise sufficient funds to purchase Westport Land, the restricted fee will be held by the Town of Westport, with an easement held by either Kennebec Estuary Land Trust or Sheepscot Valley Conservation Association. Once acquired, the property will be managed to protect water quality and wildlife habitat, and promote public access. If this project is selected for funding, MNRCP funds will be used for land acquisition, including wetland preservation as well as upland areas of the property, and to construct water control structures to enhance wetland functions.

Westport Island's voters approved a warrant to raise $75,000 at annual Town Meeting this past June, with 62% in favor of the measure, which the partners hope to match through a variety of federal and state programs. To date, the Town of Westport Island has submitted a grant application to the Coastal and Estuarine Land Conservation Program for half of the acquisition funds. In addition, a grant application will be submitted to the Land for Maine's Future Water Access program and OSI's Community Forest Program.

Estimated Project Cost:

- Total Project Cost* $1,431,000
- MNRCP Fund Request $ 350,000

* Total project cost includes: land acquisition, real estate due diligence, and stewardship endowment

Resource Priority of Project Site:

- *Within or adjacent to a Beginning with Habitat Focus Are*a (abutting Kennebec Estuary Focus Area, close proximity to Lower Sheepscot Focus Area)
- *Within or adjacent to existing public or private conservation lands* (*N/A*)
- *Within or adjacent to other natural resource priority areas* (Hockomock Bay Focus Area includes 12 islands in lower Hockomock Bay and the westcentral portion of Westport Island from Heal Cove to Squam Creek. Hockomock Bay is part of the lower Kennebec estuary and encompasses approximately 1,740 acres. The Hockomock Bay is biologically diverse, with a combination of marine, freshwater and upland habitats supporting a rich array of plant and animal species, including 5 that are rare in Maine: bald eagle, Atlantic salmon, salt marsh sharp-tailed sparrow, shortnose sturgeon and marsh elder. The Hockomock Bay is a focus area for the Sheepscot Valley Conservation Association.)
- *Contains natural resources of significant value and/or rarity* (See Attachment 2 – Species of Greatest Conservation Need)

Type of Conservation (*complete the following table*):

Natural Resource Type		Restored acres	Enhanced acres	Preserved acres	Created acres	Total acres
Freshwater Resources	Freshwater wetland, emergent (PEM/PAB)		4.94[1]	12.13		17.07
	Freshwater wetland, forested (PFO)			3.32		3.32
	Freshwater wetland, shrub-scrub (PSS)			1.45		1.45
	River, stream or brook			3,200'		3,200'
	Significant wildlife habitat, vernal pool (*indicate number of pools if necessary*)					
	Significant wildlife habitat, vernal pool critical terrestrial habitat					
	Significant wildlife habitat, Inland Waterfowl and Wading Bird Habitat		4.94	58.1		63.04
Coastal Resources	Coastal wetland, Marine subtidal (M1)					
	Coastal wetland, Marine intertidal (M2)					
	Coastal wetland, Estuarine subtidal (E1)			2.0[2]		2.0
	Coastal wetland, Estuarine intertidal (E2)					
	Significant wildlife habitat, Tidal Waterfowl and Wading Bird Habitat					
	Significant wildlife habitat, Shorebird Feeding & Staging Areas					
	Upland buffer (non wetland habitat)			183.1[3]		183.1
	Project Total	**0**	**4.94**	**202[4]**	**0**	**206.94**

[1] 3.83 acres of wetland enhancement occurs on an adjacent landowner's property.
[2] The 2 acres of estuarine intertidal habitat is based on the approximate length of the shoreline and an assumed intertidal width of 40' and can be considered a conservative estimate.
[3] Of the approximately 183 acres of property labeled "Upland Buffer", an estimated 5-10 acres is considered to be wetland (primarily PFO and PSS). These small wetlands have not been mapped at this point, but have been observed during the course of field investigations.
[4] The 202 acres referenced as the Project Total encompasses the total area of the physical property.

