

PUBLIC NOTICE

US Army Corps of Engineers ® New England District

696 Virginia Road Concord, MA 01742-2751 Date: May 14, 2019

Comment Period Ends: June 13, 2019

File Number: NAE-2005-1143 In Reply Refer To: Ruth M. Ladd

Or by e-mail: ruth.m.ladd@usace.army.mil

30 DAY NOTICE

This public notice is to share with the public those projects approved for funding between 2009 and 2018 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 (Maine DEP). 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 Maine DEP. These projects were submitted in response to Request for Proposals ("RFP") each year since 2009 and were recommended by the program's Review Committee and approved by the Approval Committee.

A general description of each project is provided in the attached draft amendment to the ILF instrument. Details on these projects, such as their mitigation plans, are available on the Corps' on-line Regulatory In-lieu fee and Bank Information Tracking System (RIBITS).

https://ribits.usace.army.mil/ribits_apex/f?p=107:2

The Corps of Engineers is soliciting comments from the public, federal, state, and local agencies and officials, Indian Tribes, and other interested parties. Any comments received will be considered by the Corps of Engineers as we continue to implement the ILF program in cooperation with the Maine DEP. Comments are also used to determine the need for a public hearing.

Anyone wishing to comment is encouraged to do so. Comments should be submitted in writing by June 13, 2019. If you have any questions, please contact Ruth M. Ladd at (978) 318-8818 or (800) 343-4789.

All comments will be considered a matter of public record. Copies of comment letters will be forwarded to the sponsor and the Interagency Review Team consisting of representatives of the Corps, Environmental Protection Agency, US Fish and Wildlife Service, National Marine Fisheries Service, Maine Department of Environmental Protection, Maine Department of Marine Resources, Maine Department of Conservation, and Maine Department of Inland Fisheries and Wildlife.

For more information on the New England District Corps of Engineers programs, visit our website at http://www.nae.usace.army.mil.

THIS NOTICE IS <u>NOT</u> AN AUTHORIZATION TO DO ANY WORK NOR DOES THE IN-LIEU FEE PROGRAM, IF APPROVED, PREJUDGE FUTURE DEVELOPMENT PROJECTS WITHIN THE SERVICE AREA.

ROBERT J. DESISTA
Acting 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:		

AMENDMENT #5 TO THE

STATE OF MAINE – IN LIEU FEE PROGRAM INSTRUMENT

WHEREAS, the approved State of Maine – In Lieu Fee Program Instrument (Instrument) was signed by the Maine Department of Environmental Protection (MDEP) on September 21, 2011 and the New England District Corps of Engineers ("Corps") on September 15, 2011. Amendment #1, which made changes to reflect actual procedures, adjusted the "Prioritization Strategy for Selecting and Implementing Projects," and address long-term stewardship funding, was signed by MDEP on February 23, 2016 and the Corps on February 17, 2016. Amendment #2, which added wording from the federal Mitigation Rule related to requirements for preservation-only projects, was signed by MDEP on July 21, 2016 and the Corps on July 19, 2016. Amendment #3, which modified the membership of the Interagency Review Team, was signed by MDEP on January 26, 2017 and the Corps on January 19, 2017. Amendment #4, which modified language in 6.1 on Legal Responsibility, was signed by both MDEP and the Corps on February 14, 2019.

NOW THEREFORE, the following changes shall be made to the Instrument:

Addition of:

Section 8.10 Approved Projects

Projects approved for funding between 2009 and 2018 by the Corps following review by the Review Committee and the Approval Committee are listed in Appendix H. Details on these projects, such as their mitigation plans, are available on the Corps' on-line Regulatory In-lieu fee and Bank Information Tracking System (RIBITS).

The project naming convention is the project application year, the service area, the project name, the town, and the state.

Appendix H Approved Projects

All information is publicly available on RIBITS (see Section 6.3) **2009 Projects**

2009-CIM – Argyle Wetlands – Argyle, ME – this project was withdrawn by the project proponent following approval. No funds were released.

2009-CIM – Blackman Stream – Bradley, ME

The objective for this project is to restore fish passage around a historic dam on Blackman Stream.

The performance standards are submission of five years of monitoring which will document installation of the fishway as shown on the project plans. A third party will provide a report documenting the suitability of the fish way to pass alewayes.

The project involves construction of a 17-step rock and pool fishway and Denil fish ladder. The dam and surrounding land are owned by the Maine Forest and Logging Museum. The Atlantic Salmon Federation has an agreement with the owner to construct the fishway. The fishway will provide access to alewives, Atlantic salmon, and American eel in and out of Chemo Pond. The museum's caretaker will assist with the operation and maintenance of the fishway which will be operated for the spring alewife runs.

2009-CIM - Brookings Bay - Woolwich, ME

The objective of this project is to preserve in perpetuity 59.5 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Maine Department of Inland Fisheries and Wildlife will purchase the parcel. This will protect high value coastal habitat in the Kennebec Estuary Beginning with Habitat Focus Area. The site include 36 acres of freshwater forested and shrub-scrub wetlands and estuarine intertidal wetlands, 1,962 feet of frontage on Brookings Bay, and 956 feet of stream frontage. Public access for traditional uses compatible with habitat protection goals will be allowed.

2009-CIM – Clark Island – St. George, ME

The objective of this project is to restore approximately two acres of wetland within the Clark Island Wildlife Refuge.

The performance standards are:

- 1. In the upland buffer there should eventually be at least:
- a. 500 trees and shrubs per acre,
- b. of which at least 350 per acre and are healthy and vigorous and at least 18" tall in 75% of the woody zone
- c. AND include at least the three non-exotic species including planted and volunteer species. Volunteer species should support the wildlife functions consistent with the design goals. To count a species, it will be well represented on the site (e.g., at least 50 individuals of that species per acre).
- 2. The emergent areas on the site have at least 60% cover by noninvasive hydrophytes.
- 3. Planned scrub-shrub areas have at least 60% cover by noninvasive hydrophytes, of which at least 15% are woody species.

For the purpose of this success standard, invasive species of hydrophytes are:

Cattails -- Typha latifolia, Typha angustifolia, Typha glauca;

Common Reed -- Phragmites australis;

Purple Loosestrife -- *Lythrum salicaria*;

Reed Canary Grass -- Phalaris arundinacea; and

Buckthorn – *Rhamnus frangula*.

- 4. Common reed, purple loosestrife, Russian and autumn olive (*Elaeagnus* spp.), buckthorn, Japanese knotweed (*Polygonum cuspidatum*), and/or multiflora rose (*Rosa multiflora*) plants at the project site are being controlled. For this standard, small patches must be eliminated during the entire monitoring period. Large patches must be aggressively treated and the treatment documented.
- 5. All slopes, soils, substrates, and constructed features within and adjacent to the mitigation site(s) are stable.
- 6. The site shall have no more than 3% cover by invasive species.

The project involves the removal of about 30 feet of rock overburden dumped in a forested wetlands as part of a rock quarrying operation decades ago. The side slopes will be graded and planted. As the exact situation that will be encountered under the rocks is unknown, the project proponent will work with MDEP and the Corps to develop an appropriate mitigation design.

2009-CIM – Montsweag Brook Dam – Wiscasset, ME

The project involves the removal the Montsweag Dam to restore natural stream processes to the Montsweag Brook including restoring diadromous and resident fish habitat and lateral movement.

The performance standard is photo and text documentation of the stability of soils post-dam removal within the monitoring period.

The Chewonki Foundation will contract for the removal of the dam which is about a quarter of a mile above the head of tide. This will eliminate the 20-acre impoundment which inundates 0.8 mil of pre-existing riverine habitat. The Foundation owns the dam, the land around the impoundment, and a 50-foot wide easement that stretches three miles upstream on the east side of the brook. The downstream estuary will be enhanced through the return to natural flood conditions.

2009-CIM – Whitten Hill – Montville, ME

The objective of this project is to preserve in perpetuity 410 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Sheepscot Wellspring Land Alliance will acquire the parcel in fee simple. The property include five acres of forested wetlands and a broad floodplain forest along 2,600 feet of the Sheepscot River headwaters. This preservation will help maintain the Sheepscot River as a designated Maine river for Atlantic salmon restoration.

20009-SM – Crooked River – Watkins – Harrison, ME – this project was withdrawn by the project proponent following approval. No funds were released.

2009-SM – Falmouth Conservation Corridor-Boudreau – Falmouth, ME

The objective of this project is to preserve in perpetuity 42 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Town of Falmouth will acquire a conservation easement over one property and place an easement on a second, both of which lie within a 500-acre conservation corridor. Following the establishment of the easements, the Town will assign its interest to the Falmouth Land Trust. The parcels include six vernal pools and other wetlands and well as critical terrestrial habitat for the on-site pools plus two that are off-site.

2009-SM - Gervais - Scarborough Marsh - Scarborough, ME

The objective of this project is the enhancement of six acres of wetlands which are infested with *Phragmites australis*.

The performance standard is documentation of the elimination of the *Phragmites*.

The Maine Department of Inland Fisheries and Wildlife will use herbicide in late summer prior to seed dispersal and follow-up with additional mowing or burning in the winter. This technique has been used elsewhere with good results.

2009-SM – Morgan Meadow – Maloney – Gray, ME

The objective of this project is to preserve in perpetuity 100 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Maine Department of Inland Fisheries and Wildlife will purchase the property which includes 12.3 acres of forested wetlands and 10.4 acres of emergent wetlands. Portions of the site provide deer wintering habitat. The acquisition will complete the state's ownership of the lower wetland of Morgan Meadow Wildlife Management Area and its upland buffer. This will improve the ability to manage the area for wildlife habitat in a rapidly developing part of the state.

2009-SM – Mt Agamenticus I – Fortenbaugh – York, ME

The objective of this project is to preserve in perpetuity 12.5 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Great Works Regional Land Trust will acquire the parcel in fee. It includes 5.5 acres of forested and emergent wetlands and 1,520 feet of frontage on the Ogunquit River. It is contiguous with other preserved land in the area. Spotted and Blandings turtles are found on the property.

2009-SM – Mt. Agamenticus I – Parent – S. Berwick, ME

The objective of this project is to preserve in perpetuity 38.9 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Great Works Regional Land Trust will acquire the parcel in fee. It include 0.31 acres of forested wetland, 0.1 ac of palustrine scrub-shrub wetland, 2.21 acres of vernal pools plus their critical terrestrial habitat.

2009-SM - Walnut Hill - Shapleigh, ME

The objective of this project is to preserve in perpetuity 88 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Three River Land Trust will purchase the property which include 11 acres of forested and scrub-shrub wetlands as well as inland waterfowl and wading bird habitat and multiple vernal pools. The presence of the vernal pools in close proximity, and the associated pocket swamp and stream-associated floodplain wetlands, increases the value of the site for Blanding's turtle conservation. The site also support the state endangered northern black race and habitat for the ebony boghaunter dragonfly, a state species of special concern.

2010 Projects

2010-CIM - Basin Cove/Curtis Cove - Harpswell, ME

The objective of this project is to preserve in perpetuity 87 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Harpswell Heritage Land Trust will purchase two parcels. They represent the largest undeveloped area in South Harpswell. One parcel extends into the intertidal zone of Curtis Cove and the other extends into the intertidal zone of Basin Cove to the south. Together is protect 28.5 acres of forested wetland, 0.7 acres of scrub-shrub wetland, 0.3 acres of ponded wetlands, and 15.5 acres of marine intertidal wetland. Both coves have been idenfied as tidal waterfowl and wading bird habitat by the Maine Department of Fisheries and Wildlife and they contain eelgrass and shellfish beds.