Potential to Meet MNRCP Goals:

The subject property is approximately 202 acres in size and is situated on the eastern shore of Westport Island, adjacent to Sheepscot River Bay (see Attachment 3 – Locus Map). The Maine Department of Inland Fisheries and Wildlife (MDIFW) provided information for Westport Island from its Beginning with Habitat (BwH) GIS that included such features as rare plant and animal habitats, deer wintering areas, undeveloped habitat blocks, Inland Waterfowl and Wading Bird Habitat, and wetland characterizations.

Flooded wetlands on the property are classified as important Inland Waterfowl and Wading Bird Habitat and much of the property is included in the undeveloped habitat block category. Bald eagle nests are found in close proximity to the property and there are several large white pine trees on the subject property that could serve as potential nest sites for bald eagles, osprey, and great blue herons. Most of the major wetlands are flooded ponds and property managers familiar with the history of the property indicate that these areas were historically forested wetlands. According to Mike Thompson, Wetland Scientist with Penobscot Environmental, Inc., forage fish are common in the flooded wetlands and these species serve as prey for kingfishers, osprey and great blue herons. Waterfowl, including wood ducks and mallards, were seen on all flooded wetlands and several of the ponds have nest boxes that were installed by the landowner. Wood ducks and mallards are expected to breed on the property, based on the presence of broods, but the greatest value for waterfowl is likely associated with spring and fall migration stopover and feeding habitats.

Penobscot Environmental concluded that there are three primary natural resource values associated with the subject property: 1) its value as part of a large, undeveloped block of forest habitat; 2) its value as important Inland Waterfowl and Wading Bird Habitat; and 3) its value associated with its proximity to important aquatic systems, such as the Sheepscot River (e.g., nesting and perching habitat for eagles and ospreys).

As undeveloped habitat, the property is home to many species of mammals and birds, with notable populations of white-tailed deer and forest raptors. No bald eagle, osprey, or great blue heron nests were observed, but the presence of large white pine trees could provide potential future nest sites, especially given the proximity to ponds on the property and adjacent rivers and estuaries. Forest habitats on the property also likely function as part of a wildlife travel corridor that provides north-south travel opportunities for mammals and birds and Westport Island.

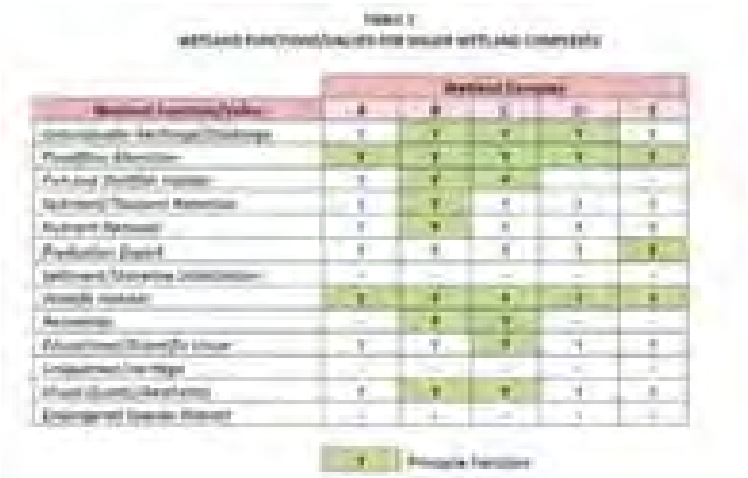
Penobscot Environmental conducted extensive field research over the summer and assessed wetland functions and values using the Highway Corps of Engineers' Highway Methodology. Based on that field work, Penobscot Environmental identified two north-south oriented basins that contain the major wetlands on the subject property (see Figures 2 and 3). According to the field report prepared for the Trust for Public Land, within these basins there are five major wetlands that, while interconnected, function somewhat independently and have generally distinct functions and values. Additional smaller wetlands and vernal pools are found elsewhere on the property, but the five major wetlands comprise the dominant wetland systems. Each of the five wetlands, labeled A-E, are actually a complex of wetland types that include Palustrine Forested, Palustrine Scrub-Shrub, Palustrine Emergent Marsh, and Palustrine Aquatic Bed habitats (see Attachment 1 and Table 1).

TABLE 1
ACREAGE OF MAJOR WETLAND TYPES BY WETLAND COMPLEX

	Wetland Complex					
Wetland Type	A	B	C	D	E	Total
Palustrine Forested	2.26	0.55	0	0	0.69	3.52
Palustrine Scrub-Shrub	0.38	0	0	0	1.07	1.45
Palustrine Emergent Marsh	0.19	0.51	0.07	1.12	2.61	4.55
Palustrine Aquatic Bed	0.42	6.77	4.87	0	0	12.12
Total	2.77	7.86	4.94	1.1	5.07	21.84

Functional Benefits:

According to the wetlands assessment prepared by Penobscot Environmental, all of the dominant wetlands on the property are hydrologically connected, and all store or diminish floodflows through the action of man-made dams, beaver dams, or extensive emergent wetlands (i.e., Wetland Complexes D and E). This alteration of floodflows reduces the impact of flooding in downstream reaches of the outlet stream and, ultimately, minimizes sedimentation in Sheepscot River Bay. All of the wetlands have the potential to provide the related function of sediment/toxicant retention, but this function is best expressed in Wetland Complex B (i.e., the watershed for Wetland Complex B contains agricultural and residential use areas that might be sources of sediments and toxicants). All of the wetlands, but notably Wetland Complex B, also trap excess nutrients and prevent them from reaching downstream waterbodies. To one degree or another, all of the wetlands have the opportunity to export productive nutrients, but most serve as nutrient traps. The only exception to this generality is Wetland Complex E and its large emergent marsh. This wetland is most likely to provide production export functions to downstream wetlands and waterbodies. All of the wetlands have forested shorelines that are stable and no signs of active erosion were observed. For this reason, none of the wetlands was noted for its ability to stabilize shorelines.



The wildlife values of the wetlands on the property, as well as the adjacent uplands (discussed in detail in the Landscape Context section below), can be considered moderate to high value for wildlife.

Wetland Complexes B and C provide recreational opportunities that could include canoeing, kayaking, bird watching, and hunting.

Enhancement Plan/Future Conditions:

The pond associated with Wetland Complex C has a surface area of approximately 5 acres and depths ranging from 2'-5'. Water levels in the pond are controlled by a small outlet structure that consists primarily of a 7"-diameter corrugated plastic pipe with an additional overflow spillway that prevents flooding of the road.

An opportunity to enhance habitat diversity in the pond exists through installation of an appropriate water control structure and stabilization of the overflow spillway. A stop-log water control structure that would allow seasonal manipulation of water levels in at least 6" increments will be installed at the location of the existing water control structure. Such structures are typically used on conservation lands managed for waterfowl, waterbirds, and other wildlife. In addition to the water control structure, the work plan recommends that approximately 200 feet of Hopkins Road may need to be improved to prevent the water from over topping. A cost estimate for survey, design, permitting, and construction costs for such a project has been prepared (See Attachment 4 – Design and Construction Estimate).

A water level management plan will be developed for such an effort, but in general reducing water levels by approximately 1' to allow the development of a shrub fringe and emergent sedge and rush communities would benefit the wildlife community. These wetland habitats would greatly improve habitat for nesting and brood-rearing waterfowl, for example, while creating nesting habitat for riparian-dwelling songbirds. In addition, habitat would be improved for other waterbirds, fish, reptiles and amphibians, and aquatic invertebrates. Such improved habitats would increase wildlife viewing opportunities and greatly improve the value of the wetland as an educational resource. These activities would not reduce the acreage of wetlands, but would instead enhance the value of the wetlands.

Minor soil disturbing activities would be associated with removing the existing water control structure and replacing it with a modern, functioning system. Construction would take place in the Fall, after the waterfowl nesting season, and the small areas of disturbed soil adjacent to the water control structure would be seeded with a conservation mix.

Threat of Conversion:

The current out of state owners are in the midst of selling off their assets for personal reasons and have listed the property on the open market. The most likely interested buyer would purchase the property for the purposes of subdivision and residential development. Despite the present downturn in the housing market, mid-coast Maine remains a desirable area for seasonal home buyers.