2010-CIM - Great Meadow Stream - Smithfield - Belgrade Lakes, ME

The objectives of this project are to preserve in perpetuity 305 acres of aquatic resources and their associated upland buffers, to restore forested areas heavily impacted by logging, and to continue efforts to control invasive water milfoil from Great Meadow Stream.

The performance standards are:

- 1. Submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.
- 2. The proposed vegetation diversity and/or density goals for woody plants from the plan are met.

Unless otherwise specified in the restoration/enhancement plans, this should be at least 500 trees and shrubs per acre, of which at least 350 per acre are trees for proposed forested cover types, that are healthy and vigorous and are at least 18" tall in 75% of each planned woody zone AND at least the following number of non-exotic species including planted and volunteer species. Volunteer species should support functions consistent with the design goals. To count a species, it should be well represented on the site (e.g., at least 50 individuals of that species per acre).

# species planted minimum	# species required (volunteer and planted)
2	2
3	3
4	3
7	4
6	4
7	5
8	5
9 or more	6

Vegetative zones consist of areas proposed for various types of wetlands (shrub swamp, forested swamp, etc.). The performance standards for density can be assessed using either total inventory or quadrat sampling methods, depending upon the size and complexity of the site.

- 3. i. Each restoration/enhancement site shall have at least 95% areal cover, excluding planned open water areas or planned bare soil areas (such as for turtle nesting), by native species.
 - ii. Planned emergent areas on each restoration/enhancement site shall have at least 80% cover by non-invasive hydrophytes.
 - iii. Planned scrub-shrub and forested cover types shall have at least 60% cover by non-invasive hydrophytes, including at least 15% cover by woody species.

For the purpose of this performance standard, invasive species of hydrophytes are: Common Reed – Phragmites australis;

Purple Loosestrife – Lythrum salicaria;

Reed Canary Grass - Phalaris arundinacea; and

Glossy Buckthorn – Frangula alnus

4. There is evidence of expected natural colonization as documented by the presence of at least 100 volunteer native trees and/or shrubs at least 3 feet in height per acre.

The Belgrade Regional Conservation Alliance (BRCA) will acquire the parcel and perform the restoration work. The parcel includes 218 acres of scrub-shrub, 9 acres of emergent, 33 acres of forested, and 2 acres of open water wetlands. There are also several small stream that cross the parcel. The western boundary protects nearly a mile of buffer along Great Meadow Stream. The stream and wetlands provide exception wildlife habitat and recreational opportunities and support water quality and flood control. BRCA will plant native trees in a 4-acre wetland and 13-acre upland and will use volunteers to remove and control the milfoil.

2010-CIM – Kanokolus Bog – Unity, ME

The objective of this project is to preserve in perpetuity 178 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Sebasticook Regional Land Trust will provide the transaction costs and stewardship endowment as part of the acquisition of the parcel. The site include 14 acres of emergent and 43 acres of forest wetland. It is adjacent to a 308 acre parcel owned by Hofstra University and used as an outdoor classroom. The area is identified as an exemplary raised level bog ecosystem by the Maine Natural Areas Program.

2010-CIM - Maquoit Bay - Henshaw - Brunswick, ME

The objective of this project is to preserve in perpetuity 237 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Brunswick-Topsham Land Trust will acquire a conservation easement on the parcel which include 5.4 acres of emergent, 43.0 acres of forested, 6.8 acres of scrub-shrub, and 45.2 marine intertidal wetlands. It also includes 3.4 acres of rivers and streams and eight vernal pools and their critical terrestrial habitat. The property is part of the largest remaining coastal unfragmented forest block in Cumberland County, part of the most significant eelgrass bed in Casco Bay, and the most productive soft shell clam harvesting area in southern Maine.

2010-CIM – Morse Pond – Collins – Georgetown, ME

The objective of this project is to preserve in perpetuity 30 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Kennebec Estuary Land Trust will acquire the property which includes 7.3 acres of forested, 11.2 acre of emergent, and 0.4 acres of scrub-shrub wetlands. It is also mapped as Inland Waterfowl and Wading Bird Habitat. The parcel is within the Kennebec Estuary Beginning with Habitat Focus Area.

2010-CIM – Muscongus Brook – Bremen, ME

The objective of this project is to restore upstream passage of diadromous fish to Webber Pond.

The performance standards are documentation of the complete removal of the restricting corrugated metal pipe, documentation of the placement of a large box culvert and embedment with natural channel materials, and documentation of use by alewives.

The Kennebec County Soil and Water Conservation District will replace a perched culvert on Muscongus Brook which will, along with a second culvert being replaced with funding from others, restore about one mile of the brook to free-flowing status and connect Webber Pond with tidal waters at Muscongus Harbor. Maine DMR stocked Webber Pond with alewives in 2003 and the stream began to get fish returning in 2007. However, the fish were unable to return to the pond because of the barrier. Maine DOT is assisting with this project.

2010-CIM - Pisgah Hill - Hobson - New Gloucester, ME

The objective of this project is to preserve in perpetuity 103 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Royal River Conservation Trust will acquire two parcels which include 13.6 acre of forest, 8.21 acres of scrub-shrub, 0.5 acres of emergent, and 0.1 acre of ponded wetlands. There are also two vernal pool complexes on the project. The project will be managed for wildlife habitat, environmental education, and low impact recreation.

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2010-CIM – Spectacle Dam Ponds 1 Cake/Whitney – Augusta, ME
2010-CIM – Spectacle Dam Ponds 2 Sukeforth – Augusta, ME
2010-CIM – Spectacle Dam Ponds 3 Glidden – Augusta, ME
2010-CIM – Spectacle Dam Ponds 4 Morin – Augusta, ME
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The objective of these four projects is to preserve in perpetuity 121.75 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Maine Department of Inland Fisheries and Wildlife will acquire the four properties, all of which are in the Spectacle-Tolman Pond Beginning with Habitat Focus Area. The Cake/Whitney parcel is 43 acres; Sukeforth is 40.3 acres, Glidden is 11.25 acres, and Morin is 27.2 acres. They include 3.8 acres of emergent, 1.35 acres of forested, 23.97 acres of scrub-shrub, and 3.97 acres of unconsolidated wetlands. They also include 32.8 acres of Inland Waterfowl and Wading Bird Habitat. The parcels will become part of the Alonzo Garcelon Wildlife Management Area.

2010-CIM – Whiskeag Creek – McKenna – Bath, ME

The objective of this project is to preserve in perpetuity 34.9 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Kennebec Estuary Land Trust will purchase the parcel which includes 12.4 acres of palustrine forested wetland and 3.1 acres of estuarine intertidal wetland. It is in the Kennebec Estuary Beginning with Habitat Focus Area and is adjacent to two other parcels owned by the City of Bath. It is one of two sites in Maine inhabited by the statelisted redfin pickerel and it supports habitat for bald eagles. The area is also identified as

Tidal Waterfowl and Wading Bird Habitat and contains over ten mapped rare place species.

2010-DM - Flanders Stream - Sullivan, ME

The objective of this project is to restore upstream passage of diadromous fish to Flanders Pond.

The performance standards are documentation of the complete removal of the restricting corrugated metal pipe, documentation of the placement of a large box culvert and embedment with natural channel materials, and documentation of use by alewives.

The Town of Sullivan will replace a failed culvert on Flanders Stream at Thorne Road with an arched culvert. The work will provide acces for native alewife, blueback herring, American eel, sea lamprey, and brook trout to three miles of stream and the 537-acre Flanders Pond. Many other species will also benefit from this barrier removal.

2010-SM – Bell Marsh – York, ME

The objective of this project is to preserve in perpetuity 50 acres of aquatic resources and their associated upland buffers and to enhance the resources through the removal of fill in wetlands and road crossings and provide additional turtle nesting areas.

The performance standards are:

- 1. Submission of the recorded preservation documents;
- 2. Submission of a management plan approved by the Corps and MDEP;
- 3. The newly created banks of the Raccoon Creek channel will be at least 86% stabilized by native vegetation and/or native soil materials by the end of the monitoring period;
- 4. Intermittent flow will occur in the channel during years of average or greater than average precipitation; and
- 5. Invasive species shall not make up more than 1% of total aerial plant coverage after discovery and subsequent removal.

The York Land Trust will acquire the parcel and perform the enhancement work. The parcel contains 5.8 acres of forested and 16.3 acres of scrub-shrub wetlands. Several small streams cross the property. Fill from quarry operations and road construction will be removed from 0.2 acres of scrub-shrub wetlands and mounds will be created for turtle nesting. The site is in the Mouth Agamenticus Focus Area. Over 2,600 acres of preserved lands abut the parcel to the east and south. Blanding's and spotted turtles have been documented on the site.

2010-SM – Boutin – Biddeford, ME

The objective of this project is to preserve in perpetuity 53.82 acres of aquatic resources and their associated upland buffers and well as enhance small stream habitats.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The City of Biddeford will acquire the parcel which includes 4.4 acres of forested and 2.6 acres of scrub-shrub wetlands. The site also includes vernal pools and 2.0 acres of vernal pool critical habitat. Blanding's and spotted turtle like use the site as they have been observed nearby. The parcel is in the Biddeford-Kennebunkport Vernal Pool Complex Focus Area. The city will also remove debris from small streams.

2010-SM – E. Branch Piscataqua R – Upper – Falmouth, ME

The objective of this project is to preserve in perpetuity 61.53 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Town of Falmouth will acquire three parcels, two in fee and one with a conservation easement which will be transferred to the Falmouth Land Trust. The parcels were used for agricultural purposes but most have been allowed to revert to forest. On the parcels there are 47.6 acres of forested wetlands, 1 vernal pool and its critical terrestrial habitat, and 6,750 feet of river frontage.

2010-SM – Granite State Wetlands – S. Berwick, ME

The objective of this project is to preserve in perpetuity 288 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Town of Wells will purchase the parcel and then convey a conservation easement to the Great Works Regional Land Trust. The parcel is largely forested and include 145.4 forested, 1.0 acre of emergent, and 3.9 acres of scrub-shrub wetlands. There are also four vernal pools, a 2.0 acre pond, and over 6, 000 feet of frontage on headwater streams. The parcel is key to a habitat corridor protection between to Beginning with Habitat Focus Areas. The parcel will be managed for conservation and low impact recreation.

2010-SM – Merriland River – Tilton – Wells, ME – this project was withdrawn by the project proponent following approval. No funds were released.

2010-SM – Steele Forest – Kennebunkport, ME

The objective of this project is to preserve in perpetuity 26.35 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Kennebunkport Conservation Trust (KCT) will acquire the parcel which includes 20.07 acres of forest wetlands and vernal pools. It is adjacent to 1,000 acres of conservation land owned by the KCT. It will be managed for wildlife habitat, environmental education, and low impact recreation.

2011 Projects

2011-CEL – Mattawamkeag River WMA – Drew Pit, ME

The objective of this project is to preserve in perpetuity 2,452 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Maine Department of Inland Fisheries and Wildlife will purchase the parcel which is adjacent to the Mattawamkeag River Wildlife Management Area (WMA). This parcel will be managed as an addition to the WMA. The property includes 7 miles of frontage on the Mattawamkeag River, Meadow Brook, and Eagle Pond. There are also several state rare or species of special concern on the property. The aquatic resources protected include 1.3 acres of emergent, 1,348 acres of forested, 629.6 acres of scrub-shrub, 45.9 acres lacustrine, and 10.2 acres of riverine wetlands.