Current and Proposed Buffers:

As depicted in Attachment 6, the property is a large forest block within a rural, residential setting. In fact, the property contains the largest remaining unfragmented forest block on Westport Island. As this is a fee simple purchase with the intention of maintaining the property as open space, the entire forested uplands will buffer the wetland complex and enhancements included in this proposal. As communities like Westport Island become more developed and fragmented, it is critical to maintain large undeveloped parcels for wildlife habitat, recreational opportunities, and groundwater recharge.

Current Uses of the Property and Abutting Land:

The property is largely found in a natural state. The property has a 1 mile long dirt access road leading to 2 small cabins and a boathouse located along the Sheepscot River. These structures were built in the early 1960s by the former landowner and are unused today. After closing, the structures will be removed, with the area restored to a natural state.

Abutting properties to the north, south and west could be characterized as rural, but developed. The land to the north was recently developed, and is an indication of what could become of this property should the conservation effort fail to materialize. To the west and south, the properties are largely historic, single family residences with large lots.

Proposed Use of the Property:

The Westport Landing Property will be managed in a natural state and made available for passive public enjoyment. The Town of Westport Island will work in cooperation with a local land trust to ensure that the property is maintained and managed in a manner that meets the goals and objectives of this application, funding programs and easement language. Broadly speaking, those goals include managing wildlife habitat and ecological functions and values, protecting water quality and providing public access.

As stated elsewhere in this application, specific management objectives and methodologies will be developed in consultation with a wildlife biologist, licensed forester, wetland scientist or other qualified professional and memorialized in a long term management plan.

Easement Terms:

As stated elsewhere, the easement will be held by one of two local land trusts – Kennebec Estuary Land Trust or Sheepscot Valley Conservation Association, both of whom support this project and have been actively engaged thus far. Easement language will be drafted prior to closing with consideration given to the fee owner, easement holder and funding sources involved.

Community Support:

In June, Westport Island voters passed 2 warrant article critical to the success of this project. The first warrant authorized the Town to take legal ownership of the property at closing (62% in favor). The second,

authorized the Board of Selectmen to bond $75,000 to help purchase the property from the current owner (63% in favor). In addition to this strong voter support, the project has been endorsed by: the Westport Island Conservation Commission, Board of Selectmen, and Groundwater Protection Commission; in addition to, the Sheepscot Valley Conservation Association, Kennebec Estuary Land Trust, Office of Lincoln County Commissioners, Lincoln County Regional Planning Commission, and Maine Department of Inland Fisheries and Wildlife.

Landscape Context:

The subject property is 202.15 acres in size and is located on the eastern side of Westport Island, which is formed by the Sheepscot, Back and Kennebec Rivers. These tidal rivers are flush nutrient rich waters from the Atlantic with fresh water from Merrymeeting Bay to form some of the largest brackish tidal marsh systems in Maine.

At the landscape scale, the Westport Landing property lies within the Penobscot Bay Ecoregion – a transitional zone between the spruce-forest of the Maritimes and the oak-pine forests of central New England. This region's myriad islands, bays, estuaries, marshes and rivers also creates a network of important habitats used by shorebirds, waterfowl, and anadromous fish for nesting/spawning, feeding, and migration. This convergence of upland and aquatic habitats makes this region one of the most productive and ecologically diverse region's in the state.

Due to this ecological diversity, this region of the state has been identified in multiple state and regional conservation plans. The eastern boundary of the Kennebec Estuary Focus Area bisects Westport Island and immediately abuts the subject property. This focus area of statewide importance is comprised of Merrymeeting Bay and the lower 15 miles of the Kennebec River and contains 20% of Maine's tidal marshes. While the project partners recognize that this project abuts (rather than lies within) several important Focus Areas, it's habitat values are consistent with those found throughout the landscape. According to the US Fish and Wildlife Service (USFWS), "A recent GIS analysis completed by the U.S. Fish and Wildlife Service's (USFWS) Gulf of Maine Coastal Program for the U.S. portion of the Gulf of Maine watershed documents that forest, freshwater wetland and subtidal/intertidal estuarine/marine habitat contained in the parcel are high value (within the top 25%), based on their value for rare or declining species of birds and fish. The analysis also predicts that the property provides important habitat for 45 of 91 USFWS priority trust species included in the analysis. Moreover, the property provides particularly high value habitat, in comparison with the rest of the Gulf of Maine watershed, for 13 of those 45 species.