2011-CEL – Varnum Farm – Sebec, ME – this project was withdrawn by the project proponent following approval. No funds were released.

2011-CIM – Head of Maquoit Stream – Brunswick, ME – this project was withdrawn by the project proponent following approval. No funds were released.

2011-CIM – Jam Black Brook – Searsmont, ME

The objective of this project is to restore year-round upstream passage of brook trout and other species to 9.8 miles of Jam Black Brook and its tributaries and restore natural stream processes.

The performance standards are documentation of the complete removal of the pair of slip-lined 10'-wide perched culvert at Magog Road and documentation of the placement of a bottomless aluminum arch culvert.

Trout Unlimited with perform the culvert replacement work. It will partner with the Town of Searsmont and state and federal agencies on the project. It will improve habitat for Atlantic salmon, a federally endangered species; eastern brook trout; river herring;

and state-threatened freshwater mussels. In addition it will provide a demonstration site for an appropriate stream crossing developed in cooperation with a municipality.

2011-CIM – Little Cobbossee – Winthrop, ME

The objective of this project is to preserve in perpetuity 89.71 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Kennebec Land Trust will acquire the parcel which includes 22.1 acre of forested, 11.31 acres of emergent, 0.2 acres of lacustrine wetlands. There are also 47.19 acres state-identified as Inland Waterfowl and Wading Bird Habitat. It is adjacent to a conservation easement managed by the Small Woodlot Owners Association of Maine.

2011-CIM – Pushaw Lake Fishway – Hudson, ME

The objective of this project is to reconnect Pushaw Lake and Little Pushaw Lake to the main stem of the Penobscot River for the benefit of migrating alewives by constructing a fishway at the outlet dam.

The performance standards are documentation of the installation of the Denil fishway and removal of the flow gate in the middle of the dam and replacement with a new gate adjacent to the fishway with slots for adult and juvenile emigration, and use by alewives.

The Atlantic Salmon Federation will contract for the installation of the fishway. Historically, Pushaw Lake was a freshwater lake that contained migratory fish such as sea-run alewives. In the 1950s, a concrete masonry dam was built at the outlet of Pushaw Lake which essentially blocked all fish passage. The dam extends the entire length of the stream channel (approximately 150 feet), and has a hydraulic height of 4 feet. The absence of what may have historically been the largest run of river herring in the Penobscot watershed has likely diminished the abundance of some species such as birds of prey and mussels that have a symbiotic relationship with alewives. The absence of herring has also likely had an unknown impact on other parts of the Pushaw watershed due to the loss of nutrients (nitrogen, phosphorous, carbon) from the marine environment.

The 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 returning adults is 235 returning adults/acre, production potential of 1,186,985 alewives for Pushaw and 96,585 alewives for Little Pushaw can be expected.

2011-CIM – Sebasticook River – Sousa – Burnham, ME 2011-CIM – Sebasticook River – 25 Mile Stream a/k/a Moultons Mill 1 – Burnham, ME

The objective of this project is to preserve in perpetuity 639 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Sebasticook River Conservation Trust will acquire two non-contiguous parcels (Sousa and 25 Mile Stream). The parcels include 0.8 acres of emergent, 287.6 acres of forested, 10.7 acres of scrub-shrub, and 5.8 acres of riverine wetlands. As part of the project, SRLT will conduct enhancement work by removal of existing threats to wetland resources. Specifically, on the Sousa property they will remove agricultural activities from wetland areas, increase setbacks for future agricultural activities, ensure that timber harvest will be prohibited from floodplain forest and wetlands on the southeast corner, prohibit ATV vehicle use on the property outside of an established corridor, and reroute pedestrian trails from sensitive wetland areas. On the 25 Mile Stream parcel they will discontinue the existing road bisecting the property, prohibit ATV use, and increase riparian and wetland buffers from any future timber harvests. The parcels are located within the Unity Wetlands Focus Area identified by the Beginning with Habitat program and were identified as conservation priorities in the Unity Wetlands Conservation Plan and support goals of the Unity and Burnham Comprehensive Plans. The acquisition will conserve hardwood floodplain forest, contiguous upland forest, habitat for rare aquatic species, wetland systems, grassland habitat for nesting birds, agricultural lands and public open space.

2011-CIM – St. George River Tidal – Warren, ME

The objective of this project is to preserve in perpetuity 100 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Geoges River Land Trust will acquire the parcel which includes 18 acres of forest, 0.2 acres of palustrine emergent, and 8.7 acres of estuarine intertidal wetlands. The site also includes 6.5 acres of Tidal Waterfowl and Wading Bird habitat and 900 feet of river frontage. It is adjacent to a 57 acre parcel on which the Trust holds a conservation easement.

2011-CIM – Upper Cathance River – Perry – Topsham, ME

The objective of this project is to preserve in perpetuity 150 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Brunswick Topsham Land Trust will purchase the parcel which includes 122.5 acres of forested, 6.5 acres of scrub-shrub, 1.6 acres of emergent, 0.2 acres of lacustrine, and 0.6 acres of riverine wetlands as well as 2,200 feet of frontage on the Cathance River. The site abuts the Trust's 163-acre Bradley Pond Preserve.

2011-CIM – Wallamatogus Great Heath-2 – Penobscot, ME

The objective of this project is to preserve in perpetuity 273 acres of aquatic resources and their associated upland buffers and will restore 2 acres of scrub-shrub wetlands impacts by an ATV/snowmobile trail.

The performance standards are submission of the recorded preservation documents, a management plan approved by the Corps and MDEP, and photo documentation of the removal of the trail and its complete revegetation with native plants.

The Blue Hill Heritage Trust will purchase the parcel which includes a mosaic of wetland communities and types. They include a raised level bog, bluejoint meadow, and white cedar woodland according to the Maine Natural Heritage Program. Specifically it includes 25 acres of emergent, 75 acres of forested, 62 acres of scrub-shrub wetlands as well as 2 acres of stream and 2 acres of vernal pools. The emergent wetland is also state-designated Inland Waterfowl and Wading Bird Habitat.

2011-CWM – Sevenmile Stream – Jay, ME

The objective of this project is to preserve in perpetuity 42 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Androscoggin Land Trust will purchase the parcel which include 26.6 acres of forested, 1.2 acres of emergent, 2.7 acres of scrub-shrub, and 2.2 acres of palustrine open water (pond) wetlands. It is part of a large wetlands complex.

2011-CWM – Sucker Brook – Horsehoe Pond Parcel – Lovell, ME 2011-CWM – Sucker Brook West Side Parcel – Lovell, ME

The objective of these projects is to preserve in perpetuity a total of 226.1 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Greater Lovell Land Trust will acquire two non-contiguous parcels (Horseshe Pond and West Side) that include 2.13 acre of emergent, 17.92 acres of forest, 25.16 acres of scrub-shrub, and 2.62 acres of lacustrine wetlands. In addition, 83.67 acres is state-identified as Inland Waterfowl and Wading Bird Habitat. It is in the Focus Area for Land Conservation Efforts with the Conservation Plan for the Kezar River, Kezer Lake and Cold River Watershed. It is adjacent to land owned by the Trust.

2011-SM - Boulter Pond Wetlands - York, ME

The objective of this project is to preserve in perpetuity 22.7 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The York Land Trust will purchase the land which is comprised of three adjacent lots. They include 6.5 acres of forest and 0.9 acres of scrub-shrub wetlands. It abuts other conservation land owned by the Trust and the Kittery Water District. It is within the Mt. Agamenticus Focus Area of Statewide Ecological Significance.

2011-SM - Crooked River - Robie - Harrison, ME

The objective of this project is to preserve in perpetuity 51.0 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Western Foothills Land Trust will purchase the parcel which include 1.2 acres of emergent, 20.0 acres of forested, and 14.0 acres of scrub-shrub wetlands as well as 2,549 feet of frontage on Russell Brook. It is part of the Crooked River Conservation Corridor and is adjacent to other land protected by the Trust.

2011-SM – Merriland River – High Pine – Wells, ME

The objective of this project is to preserve in perpetuity 61.0 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Town of Wells will purchase the parcel which include 45.8 acres of forest and 0.4 acres of scrub-shrub wetlands. It is part of a large unfragmented forest block and adjacent to the 700-acre Fenderson Wildlife Commons, a town conservation area. The project will protect high priority lands in the headwater of the Merriland River, protect forested wetlands, and continue in the effort to build a wildlife correction between 4,000

acres of water district and conservation lands at Kennebunk Plains and the 700-acre Fenderson Wildlife Commons.

The objective of these projects is to preserve in perpetuity 51.32 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Great Works Regional Land Trust will acquire the two parcels which include 5.14 acres of forest, 1.25 acres of scrub-shrub, and 0.5 acre of palustrine open water (pond) wetlands. The parcels are in the Mt. Agamenticus Beginning with Habitat Focus Area and adjacent to other lands managed by the Trust. The parcel will provide habitat for Blanding's and spotted turtles and may host the globally rare ringed boghaunter dragonfly.

2011-SM - Suckfish Brook - Falmouth, ME

The objective of this project is to preserve in perpetuity 93.69 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Town of Falmouth will acquire the parcel and perform restoration of uplands which are eroding into the wetlands. The wetlands and uplands constitute a large portion of the headwaters of Suckfish Brook. The site includes 2.7 acres of emergent, 40.6 acre of forested and 24.7 acres of scrub-shrub wetlands as well as 51.3 acres that are Inland Waterfowl and Wading Bird Habitat. It also includes one of the very few northern peat bog habitats found in the Greater Portland area. The restoration will address a heavily eroded tote road resulting from poor wood harvesting in past years.

2012 Projects

2012-AHL - Violette Brook - Cyr Plantation, ME

The objective of this project is to preserve in perpetuity 333 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Forest Society of Maine will protect the land with a conservation easement on lands owned by the Van Buren Water District. The parcel includes 15.6 acres of emergent, 7.5 acres of forested, 44.6 acres of scrub-shrub, and 6.2 acres of palustrine open water (pond) wetlands. 140.1 acres of state-identified as Inland Waterfowl and Wading Bird Habitat.

2012-CIM – Caribou Bog-Dorian – Orono, ME

The objective of this project is to preserve in perpetuity 318.7 acres of aquatic resources and their associated upland buffers and to enhance the resources through removal of water control structures and addressing invasive species.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Orono Land Trust will acquire the parcel and perform restoration work. The property includes 68.34 acres of forested, 6.06 acre of emergent, 1.1 acres of scrub-shrub, and 9.5 acres of palustrine open water (pond) wetlands. There are also 38 acres state-identified as Inland Waterfowl and Wading Bird Habitat and 89 acres that are part of a domed bog system. The restoration work will restore functions to 4 acres of emergent wetlands.

2012-CIM – Davis/Holbrook Fishway – Eddington, ME

The objective of this project is to restore passage for diadromous fish in the Blackman Stream watershed at the last major blockage in the watershed.

The performance standards are documentation of the complete removal of the pair of slip-lined 10'-wide perched culvert at Magog Road and documentation of the placement of a bottomless aluminum arch culvert.

The Atlantic Salmon Federation, in cooperation with the Maine Department of Marine Resources and the US Fish and Wildlife Service, developed the plans. An Alaskan Steepass Fishway will be built at the Davis Pond outlet dam. This will allow sea-run fish access to the 503-acre Davis Pond and 347 acre Holbrook Pond. A new gate structure will provide for out-migration of fish and allow the lake association to control flows. The watershed has the potential to produce a run of half a million alewives and has been a Phase 1 priority for restoration in the Penobscot watershed.

2012-CIM – Morse Pond II – Georgetown, ME

The objective of this project is to preserve in perpetuity 71.4 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Kennebec Estuary Land Trust will purchase two adjoining parcel that combined contain 16.2 acres of forested, 10.9 acres of emergent, 1.0 acres of scrub-shrub, and 0.8 acres of palustrine open water (pond) wetlands. It also includes 27.6 acres of state-designated Inland Waterfowl and Wading Bird Habitat. The parcels abut other conservation land.

2012-CIM – Moulton's Mill Part II – Unity, ME

The objective of this project is to preserve in perpetuity 267.5 acres of aquatic resources and their associated upland buffers and to improve hydrology on an adjacent conservation parcel.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP and photo documentation of the culvert removals.

The Sebasticook Regional Land Trust will purchase the parcel which includes 172 acres of forested, 15.3 acres of emergent, 70.1 acres of scrub-shrub, 0.4 acres of palustrine open water (pond) wetland as well as 7.9 acres of stream habitat. To enhance aquatic resources on an adjacent conservation parcel, the Trust will remove three culverts from an abandoned forest access road.

2012-CIM - Penjajawoc Marsh-Severance - Bangor, ME

The objective of this project is to preserve in perpetuity 93.99 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Bangor Land Trust will acquire the parcel which includes 0.5 acre of forested, 3.4 acres of scrub-shrub, and 21.1 acres of emergent wetlands. It also includes 32 acres of state-identified Inland Waterfowl and Wading Bird Habitat and vernal pool habitat. It is in the 18,000 acre Caribou Bog-Penjajawoc Lands Project Focus Area of the Bangor Land Trust and the Orono Land Trust.

2012-CIM – Weskeag Wetlands – South Thomaston, ME

The objective of this project is to preserve in perpetuity 199.20 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Georges River Land Trust will acquire the parcel which includes 3.76 acres of forested, 18.97 acres of freshwater emergent, 1.8 acres of riverine, and 2.21 acres of

estuarine intertidal wetlands. There are also 14 acres state-identified Significant Shorebird Feeding and State Habitat and 10 potential vernal pools.

2012-CWM – Orbeton Stream – Madrid Township, ME – this project was withdrawn by the project proponent following approval. No funds were released.

2012-DM – Indian River – Addison, ME

The objective of this project is to preserve in perpetuity 130 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

The Pleasant River Wildlife Foundation will acquire the parcel which includes 43.27 acres of forested, 13.6 acres of palustrine emergent, 36.54 acres of scrub-shrub, 0.37 acres of estuarine.

2012-SM - Moon Valley - Harrison, ME

The objective of this project is to create and enhance approximately 4 acres of wetlands in a former sand extraction area. The objective was also to preserve in perpetuity approximately 14.5 acres of these resources and their associated upland buffers.

The performance standards are:

- 1. Is the proposed hydrology met at the site? What percentage of the site is meeting projected hydrology levels? Areas that are too wet or too dry should be identified along with suggested corrective measures.
- 2. Is the proposed vegetation standard met (i.e. at least an average of 250 woody plants per acre that are healthy and are at least 18" tall) in at least 75% of the planned PFO/PSS creation and enhancement area; AND at least the following number of non-exotic species including planted and volunteer species:

# species planted minimum	# species required (volunteer and planted)
2	2
3	3
4	3
7	4
6	4
7	5
8	5
9 or more	6

3. Do the creation and enhancement areas have at least 80% aerial cover by noninvasive species (see Appendix A)?

- 4. Do the forested and shrub creation and enhancement areas have at least 60% cover by noninvasive hydrophytes, of which at least 15% are woody species?
- 5. Are invasive plants at the mitigation site being controlled? For the purpose of this performance standard, invasive species include:
 - a. Cattails (*Typha latifolia*, *T. angustifolia*, and *T. glauca*);
 - b. Common reed (*Phragmites australis*);
 - c. Purple loosestrife (*Lythrum salicaria*);
 - d. Reed canary-grass (*Phalaris arundinacea*);
 - e. Glossy buckthorn (Frangula alnus);
 - f. Common reed (*Phragmites australis*);
 - g. Purple loosestrife (*Lythrum salicaria*);
 - h. Smooth and common buckthorns (Frangula alnus and Rhamnus cathartica);
 - i. Russian and autumn olive (*Elaeagnus angustifolia* and *E. umbellata*);
 - j. Mulitflora rose (Rosa multiflora);
 - k. Reed canary-grass (Phalaris arundinacea); and
 - 1. Japanese knotweed (Fallopia japonica).

For this standard, small patches must be eliminated during the entire monitoring period. Large patches must be aggressively treated and the treatment documented.

- 6. Does the soil in the creation area have documented evidence of redoximorphic features developing?
- 7. Is there evidence of the use of the site by wildlife? Provide a comparison of wildlife observed at the site pre- and post-construction on an annual basis.
- 8. Is the rock ford functioning appropriately? Is hydrology being impounded or migrating successfully through the ford? If functionality is impaired explain why and recommend a remedial action. Is there evidence of erosion or undercutting along the base? Is there any recommended maintenance?
- 9. Are all slopes, soils and substrates within and adjacent to the mitigation site stabilized?

The Moon Valley parcel is a 14-acre un-reclaimed sandpit owned by the Western Foothills Land Trust (WFLT). The majority of the property consists of large areas of exposed, sandy soil with limited vegetation. The site contains 1.4 acres of poorly functioning, weakly vegetated emergent and scrub-shrub wetlands created by historic sand extraction intercepting the water table. The proposed wetland creation and enhancement project will create 2.7 acres of wetlands, enhance the existing 1.4 acres of man-made wetlands, as well as enhance approximately 5 acres of upland buffers. Preservation of the parcel will include all creation and enhancement areas, upland buffer enhancement areas, 4.8 acres of upland buffer preservation, and protection of approximately 680 feet of the Crooked River.

2012-SM – Mt Agamenticus Pocket Swamp – York, ME

The objective of this project is to preserve in perpetuity 15.5 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

York Land Trust will acquire the parcel which includes approximately 5.9 acres of forested wetland and associated upland buffer.

2012-SM – Ogunquit River – South Berwick, ME

The objective of this project is to preserve in perpetuity approximately 37 acres of aquatic resources and their associated upland buffers. The project also includes wetland enhancement by restoring the hydrologic connection between two wetlands on the property and the Ogunquit River while enhancing wildlife road passage for amphibians, turtles and small mammals through the upgrading and re-design of a culvert replacement project.

The performance standards for the acquisition are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP. Performance standards for the wetland enhancement include retaining water levels in the wetland, reducing flooding events that close the road, site stabilization minimizing erosion/transportation of roadside sediment into either the wetlands or the Ogunquit River, and having the culvert remain open and passable by the targeted species.

Great Works Regional Land Trust will acquire the parcel which includes 1.9 acres of forested wetland, vernal pools and critical terrestrial habitat, and associated upland buffer. The enhancement will result in approximately 1.6 acres of emergent and scrubshrub wetland enhancement.

2012-SM – Walnut Hill II – Alfred, ME

The objective of this project is to preserve in perpetuity 256 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Three Rivers Land Trust will acquire the parcel which includes approximately 40.6 acres of forested wetland, 13 vernal pools and associated critical terrestrial habitat, and associated upland buffer.

2012-SM – Warren Woods – Scarborough, ME – this project was withdrawn by the project proponent following approval. The parcel was acquired but there agreement could not be reached on management. Funds that had been released were refunded to the MNRCP.

2013 Projects

2013-CIM – Etna Pond Fishway – Carmel, ME

The objective of this project is to restore sea-run alewives and other migratory fish to Souadabscook Stream in the Penobscot River watershed, thereby enhancing adjacent wetlands, the riparian corridor, and numerous species of fish and wildlife in the area.

The performance standards are documentation of operation of the fishway, adequate flows for out migrating alewives, no erosion at the construction site, and the target species, alewives, are successfully using the fishway.

The Atlantic Salmon Federation, working with US Fish and Wildlife Service (USFWS) and Maine Department of Marine Resources (DMR), will construct an Alaskan Steepass Fishway on an impassable town owned dam to allow passage for migratory fish such as alewives. The restoration of the alewife run will bring marine-derived nutrients (nitrogen, phosphorous, carbon) into the watershed, which in turn can provide direct benefits to eagles and osprey and indirect benefits to other birds and mammals that feed on algae, plankton, aquatic insects, and fish. The export of millions of juvenile herring out of the watershed will likewise provide benefits to prey fish and other life along the river corridor.

2013-CIM – Kate Furbish Restoration – Brunswick, ME

The objective of this project is to remove of an earthen dam on an unnamed tributary stream that empties into Harpswell Cove to restore natural stream and stream-associated wetland habitat, improve water quality, and enhance wildlife habitat.

The performance standards are successful establishment of natural wetland conditions and riparian vegetation upstream of the dam removal site, no significant erosion at the dam removal site, and control of a stand of invasive *Phragmites australis*.

Maine Coast Heritage Trust led the project, which is located within the Town of Brunswick's Kate Furbish Preserve, a 590-acre open space conveyance resulting from the closure of the former Brunswick Naval Air Station. Priority wetland resources addressed by the project include coastal saltmarsh, freshwater emergent, scrub-shrub and stream channels. All wetlands and adjacent uplands that will be influenced by the removal of the barrier are within the preserve. Additionally, a growing patch of invasive *Phragmites australis* in a portion of the salt marsh immediately downstream of the impoundment was treated, and on-going erosion into an artificially enhanced vernal pool was also addressed. Completion of the project in anticipated to facilitate salt marsh migration anticipated to occur as a result of sea level rise. The project is also expected to improve water quality within the stream system that drains directly to commercially harvested shellfish flats.

2013-CIM – Middle Bay-Liberty – Harpswell, ME

The objective of this project is to preserve in perpetuity 40.3 acres intertidal and subtidal wetlands, a vernal pool, and associated upland buffer in Middle Bay Cove at the northern end of Harpswell Neck through fee acquisition.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Harpswell Heritage Trust will acquire the parcel which includes 26.5 acres of intertidal wetland, a 0.4 acre pond, and associated upland buffer. The project was part of a collaborative partnership by HHLT, Brunswick Topsham Land Trust (BTLT), and Maine Coast Heritage Trust (MCHT) called the Middle Bay Wetlands Partnership. HHLT will manage the property in perpetuity as a natural preserve. The primary goal of the preserve's management will be to protect its ecological resources from degradation. Low impact recreational activity and shore access for recreational and commercial shell fishermen will be allowed consistent with preservation of its ecological resources.

2013-CIM – Mill Pond Tidal Restoration – Arrowsic, ME

The objective of this project is to remove a gravel road through a salt marsh and remove a timber bridge spanning a tidal creek through the marsh. The removal of the road and bridge will result in more natural tidal flow in and out of the upper reaches of the salt marsh and will restore sheet flow on the marsh, which in turn will result in more efficient transport of nutrients across the marsh.

The performance standards are:

- 1. The site has restored tidal processes, as demonstrated with salinity and elevation data collected from the tidal creek for a two week period following restoration.
- 2. The saltmarsh restoration shall have 95% areal cover by native species. Planned emergent areas on the saltmarsh shall have at least 80% cover by non-invasive hydrophytes. For the purpose of this performance standard, invasive species of hydrophytes are Phragmites australis. The vernal pool enhancement site shall have at least 95% areal cover by native species. However, it is anticipated that the berm will not support 95% native species within two years.
- 3. If common reed (Phragmites australis) becomes established in the saltmarsh, it will be eliminated.
- 4. Vernal pools will have documented use by breeding populations of target species: wood frogs, spotted salamanders, and/or blue-spotted salamanders.
- 5. The saltmarsh will have documented use by target wildlife species: migrating waterfowl and shorebirds.
- 6. All slopes, soils, substrates, and constructed features within and adjacent to the restoration/enhancement site(s) are stable.