Additionally, two state designated wetlands connected by a stream provide important inland waterfowl/wading bird habitat identified by the Beginning with Habitat program and mapped as Significant Wildlife Habitat by MDIF&W. This habitat type is utilized by a variety of waterfowl and wading birds for foraging, nesting, cover and serves as an important migratory stopover. Finally, Maine Natural Area's program data shows suitable habitat for Redshouldered Hawk on the property and northern harrier just west of the property.

The property contains functional examples of 9 of the 21 key habitat types identified in Maine's SWAP. As a result of this diversity of habitats, forty-five Species of Greatest Conservation Need are known to occur on the property as either resident species, seasonal breeding species, or seasonal migrants (see attachment 2 – Species of Greatest Conservation Need). Additionally, the site is known to support 25 species listed as species of special concern by MDIF&W.

Adverse Impacts:

As the entire 202 acre property will be managed in a natural state, the project partners do not anticipate any adverse impacts to the natural resources found on the property. In fact, through developing a forest management plan, the intention is to improve existing conditions on the ground with specific goals of enhancing wetland functions to improve aquatic habitat for waterfowl, fish and songbirds.

Project Readiness

The Trust for Public Land has reached agreement with the landowners to purchase the property in fee. Under the terms of the signed Option Agreement, TPL will pay the landowner in cash for the property no later than August 2012. A restricted use appraisal of the subject property was completed in September 2009 and will be updated to "Yellow Book" standards prior to closing per federal guidelines for land acquisition. A complete boundary survey has been recorded with the registry of deeds. Title review and Phase I Environmental Site Assessment have been satisfactorily completed, with no title or recognized environmental conditions. Also during the project period, a conservation easement over the subject property will be negotiated for conveyance to a local land trust and baseline documentation will be prepared.

Permits:
According to Gartley & Dorsky Engineering and Surveying, the firm that would be hired to install the water control structure, the proposed work plan would require a permit by rule under the Natural Resources Protection Act.

Legal Access:
Legal access to the property is obtain by 1,878 feet of frontage on Maine State Road 144 and via Hopkins Road (private), which bisects the property. The existing gate at the entrance to Hopkins Road will remain closed and a small parking area will be created for 6 – 8 cars. Wheeled vehicular access will be restricted to management related activities.

Landowner Name and Contact Information:

James Barrett
6700 Via Austi Parkway
Las Vegas, NV 89119
Jbarrett_rio@yahoo.com
702.595.1146

Maureen Barrett
2276 Trafalgar Court
Henderson, NV 89074
Rmmf241@midcoast.com
702.433.9218

Project Timeline/Tasks:

Time Period	*Milestone:*
January 2011	Preliminary Appraisal Complete Option Agreement with landowner executed
July 2011 – October 2011	Due diligence period (title work, environmental assessment) complete Initial assessment of wetland conditions on the property by Penobscot Environmental Consulting - Complete
March 2011 – January 2012	Secure federal, state, local and private funding - Ongoing
December 2011 – January 2012	Finalize CELCP easement
February 2012	Complete Final appraisal
April 2012	Submit documentation to funders for review
July 2012	Complete Baseline Documentation, Project closing
Post Closing:	
Fall 2012	Develop stewardship and Management Plan Survey and design plans for water control structure Water level management plan
January 2013	6 month progress report due to NOAA Permit applications for water control structure
Spring 2013	Construction Bid documents for wetland enhancements Assemble Stewardship and Management Committee Write Stewardship and Management Plan
Summer 2013	Install wetland enhancement structures Write detailed f-year wetland monitoring plan

Monitoring Plan:

A detailed 5-year wetland monitoring plan for the proposed enhancement area will be completed upon notification of award of project funding. The plan will include the following elements:

- Baseline survey of waterfowl nesting activity;
- Baseline survey of waterfowl brood-rearing activity;
- Baseline survey of breeding birds;
- Baseline survey of bird use during spring and fall migration;
- Baseline survey of other seasonal wildlife uses;
- Baseline survey of existing plant communities; and
- Post-construction monitoring (for 5 years) of waterfowl nesting, waterfowl brood-rearing, breeding birds, migratory bird use, other wildlife use, and plant communities.