The Nature Conservancy (TNC) owns and manages the 50-acre Mill Pond Preserve in Arrowsic within the Kennebec Estuary Focus Area of Statewide Ecological Significance.

In 2013, TNC purchased a 0.75 acre inholding within Mill Pond Preserve that was accessed by a gravel road bisecting the preserve and salt marsh. A timber bridge spanned the tidal creek supported by timber and rock cribbing in the bottom of the tidal creek which created a dam that restricted tidal inflow and outflow. The road was no longer needed for vehicular access so this project will remove the road, bridge and cribworks from the salt marsh to restore tidal flow.

2013-CIM – Morse Pond III – Georgetown, ME

The objective of this project is to preserve in perpetuity 86 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Kennebec Estuary Land Trust will acquire the parcel which includes approximately 21.0 acres of palustrine forested wetland, 7.3 acres of palustrine emergent wetland, 1.1 acres of scrub-shrub wetland, 0.4 acres of freshwater pond, and the remaining acreage of upland buffer. The parcel also includes approximately 12.2 acres of Inland Waterfowl and Wading Bird Habitat, 2,174 linear feet of stream, as well as potential vernal pools. The property abuts other conservation land connecting 325 acres of KELT lands with 746-acre Reid State Park within the Kennebec Estuary Beginning with Habitat Focus Area of Ecological Significance.

2013-CIM – Sewall Pond Restoration – Arrowsic Island, ME

The objective of this project is to replace a deteriorated culvert that forms the outlet of Sewall Pond with a box culvert that provides passage for anadromous fish and many other aquatic species. The project will also improve the water quality by reducing the phosphorus levels in the pond.

The performance standards are:

- 1. The average number of river herring passed into the pond over the next 5 years after construction (2015-2020) will be greater than the average for the past 5 years (2009-2013).
- 2. Other local species including reptiles, mammals, amphibians and fish species (other than river herring), are observed successfully passing through the culvert. The game camera footage demonstrates that those species are utilizing the ramp without observable delay or impediment.
- 3. The average Total Phosphorus Load (TPL), measured in August (where highest levels are generally recorded) for the next 5 years after construction will decrease as compared to the average for the past 5 years of measured TPL in August.
- 4. No invasive species as listed are present on the project site or, if found, have been removed.

- 5. There is no erosion of sediments into the pond, downstream channel or wetlands, and erosion control measures at the site follow Maine Erosion and Sediment Control Best Management Practices.
- 6. Erosion control materials have been removed (once site is stable).
- 7. Project partners observe and document that the structure is functioning as designed during all seasons of flows.

Kennebec Estuary Land Trust (KELT) will replace the culvert to allow fish and other aquatic organism passage. The new structure will preserve the water level of the pond while maintaining access from the creek to the pond for fish and wildlife during all conditions. The pond provides 45 acres of spawning habitat and is well documented for its ecological values and observed habitat for blueback herring, American eel, snapping turtle, painted turtle, bald eagle, osprey, blue heron, as well as numerous marine and upland mammals.

2013-CIM – Sherman Marsh to Salt Bay – Newcastle, ME

The objective of this project is to preserve in perpetuity approximately 97 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Damariscotta River Association will acquire the parcel which includes approximately approximately 5.57 acres of forested freshwater wetland, 3.37 acres of shrub-scrub freshwater wetland, 0.72 acres of vernal pools and 3,200 linear feet of stream as well as vernal pool critical terrestrial habitat and associated upland buffer. The property abuts two other conservation lands owned by Damariscotta River Association and the Bureau of Parks and Lands' Dodge Point Preserve and links two Beginning with Habitat focus areas: the Salt Bay Focus Area and the Lower Sheepscot River Focus Area.

2013-CIM – Upper Cathance – Karonis – Topsham, ME – this project was withdrawn by the project proponent following approval. Agreement could not be reached on management of the property. No funds were released.

2013-CIM – Wallace Shore Road – Harpswell, ME

The objective of this project is to replace an undersized, failing concrete box culvert/bridge with a correctly sized structure where Wallace Shore Road crosses a small tidal creek to reduce the area of impoundment of freshwater and improve exchange of tidal water into the wetland.

The performance standards are

1. All the constructed features such as slopes, soils, substrates within the mitigation site will be stabilized and free from erosion, with erosion control materials removed once the site is stable.

- 2. Invasive *Phragmites australis* is not introduced to the site, or if invasive *Phragmites australis* is introduced, it is controlled.
- 3. Differences in elevations of surface water metrics for high tides upstream and downstream of crossing 9079 will be reduced, specifically: Mean Higher High Water, Mean High Water, Highest Observed Water, and Mean Water Level.

Casco Bay Estuary Partnership will remove the failing concrete structure that had partially collapsed and restricted tidal flow in and out of the adjacent 13.5 acre estuarine tidal wetland, and impounded water upstream of the structure. Surface water hydrology monitoring in 2013 illustrated that the road created a severe restriction to tidal exchange between the New Meadows River and the wetland as evidenced by reduced tidal range, height, and inundation upstream, the effects of which are amplified during spring tides, and impoundment at low tide. Vegetation around the perimeter of the wetland, which is predominantly salt marsh, appears to have shifted, as indicated by the presence of freshwater scrub/shrub and Typha spp. in low-lying areas. Removing the restriction will reduce the impoundment of water, enhance wetland resiliency, and improve exchange of tidal water, freshwater, aquatic organisms, and sediments beneath the road, restoring natural function of the estuarine wetland.

2013-CWM - Witt Swamp Preserve - Norway, ME

The objective of this project is to preserve in perpetuity approximately 111 acres of aquatic resources and their associated upland buffers adjacent to existing preserves in Norway.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Western Foothills Land Trust will acquire the parcel containing forested and scrub-shrub wetlands, stream habitat, and forested upland buffer, adjacent to their existing 161-acre Shepard's Farm and Witt Swamp Preserves in Norway. The wetlands on the property connect to Pennesseewassee Lake and preservation will provide water quality benefits to the lake. The acquisition will protect an additional 4,301 feet of Witt Brook and will double the wetland acres protected in the Witt Swamp Preserve.

2013-SM – Perley Pond/Northwest River – Sebago, ME

The objective of this project is to preserve in perpetuity approximately 150 acres of aquatic resources and their associated upland buffers on the shoreline of Perley Pond and the Northwest River.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Loon Echo Land Trust will acquire the parcel which includes 92.5 acres of freshwater forested, scrub-shrub, emergent and lacustrine wetlands, as well as examples of a

leatherleaf boggy fen and unpatterned fen ecosystem (85 acres) and a pitch pine bog natural community (27 acres).

2013-SM – Salmon Falls – Tuckahoe – Berwick, ME

The objective of this project is to preserve in perpetuity approximately 29 acres of aquatic resources and their associated upland buffers adjacent to the Great Works Regional Land Trust (GWRLT) Salmon Falls River Conservation Area in Berwick.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

GWRLT will acquire the parcel which will preserve riparian land and wetlands, protect drinking water, and provide a corridor for wildlife. The property has 2,460 feet of frontage on Keay Brook, and abuts the Salmon Falls River. The Salmon Falls River provides drinking water through public wells to approximately 28,000 people including the towns of Berwick and Somersworth both of which withdraw their municipal drinking water just downstream from the project site.

2014 Projects

2014-AHL – Salmon Brook – Washburn, ME – this project was withdrawn by the project proponent following approval. No funds were released.

2014-CIM – Long Cove Wetlands – St. George, ME

The objective of this project is to preserve in perpetuity approximately 41.9 acres of aquatic resources and their associated upland buffers along Long Cove in St. George.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Maine Coast Heritage Trust will acquire the parcel which includes approximately 6.3 acres of forested wetland, 3.5 acres of scrub-shrub wetland, 6.1 acres of estuarine intertidal wetland, a small freshwater pond, 5 vernal pools, and associated upland buffer. The property frontage is also mapped as Significant Tidal Waterfowl and Wadingbird Habitat.

2014-CIM – Mill Street Dam – Lisbon, ME – this project was withdrawn by the project proponent following approval. No funds were released.

2014-CIM – Morse Pond IV – Georgetown, ME

The objective of this project is to preserve in perpetuity approximately 62 acres of aquatic resources and their associated upland buffers around Morse Pond.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

This will be the fourth project in the Kennebec Estuary Land Trust (KELT) Morse Pond focus area funded by MNRCP. This project protects approximately 600 feet of pond shore front or one third of the total shore frontage of Morse Pond. Previous Morse Pond projects protected the east and north sides of the pond while this proposed project would protect the south and almost half of the west side of the pond. The parcel includes approximately 13.4 acres of forested wetland, 0.8 acres of emergent wetland, 4.5 acres of scrub-shrub wetland, 2.5 acres of freshwater pond, and associated upland buffer. The parcel also includes mapped Inland Waterfowl and Wading Bird Habitat, streams, and vernal pools.

2014-CIM - Parker Head Road - Phippsburg, ME

The objective of this project is to replace an existing 36" diameter culvert whose size and elevation is causing the impoundment of water at low tide behind the culvert and scouring of the coastal estuary. Lowering and enlarging the culvert is intended to simulate the historic function of the coastal wetland, allowing the tidal estuary to ebb and flow more naturally and to drain at low tide.

The primary performance standards are reestablishment of tidal flow in and out of the culvert under the road and transition of vegetation from freshwater species to high and low salt marsh species. Additional performance standards include:

- 1. No invasive species as listed are present on the project site or, if found, have been removed.
- 2. There is no erosion of sediments into the pond, downstream channel or wetlands and erosion control measures at the site following Maine Erosion and Sediment Control Best Management Practices.
- 3. Erosion control materials have been removed (once site is stable).
- 4. Project partners observe and document that the structure is functioning as designed during all seasons of flows.

The Town of Phippsburg will install the new culvert at a more appropriate elevation to restore the wetland so that it more closely resembles its original, natural condition. Rather than the standing water that was present on the inlet side of the culvert between low and high tides, a more defined channel will develop similar to that on the outlet side. Wetland vegetation will be enhanced by the full tide cycle and allowed to develop in the newly restored habitat area. The new culvert will enable connections between aquatic habitats, allowing species to access the area for breeding, feeding, and shelter. The project will result in the restoration of approximately 1.4 acres of estuarine intertidal wetland.

2014-SM – Mill Lane Wetlands – York, ME

The objective of this project is to preserve in perpetuity approximately 24.5 acres of aquatic resources and their associated upland buffers in the Mt. Agamenticus region.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

York Land Trust will acquire the parcel which includes 6 vernal pools and approximately 16.3 acres of vernal pool critical terrestrial habitat, as well as an additional 0.23 acres of forested wetland and additional upland buffer.

2014-SM – Salmon Falls/Keay Brook – Berwick ME

The objective of this project is to preserve in perpetuity approximately 86 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Great Works Regional Land Trust will acquire the parcel which includes 4.2 acres of emergent wetland, 13.9 acres of forested wetland, 6.3 acres of scrub-shrub wetland, as well as vernal pools, streams, and associated upland buffer. The property is adjacent to the Great Works Regional Land Trust's Salmon Falls River Conservation Area (143 acres) and was slated for development for house lots prior to its acquisition.