Stewardship and Management Plan:

The Town of Westport Island will own and manage the property, with an easement held by either the Kennebec Estuary Land Trust (KELT) or the Sheepscot Valley Conservation Association (SVCA. Both of these land trusts have long track records of managing natural lands in the mid-coast and support this application (see attached letters). Regardless of which land trust is chosen, both have a track record of owning and managing property.

Prior to closing, Westport Island will work in partnership with the Trust for Public Land and the easement holder to develop specific easement terms, which will generally include provisions for water quality and wildlife habitat protection, maintain historic, cultural and scenic amenities and intact forest block. In cooperation with the easement holder and in consultation with a wildlife biologist, forester, wetland scientist or other qualified professional, the Town of Westport will develop a 10 year Stewardship and Management Plan to guide management decisions on the property. A baseline report will be completed prior to closing.

As part of the project budget, the partners will raise a $15,000 stewardship endowment to help pay for costs associated with annual easement monitoring. Town expenses for maintenance and management will be paid from Westport Island's Conservation Fund.

Format for MNRCP Project Budget

Identify costs as actual incurred or estimated. Describe the basis for any estimated costs.

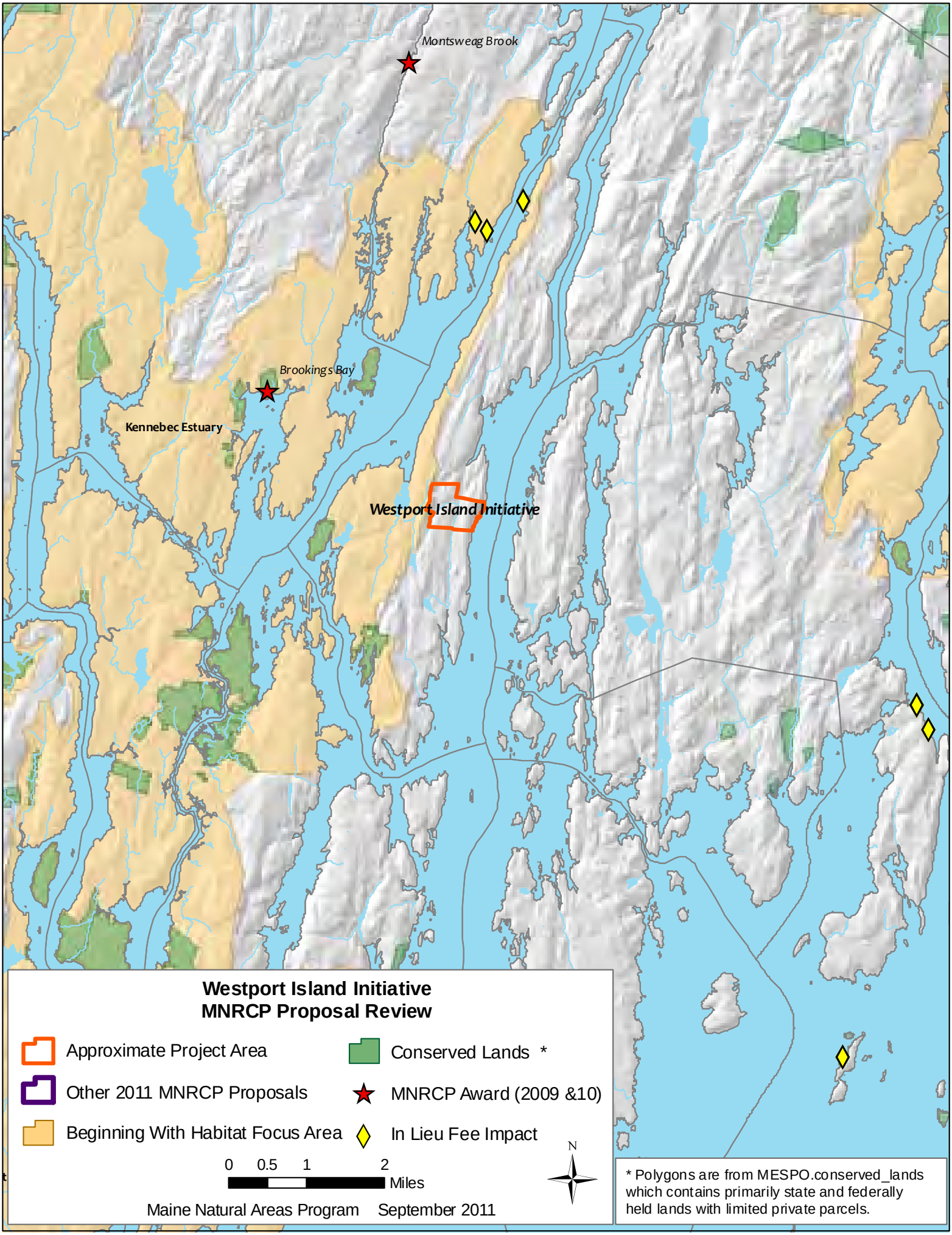
Acquisition and Associated Costs	
Value of fee lands or conservation easements to be purchased**	$1,350,000.00
Appraisal costs	$ 7,000.00
Title, legal and closing costs	$ 3,500.00
Land survey	$ 0.00
Environmental hazard survey	$ 2,400.00
Baseline documentation *(easement only)*	$ 1,500.00
Long-term management/stewardship planning	$ 5,000.00
Natural resource survey	
Restoration, Enhancement, or Creation Costs	
Restoration planning (surveying, Engineering, Planning)	$ 7,000.00
Personnel	$ 4,400.00