2014-SM – Walnut Hill Blandings Turtle Incubator – Alfred, ME

The objective of this project is to preserve in perpetuity approximately 25 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Three Rivers Land Trust will acquire the parcel which includes vernal pools and associated critical terrestrial habitat, as well as forested and scrub-shrub wetland and associated upland buffer. The property is wedged between conservation land and a 30-lot subdivision, where two houses have been built. The project site is within the Walnut Hill Focus Area of Statewide Significance in Alfred and was supported by the Maine Department of Inland Fisheries and Wildlife.

2015 Projects

2015-CIM – Basin Preserve Restoration – Phippsburg, ME

The objective of this project is restoration of an abandoned gravel pit excavated below groundwater and enhancement of the aquatic resources, resulting in approximately 1 acre of restored wetland.

The performance standards are:

- 1. All slopes, soils, substrates, and constructed features within and adjacent to the restoration/enhancement site(s) are stable.
- 2. Site will have documented use by wildlife species present for comparison of pre-and post-restoration conditions.
- 3. Invasive species are not present and the following plants are eliminated from the site:
 - a. Multiflora rose (Rosa multiflora)
 - b. Japanese knotweed (Fallopia japonica)
- 4. The proposed vegetation diversity and/or density goals for woody plants from the plan are met. Unless otherwise specified in the restoration/enhancement plans, this should be at least 500 trees and shrubs per acre, of which at least 350 per acre are trees for proposed forested cover types, that are healthy and vigorous and are at least 18" tall in 75% of each planned woody zone AND at least the following number of non-exotic species including planted and volunteer species. Volunteer species should support functions consistent with the design goals. To count a species, it should be well represented on the site (e.g., at least 50 individuals of that species per acre).

# species planted minimum	# species required (volunteer and planted)
2	2
3	3
4	3
7	4
6	4
7	5
8	5
9 or more	6

Vegetative zones consist of areas proposed for various types of wetlands (shrub swamp, forested swamp, etc.). The performance standards for density can be assessed using either total inventory or quadrat sampling methods, depending upon the size and complexity of the site.

- 5. The restoration/enhancement site shall have at least 95% areal cover, excluding planned open water areas by non-invasive species.
- 6. Planned scrub-shrub and forested cover types shall have at least 60% cover by non-invasive hydrophytes, including at least 15% cover by woody species.

For the purpose of this performance standard, invasive species of hydrophytes are:

Common Reed -- Phragmites australis;

Purple Loosestrife -- Lythrum salicaria;

Reed Canary Grass -- Phalaris arundinacea; and

Glossy Buckthorn – Frangula alnus (= Rhamnus frangula).

7. Until canopy coverage exceeds 30%, the average height of all woody stems of tree species including volunteers in each site, must increase by not less than an average of 10% per year by the fifth (Year 5 following construction) and tenth (Year 10 following construction) monitoring years.

- 8. There is evidence of expected natural colonization as documented by the presence of at least 100 volunteer native trees and/or shrubs at least 3 feet in height per acre.
- 9. The fifth year (Year 5) monitoring report shall contain documentation that all vegetation within the buffer areas is healthy and thriving and the average tree height of all established and surviving trees is at least 5 feet in height.

The Nature Conservancy will perform the restoration work on land already owned by TNC. The abandoned pit covers approximately 7-acres and consists of barren soil around old roads, four ponds totaling approximately 1.1 acres, primarily old field vegetation, and stockpiled overburden of sand and gravel with limited organic matter. The pit is also being accessed by unauthorized motorized vehicles, resulting in soil erosion and damage to the limited natural vegetation. The project involves redistributing the stockpiled overburden to better match the existing topography, stabilizing an eroding outflow from the largest pond, creation of pit and mound features, and revegetating the site with both upland and wetland vegetation to improve both habitat and water quality within the existing ponds. Boulders will also be placed to block access to motorized vehicles and prevent damage to the restored areas.

2015-CIM – Boothbay Source Water Prot – Boothbay, ME

The objective of this project is to preserve in perpetuity approximately 68 acres of aquatic resources and their associated upland buffers and to restore about 600 linear feet of perennial stream that had been impacted by logging roads. Runoff and erosion problems beyond the stream corridor will also be addressed using best management practices.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP for the acquisition. For the stream restoration, the performance standards are:

- 1. All slopes, soils, substrates, and constructed features within and adjacent to the restoration/enhancement site(s) are stable.
- 2. Site will have documented use by populations of aquatic macroinvertebrates, such as caddisflies, (Limnephilidae and Lepidostomatidae), stoneflies (Leuctridae).
- 3. Invasive species are not present or the following plants are being controlled at the site:
 - Japanese knotweed (Fallopia japonica)
 - Multiflora rose (*Rosa multiflora*)

For this standard, small patches must be eliminated during the entire monitoring period to prevent invasive species from becoming established.

Boothbay Regional Water District (BRWD) will acquire the parcel which includes approximately 10.8 acres of forested wetland and associated upland buffer. BRWD will own the land, with a conservation easement held by the Boothbay Region Land Trust. The property will be managed for source water protection, wildlife habitat, scientific and educational purposes, and limited public recreation.

2015-CIM – Caribou Bog-Birmingham – Old Town, ME

The objective of this project is to preserve in perpetuity approximately 189 acres of aquatic resources and their associated upland buffers in the Caribou Bog Wetland Complex, a state-significant wetland containing rare plants and dragon flies and an exemplary natural community.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Orono Land Trust will acquire the property which includes approximately 43 acres of freshwater forested wetland, 20.7 acres of scrub-shrub wetland, 0.4 acres of emergent wetland, as well as vernal pools and associated upland buffer. The property is located within the Caribou Bog Focus Area of Statewide Ecological Significance and within the Caribou Bog-Penjajawoc Lands Project Focus Area, a regional conservation effort. It is adjacent to 3,355 acres of existing conservation land, including MDIFW's Caribou Bog State Wildlife Management Area (WMA).

2015-CIM – Little River Restoration – Georgetown, ME

The objective of this project was to restore tidal flow to the upper Little River salt marsh by removing a derelict causeway across the stream channel which was restricting stream and tidal flow.

The performance standards are:

- 1. No significant differences in temperature will be noted between gauges set up upstream and downstream from the Project Site.
- 2. Stage measured by gauges set up upstream and downstream from the Project Site will show no evidence of water being trapped and held at a higher elevation at the upstream site.
 - a. The difference between the upstream daily minimum and maximum values is roughly equivalent to the difference between the downstream daily minimum and maximum values.
 - b. The daily maximum tidal height will be similar both upstream and downstream from the Project Site through both spring and neap tidal cycles.
 - c. The daily minimum tidal height will be at a similar elevation both upstream and downstream from the Project Site.
- 3. All slopes, soils, substrates, and constructed features within and adjacent to the restoration site are stable.
- 4. No viable *P. australis* plants are present within the Project Area.
- 5. Spartina community plants have revegetated the soil surface at the causeway area where the culvert was removed. The salt marsh restoration site shall have at least 95% areal cover, excluding the tidal channel area.
- 6. The southern boundary of *Typha x glauca* within the Project Area will move northward.
- 7. At the two upstream vegetation transects (Transects 1 and 2) vegetation transition will occur during the 5 year monitoring period that will include:

- a. An increase in the percentage of halophyte and brackish vegetation compared to the pre-project composition documented in Appendix B.
- b. A decrease in the percentage of area that is currently dead vegetation or exposed mud compared to the pre-project composition documented in Appendix B.

Kennebec Estuary Land Trust will remove the causeway and re-connect approximately 2,000 feet of tidal channel and restore hydrologic function to approximately 13.2 acres of estuarine wetland. The introduction of greater tidal flow to this area will increase salinity, reduce or eliminate the invasive common reed *Phragmites australis*, and restore natural ecological function of the upper salt marsh.

2015-CIM – Outlet Stream/Masse Dam – E. Vassalboro, ME

The objective of this project is to remove a relic dam and restore a 6-acre impoundment to riverine conditions.

The performance standards are:

- 1. All slopes, soils, substrates, and constructed features within and adjacent to the restoration/enhancement site(s) are stable.
- 2. Site will have documented use by breeding populations of target species: river herring
- 3. The following invasive plant species will have been controlled at the site. Small patches have been eliminated during the entire monitoring period. Large patches have been aggressively treated, and the treatment documented:
 - a. Multiflora Rose (Rosa multiflora)
 - b. Shrubby Honeysuckle (*Lonicera* species)
 - c. Purple Loosestrife (*Lythrum salicaria*)
- 4. There is evidence of expected natural colonization as documented by the presence of at least 100 volunteer native trees and/or shrubs at least 3 feet in height per acre
- 5. The fifth year (Year 5) monitoring report shall contain documentation that all vegetation within the buffer areas is healthy and thriving and the average tree height of all established and surviving trees is at least 5 feet in height.

Sebasticook Regional Land Trust has joined with a broad coalition of partners including Maine Dept. of Marine Resources, Maine Rivers, US Fish & Wildlife Service, USDA-Natural Resources Conservation Service and China Region Lakes Alliance to restore riverine function and fisheries in the Outlet Stream ecosystem. The coalition will purchase and remove the Masse Dam. The ecological benefits of restoring this reach to fluvial habitat include lowering water temperatures, increased dissolved oxygen concentrations, restored sediment and woody debris transport, and enhanced fish and wildlife habitat. Restored riverine conditions will increase riffle and run habitats, which can support highly productive benthic communities that provide forage for fish and are an integral component of the riverine food web, and spawning and nursery opportunities for native riffle/run obligate species such as Atlantic salmon, blueback herring, sea lamprey, brook trout and fallfish.

2015-SM – Crooked River-Green – Otisfield, ME – this project was withdrawn by the project proponent following approval. No funds were released.

2015-SM – Tatnic Turtle Crossing – Wells, ME

The objective of this project is to preserve in perpetuity approximately 17 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Great Works Regional Land Trust will acquire the property which includes approximately 7.5 acres of forested wetland, vernal pools and associated critical terrestrial habitat, and upland buffer.

2015-SM - Walnut Hill/Sousa Restoration - Alfred, ME

The objective of this project was to perform a wetland and stream restoration on a parcel acquired by Three Rivers Land Trust with MNRCP funds in 2014.

The performance standards are:

- 1. The newly created banks of the stream channel will be stabilized by native vegetation and/or native soil materials similar to adjacent undisturbed banks by the end of the monitoring period.
- 2. The slopes surrounding the wetland restoration area 1b will be stable and vegetated in a manner similar to surrounding undisturbed areas.
- 3. In Restoration Area 1b, the upper pool will be saturated into late spring in most years. The lower floodplain pool will be saturated similar to the adjacent wetland and stream areas. In Restoration Area 2, the created depressions will be saturated similar to the adjacent wetland and stream areas.
- 4. The restoration areas will contain well-established native plant species by the end of the monitoring period.
- 5. Intermittent flow will occur in the restored stream channel during years of average or greater than average precipitation.
- 6. Invasive species shall not make up more than 1% of total areal plant coverage after discovery and subsequent removal.
- 7. During each monitoring event, the qualified monitor will document the condition of each restoration area and identify any necessary remedial actions. Any areas requiring stabilization will be identified. Observations of the saturation and health of the wetlands/pools should be made and some limited alteration may be necessary to fully establish the desired condition.

Prior to Three Rivers Land Trust's purchase of the land, an access road and culvert were installed to reach the parcel interior. The culvert was not properly installed and was impacting stream flow and riparian wetlands had been filled. Restoration work will focus on removal of the culvert and surrounding fill, and stabilization and revegetation of this

corridor. Slash and debris, excess fill, and the remains of a silt fence will be removed. A breach at the base of the north ditch will be sealed and the basin regraded to avoid erosion into the stream. Two small wetland basins will be dug with the intent to form vernal pools over time. A new planked bridge will be installed across the stream away from the wetland restoration area, primarily for pedestrian use, but large enough to accommodate a bush hog or small tractor for annual maintenance of habitat sites, if necessary. In order to discourage motorized use of the bridge, an existing gate and boulders already on the property will be moved to block the bridge and parts of the stream that could be passable by ATV. The restoration will result in approximately .14 acres of restored and enhanced wetland and stream resources.

2016 Projects

2016-CIM – Meadow Brook Wetlands – St. George, ME

The objective of this project is to preserve in perpetuity approximately 22 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Maine Coast Heritage Trust will acquire the property which includes approximately 6.5 acres of estuarine intertidal wetland, 6.5 acres of palustrine forested wetland, and associated upland buffer.

2016-CIM – Muddy & Cathance River Conservation Corridor/Tardiff – Topsham, ME

The objective of this project is to preserve in perpetuity approximately 123 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Brunswick-Topsham Land Trust will acquire the property which includes approximately 19.5 acres of palustrine forested wetland, 5.9 acres of palustrine scrub-shrub wetland, 7 vernal pools and associated critical terrestrial habitat, and associated upland buffer.

2016-CIM – Outlet Stream/Lombard Dam – Vassalboro, ME

The objective of this project is to remove a non-generating relic dam and restore an approximately 5-acre impoundment to riverine and palustrine conditions.

The performance standards are:

1. All slopes, soils, substrates, and constructed features within and adjacent to the restoration/enhancement site(s) are stable.

- 2. Site will have documented use by breeding populations of target species: river herring. Fish passage is planned for two downstream dams either in summer of 2018 (concurrent with this dam removal), or in summer of 2019. Once those downstream projects are complete, river herring will be able to reach the project area and their presence will be documented.
- 3. The following identified invasive plant species will have been controlled at the site. Small patches have been eliminated during the entire monitoring period. Large patches have been aggressively treated, and the treatment documented. Other species documented during annual surveys will have been removed or controlled. No monotypic stands greater than 100 square feet will be present. Less than 5% total cover of the project area will consist of invasive plant species.
 - a. Box Elder (Acer negundo)
 - b. Multiflora Rose (*Rosa multiflora*)
 - c. Purple Loosestrife (Lythrum salicaria)
 - d. Japanese Knotweed
 - e. Non-native Honeysuckle
- 4. There is evidence of expected natural colonization as documented by the presence of at least 100 volunteer native trees and/or shrubs at least 3 feet in height per acre
- 5. The fifth year (Year 5) monitoring report shall contain documentation that at least 95% of the vegetation within the buffer areas is native, healthy and thriving. At least 30% cover will be native, woody vegetation in the wetland tree/shrub planting areas, and the average tree height of all established and surviving trees is at least 5 feet in height.

The project is a collaborative effort of Sebasticook Regional Land Trust, the private dam owner, Maine Rivers, Maine Dept. of Marine Resources, Natural Resources Conservation Service and China Region Lakes Alliance. The property owner has sold the rights to remove the dam and entered into a long-term management agreement with project partners to assure the long-term preservation of the restored stream.

2016-CIM - Sherman Marsh/Louderback - Edgecomb, ME

The objective of this project is to preserve in perpetuity approximately 160 acres of aquatic resources and their associated upland buffers located between the Lower Sheepscot River and Salt Bay Focus Areas of Statewide Ecological Significance.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Damariscotta River Association will acquire the property which includes approximately 18 acres of palustrine emergent wetland, 46.9 acres of palustrine forested wetland, 23.5 acres of palustrine scrub-shrub wetland, and associated upland buffer. The property also contains mapped Inland Waterfowl and Wading Bird Habitat.

2016-CIM – Surry Forest – Surry, ME

The objective of this project is to preserve in perpetuity approximately 2,100 acres of aquatic resources and their associated upland buffers. The project also includes wetland restoration by removal of a poorly designed logging road crossing.

The performance standards for the acquisition are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP. The performance standards for the wetland restoration are that all – or nearly all – material used to create the road crossing in 2015 will be removed and regular hydrologic function of the palustrine, forested wetland will be restored. All material removed will be stabilized to avoid erosion. The site will be completely stable with no impediment to the movement of water across the area of the soil removal. Additional performances standards include:

- 1. Road material removed and no remaining impediment to hydrologic connectivity from one side of the road to the other.
- 2. No evidence of erosion from initial work or from weather events during the monitoring period.
- 3. At least 90% coverage of exposed soils by native vegetation after five years.
- 4. Less than 5% cover of invasive vegetation with no monotypic stands greater than 100 square feet.

Blue Hill Heritage Trust will acquire the property which includes approximately 738 acres of palustrine forested wetland, 36 acres of palustrine emergent wetland, 71.8 acres of palustrine scrub-shrub wetland, 1.6 acres of open water, 8 vernal pools and associated critical terrestrial habitat. The property also includes mapped Inland Waterfowl and Wading Bird Habitat. The project will also result in the restoration and enhancement of approximately 9 acres of forested wetland.

2016-CWM – Hunter Cove/Lewin – Rangeley, ME

The objective of this project is to preserve in perpetuity approximately 70 acres of aquatic resources and their associated upland buffers with approximately 1,200 feet of shore frontage on the Hunter Cove portion of Rangeley Lake.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Rangeley Lakes Heritage Trust will acquire the property which includes approximately 20.4 acres of palustrine forested wetland and associated upland buffer.

2016-DM – Beaverdam Stream Fish Access Restoration – Wesley, ME

The objective of this project is to remove a road crossing that was preventing fish passage and restore a stream channel to its natural functioning. The project also includes preservation in perpetuity of the riparian buffer surrounding the restoration location.

The performance standards are:

- 1. Erosion is controlled at the removal site and is not worsening downstream of the construction site.
- 2. Created log jams are stable and influencing positive changes to stream morphology within the project reach.
- 3. All slopes, soils, substrates, and constructed features within and adjacent to the restoration site are stable.
- 4. Site will have documented habitat improvements (for breeding, connectivity) for populations of target species: Atlantic salmon, Eastern brook trout, American eel, sea lamprey, alewife, blueback herring.
- 5. Site will have documented use by target macroinvertebrate species: EPT taxa (Mayflies, stoneflies, caddisflies)
- 6. Invasive species are not present or, if identified, are being controlled at the site.

Downeast Salmon Federation will acquire the property and remove the road crossing to improve habitat for Atlantic salmon and other diadromous fish species. Beaverdam Stream is a habitat-rich stream that, if fully re-connected to the Gulf of Maine will help sustain critical bird, fish, and wildlife habitat. It is a high value stream that contributes to the health of the marine environment and to the coastal fisheries that support the communities of Washington County.

2016-DM – Old Pond-Demska – Hancock, ME

The objective of this project is to preserve in perpetuity approximately 43 acres of aquatic resources and their associated upland buffers. The project also includes replacing an undersized culvert along an access road that was restricting stream flow and replacing it with an appropriate structure.

The performance standards for the acquisition are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP. The performance standards for the culvert replacement are still in progress pending completion of the work plan.

Maine Coast Heritage Trust will acquire the property which includes approximately 19 acres of estuarine intertidal wetland, 3.2 acres of palustrine forested wetland and associated upland buffer. The culvert removal will result in approximately 0.02 acres of wetland enhancement.

2016-SM – Mt Agamenticus Rd Habitat Connecticut – South Berwick, ME – this project was withdrawn by the project proponent following approval. No funds were released.

2016-SM - Suckfish Brook II/McDermott - Falmouth, ME

The objective of this project is to preserve in perpetuity approximately 46 acres of aquatic resources and their associated upland buffers. The project also includes restoration of approximately 3,800 square feet of wetland through removal of an unused portion of a gravel road.

The performance standards for the acquisition are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP. The performance standards for the wetland restoration are:

- 1. All slopes, soils, substrates, and constructed features within and adjacent to the restoration/enhancement site(s) are stable.
- 2. The following invasive species are present and are being controlled at the site (in order of frequency):
 - Smooth (Common) Buckthorn (Rhamnus cathartica)
 - Japanese Honeysuckle (Lonicera japonica)
 - Japanese Barberry (Berberis thunbergil)
 - Multi-Flora Rose (Rosa Multiflora)
 - Knotweed sp. (Fallopia sp.)
 - Glossy Buckthorn (Frangula alnus)
 - G. Oriental Bittersweet (Celastrus orbiculatus)
 - a. For this standard, small patches will be eliminated during the entire monitoring period. Large patches must be aggressively treated and the treatment documented.
- 3. The proposed vegetation diversity and/or density goals for woody plants from the plan are met. The target goals for this Plan are as follows:

Wetland Restoration Area:

- a. Woody Plant Species Diversity: Eight species of trees and shrubs are being planted in the wetland restoration area. Some species not already found onsite are being included in this mix, so species diversity at planting is greater than the target. The target diversity for success is approximately 50% of the number of species planted, should be represented by at least one living plant after five years. Thus, the goal of this plan is survivorship of at least five species of native woody plants within the restored wetland after five growing seasons. Achievement of this goal may include volunteer species as well, if they are at least 18 inches tall.
- b. Woody Plant Species Number: Approximately 90 plants are being installed in the wetland restoration area in 2017. Additionally, a number of willow and dogwood whips will be installed during the planting effort. The whips will be counted towards the density/survivorship number goal, and will be credited toward achieving the diversity goal. The goal of this Restoration Work Plan is to reach at least 85% success of the number of plants installed at the time of restoration, at the end of five years. Thus, success will be noted as 90 X 0.85 = 77 native woody trees and/or shrubs within the wetland restoration area. This will include volunteer native wetland woody plants, over 18 inches tall at the time of monitoring. In this context, "wetland" will include plants that are rated as FAC or wetter according to the USDA's most current wetland indicator status list.

Stream Riparian Enhancement Area:

Approximately 20 native, woody plants representing five species are being installed along the stream. These will be marked with flagging to denote planted species. Success in this area will be achieved by having at least 14 (85%) of these plants, of at least three species (50%) survive after 5 years.

4. In addition, the restored wetland area shall have at least 60% cover by non-invasive hydrophytes, including at least 15% cover by woody species.

The Town of Falmouth will acquire the property which includes approximately 15 acres of palustrine forested wetland, 1.4 acres of palustrine scrub-shrub wetland, 0.9 acres of emergent wetland, 1 vernal pool, and associated upland buffer. The road removal will result in approximately 0.14 acres of scrub-shrub wetland restoration.

2017 Projects

2017-CIM – Penjajawoc Marsh-Walsh – Bangor, ME

The objective of this project is to preserve in perpetuity approximately 84 acres of aquatic resources and their associated upland buffers along Penjajawoc Marsh.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Bangor Land Trust will acquire the property which includes approximately 30.8 acres of palustrine emergent wetland, 3.5 acres of palustrine forested wetland, 1.7 acres of palustrine scrub-shrub wetland, and associated upland buffer. The property also contains mapped Inland Waterfowl and Wading Bird Habitat.

2017-CIM – Smelt Cove Wetlands – Vinalhaven, ME

The objective of this project is to preserve in perpetuity approximately 48 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Maine Coast Heritage Trust will acquire the property which includes approximately 23.4 acres of marine/estuarine intertidal wetland, 1.3 acres of palustrine forested wetland, 1.2 acres of palustrine scrub-shrub wetland, and associated upland buffer. The property also contains mapped Tidal Waterfowl and Wading Bird Habitat.