Site Work (site prep, road improvements, outlet control structure, erosion control and revegetation)	$ 30,000.00
Contractual	
Equipment	
Supplies	
Other - contingency (15%), NRPA Permitting	$ 5,200.00
Monitoring and Long-Term Management Costs	
Short-term monitoring costs††	
Long-term management/stewardship costs‡‡	$ 15,000.00
Total Project Cost:	$1,431,000.00
Total Maine Natural Resource Conservation Program (MNRCP) Request:	$ 350,000.00
Other Funding Sources and Amounts: Coastal and Estuarine Land Conservation	$ 675,000.00
LMF Water Access	$ 131,000.00
OSI Community Forest Fund	$ 200,000.00

** Land Acquisition or Conservation Easement Costs must based on an Appraisal completed within the past two years, in accordance with the Uniform Standards of Professional Appraisal Practice (USPAP). A copy of the final appraisal must be provided and consist of a complete appraisal and a self contained appraisal report.

†† For restoration, enhancement or creation, a five-year monitoring term is typical, with a potentially longer period for resources with slow development rates. Preservation projects do not require short-term monitoring.

‡‡ Funded projects are expected to protect priority resources "in perpetuity," which requires an entity with the resources and expertise to ensure long-term management and stewardship. A financing mechanism (e.g., endowment, trust, or long-term financing plan) is required to ensure adequate funding is available over time, though all the funds needed for establishment do not need to be included in MNRCP request.

Town of Westport Island	$ 75,000.00


Montsweag Brook
Brookings Bay
Kennebec Estuary
Westport Island Initiative
Westport Island Initiative
MNRCP Proposal Review
Approximate Project Area
Other 2011 MNRCP Proposals
Beginning With Habitat Focus Area
Conserved Lands *
MNRCP Award (2009 &10)
In Lieu Fee Impact
0 0.5 1 2
Miles
N
Maine Natural Areas Program September 2011
* Polygons are from MESPO.conserved_lands which contains primarily state and federally held lands with limited private parcels.