2017-CIM – Surry Forest Crossings – Surry, ME

The objective of this project is to enhance the hydrologic function of two wetland systems by improving two road crossings through wetlands.

The performance standards for each crossing location are:

- 1. No remaining impediment to hydrologic connectivity from one side of the road to the other.
- 2. No evidence of erosion from initial work or from weather events during the monitoring period.
- 3. At least 50% coverage of exposed soils by native vegetation by the end of the second growing season.
- 4. At least 90% coverage of exposed soils by native vegetation after five years.
- 5. No invasive species.

Blue Hill Heritage Trust (BHHT) acquired the property in 2016 with MNRCP funds. BHHT will improve the two crossings by installing bridge panel crossings to replace two undersized culverts. The proposed project will result in the enhancement of 7.3 acres of emergent wetland, 2.7 acres of forested wetland, and 2.7 acres of scrub-shrub wetland.

2017-CWM - Magalloway River-Howe/McDevitt Woods - Lincoln, ME

The objective of this project is to preserve in perpetuity approximately 229 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Rangeley Lakes Heritage Trust will acquire the property which includes approximately 115.7 acres of palustrine forested wetland, 18.9 acres of palustrine scrub-shrub wetland, 2.4 acres of palustrine emergent wetland, 1.4 acres of open water, and associated upland buffer. The property also contains approximately 2,035 feet of frontage on Magalloway River, a Significant Vernal Pool, and mapped Deer Wintering Area habitat.

2017-DM – Bells Brook – Columbia & Addison, ME

The objective of this project is to preserve in perpetuity approximately 22 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Downeast Coastal Conservancy will acquire the property which includes approximately 8.7 acres of palustrine scrub-shrub wetland, 7.9 acres of palustrine emergent wetland, frontage on Bell's Brook, and associated upland buffer. The property is upstream from the Addison tide gates which have prevented salt water from flowing up the West Branch of the Pleasant River and Bell's Brook since the 1940's, converting this intertidal salt marsh to freshwater wetland or upland vegetation. Conservation of the Bell's Brook parcel is strategically important to the overall project to restore tidal marshes to the West Branch of the Pleasant River by removal of the tide gates.

2017-DM – Smelt Brook Intertidal Restoration – Sullivan, ME

The objective of this project is to preserve in perpetuity approximately 6.7 acres of aquatic resources and their associated upland buffers. The project also includes removal of a granite dam located within the intertidal zone in Smelt Cove that blocked migratory smelt and brook trout access to Smelt Brook.

The performance standards for the acquisition are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP. The performance standards for the dam removal are:

- 1. All slopes, soils, substrates, and constructed features within and adjacent to the restoration/enhancement site(s) are stable.
- 2. Site will have documented use by target wildlife species: Rainbow Smelt, American eel, brook trout, and tomcod.
- 3. *Spartina* spp. will colonize transect 3 in distinct low and high marsh vegetation zones and will be documented from photo station 3. The site will be covered with a minimum of 85% native salt marsh vegetation.
- 4. Monitoring for the following plants will be conducted yearly and, if found, controlled in accordance with the best management practices detailed on the Maine Natural Areas Program webpage

https://www.maine.gov/dacf/mnap/features/invasive_plants/invsheets.htm

- a. Common reed (*Phragmites australis*)
- b. Purple loosestrife (*Lythrum salicaria*)
- c. Smooth and Common buckthorns (Frangula alnus, Rhamnus cathartica)
- d. Russian and Autumn olives (*Elaeagnus angustifolia* and *E. umbellata*)
- e. Multiflora rose (*Rosa multiflora*)
- f. Reed canary-grass (*Phalaris arundinacea*)
- g. Japanese knotweed (Fallopia japonica)

Downeast Salmon Federation will acquire the parcel and remove the dam. Smelt Brook historically had a robust run of smelt, but after the construction of the dam, roughly 100 years ago, the run was extirpated. Removal of the dam will help the stream return to its natural function, increasing its bio-productivity, biodiversity, and ecological robustness. Removal will also allow fish to pass upstream and return tidal flow to the impounded area that was behind the dam, allowing it to revert to salt marsh. As sea levels rise, the salt marsh will be able to migrate further inland on the property. Freshwater wetlands will form above the salt water.

2017-SM - Garey Mill Road Wetlands - York, ME

The objective of this project is to preserve in perpetuity approximately 17 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

York Land Trust will acquire the property which includes approximately 0.45 acres of palustrine scrub-shrub wetland, 0.1 acres of open water, and associated upland buffer. The property also contains mapped Inland Waterfowl and Wading Bird Habitat and is adjacent to Bell Marsh Reservior, a public drinking water supply for residents of Kittery, Eliot and parts of York. It is adjacent to land to the south and east that was conserved by York Land Trust with funding from MNRCP in 2010 and land owned by the Maine Dept. of Inland Fisheries and Wildlife (MDIFW) to the north. It is within the Mt. Agamenticus Focus Area of Statewide Ecological Significance, MDIFW's Mt. Agamenticus Wildlife Management Area, and is part of a 6,300-acre unfragmented forest block.

2017-SM – Hansen Pond 2 – Acton, ME

The objective of this project is to preserve in perpetuity approximately 273 acres of aquatic resources and their associated upland buffers. The project also includes wetland enhancement through replacement of an undersized culvert with an improved crossing and replacing a damaged snowmobile bridge to keep snowmobiles out of a stream.

The performance standards for the acquisition are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP. The performance standards for the culvert replacement are still in progress pending completion of the work plan.

Three Rivers Land Trust will acquire the property which includes the approximately 25-acre Hansen Pond, as well as approximately 61.5 acres of forested wetland, 28.8 acres of scrub-shrub wetland, 20.1 acres of emergent wetland, 2 vernal pools, and associated upland. The property also contains mapped Inland Waterfowl and Wading Bird Habitat.

2017-SM – Walnut Hill IV-Roberts – Alfred, ME

The objective of this project is to preserve in perpetuity approximately 93 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Three Rivers Land Trust will acquire the property which includes approximately 9.2 acres of palustrine forested wetland, 2.8 acres of palustrine scrub-shrub wetland, 0.4 acres of emergent wetland, 0.1 acres of open water, and associated upland buffer. The property

also contains mapped Inland Waterfowl and Wading Bird Habitat and 9 vernal pools, 5 of which meet the criteria to be considered Significant Vernal Pools.

2018 Projects

2018-AHL – Aroostook NWR Restoration – Limestone, ME

The objective of this project is to restore and enhance approximately 10 acres of wetland through removal of an unused railroad bed on the site of the former Loring Air Force Base.

The performance standards are in progress pending completion of the work plan.

The Friends of Aroostook National Wildlife Refuge, working in conjunction with U.S. Fish and Wildlife Service, will remove the former railroad bed and restore the hydrologic connection between two disconnected wetland systems. The project is located within the Aroostook National Wildlife Refuge.

2018-CEL - Third Lake Stream - T43 MD BPP, ME

The objective of this project is to restore access to approximately 4,000' of blocked river channels and improve habitat complexity and natural stream processes to 2 miles of the Machias River, also referred to as Third Lake Stream in this area.

The performance standards are in progress pending completion of the work plan.

The project location is within the Machias River Conservation Corridor owned and managed by the State of Maine. It is within one of Project SHARE's original focus areas for habitat restoration. A preliminary assessment by Project SHARE identified 17 rock walls, some of which were several hundred feet long, that blocked 11 side channels and original meander bends of the Machias River. The project will breach the rock dams sufficiently to restore stream flow to the blocked channels. Working with MDMR and USFWS biologists, Project SHARE will also randomly place the boulders back in the stream channel enhancing habitat complexity for Atlantic salmon and Eastern brook trout.

2018-CIM – ShermanMarsh/Arter – Newcastle, ME

The objective of this project is to preserve in perpetuity approximately 91 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Damariscotta River Association will acquire the property which includes approximately 13.9 acres of palustrine forested wetland, 3.3 acres of emergent wetland, 0.6 acres of open water, and associated upland buffer.

2018-CIM – Taylor Bait Ponds Restoratoin – Orono, ME

The objective of this project is to restore approximately 27 acres of emergent and scrubshrub wetlands by converting old bait ponds into vegetated wetland.

The performance standards are in progress pending completion of the work plan.

Orono Land Trust will acquire the property and perform the restoration work. To perform the restoration, OLT will breach the berm around one of the bait ponds and allow an existing stream to follow its original course through the converted pond. OLT will also replace the existing outlet structure at the pond to reduce water levels in the pond and return them to the natural elevation of the former stream. The reduced water levels should allow for the restoration of emergent and scrub-shrub wetland. OLT will also replace an outlet structure at a second pond to reduce water levels in that pond to facilitate reestablishment of emergent and scrub-shrub vegetation.

2018-DM - Spring Point/Hog Bay - Franklin, ME

The objective of this project is to preserve in perpetuity approximately 17 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Frenchman Bay Conservancy will acquire the property which includes approximately 10.8 acres of estuarine wetland, 0.9 acres of palustrine forested wetland, and associated upland buffer. The property also contains mapped Tidal Waterfowl and Wading Bird Habitat.

2018-SM – Blandings Park Wildlife Sanctuary – Biddeford, ME

The objective of this project is to preserve in perpetuity approximately 34 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Blandings Park Wildlife Sanctuary will acquire the property which includes approximately 5 acres of palustrine forested wetland, several vernal pools and associated critical terrestrial habitat, and associated upland buffer.

2018-SM – Fixing Furbish Phase I – Wells, ME

The objective of this project is to perform salt marsh enhancement within the Rachel Carson National Wildlife Refuge. The project will result in the enhancement of approximately 27 acres of estuarine intertidal wetland.

The performance standards are in progress pending completion of the work plan.

Rachel Carson National Wildlife Refuge will use innovative techniques proven at other National Wildlife Refuges (NWR) including tideshed definition, runneling, partial embankment removal and ditch remediation. The project will work with natural processes to improve ecosystem functionality. USFWS believes that a "no action" scenario will lead to further subsidence, continued loss of high marsh conditions and depletion of productive saltmarsh sparrow nesting areas.

2018-SM – Josias Woods – York, ME

The objective of this project is to preserve in perpetuity approximately 91 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

York Land Trust will acquire the property which includes approximately 35.5 acres of palustrine forested wetland, .2 acres of palustrine scrub-shrub wetland, vernal pools and associated critical terrestrial habitat, and associated upland buffer.

2018-SM – Tiger Hill Forest – Sebago, ME

The objective of this project is to preserve in perpetuity approximately 1,417 acres of aquatic resources and their associated upland buffers.

The performance standards are submission of the recorded preservation documents and a management plan approved by the Corps and MDEP.

Loon Echo Land Trust will acquire the property which includes approximately 231.7 acres of palustrine forested wetland, 55.2 acres of palustrine scrub-shrub wetland, 24.3 acres of palustrine emergent wetland, 15.3 acres of open water, vernal pools and associated critical terrestrial habitat, streams, and associated upland buffer. The property contains mapped Inland Waterfowl and Wading Bird Habitat and is partially within the Perley Pond Peatland State Focus Area.

IN WITNESS WHEREOF, the undersigned have caused this amendment to be duly executed.

	Date:	
Jerry Reid, Commissioner		
Maine Department of Environmental Protection		
	Date:	
Robert J. DeSista		
Acting Chief, Regulatory Division		
New England District Corps of Engineers		