PUBLIC NOTICE

US Army Corps
of Engineers ®
New England District

696 Virginia Road
Concord, MA 01742-2751

Date: June 4, 2019
Comment Period Ends: July 5, 2019
File Number: NAE-2005-1143
In Reply Refer To: Taylor Bell
Or by e-mail: taylor.m.bell@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 New Hampshire's In Lieu Fee ("ILF") program, the New Hampshire Aquatic Resource Mitigation Fund ("ARM Fund"). The sponsor for the program is the New Hampshire Department of Environmental Services (NHDES). 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 NHDES. These projects were submitted in response to Requests for Proposals ("RFP") each year beginning in 2009 and were recommended by the program's Site Selection Committee and approved by the federal Interagency Review Team and the New Hampshire Wetlands Council.

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 Banking 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 NHDES. 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 July 5, 2019.** If you have any questions, please contact Taylor Bell at (978) 318-8952 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, National Marine Fisheries Service, and Natural Resources Conservation Service.

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 NOT AN AUTHORIZATION TO DO ANY WORK NOR DOES THE IN-LIEU FEE PROGRAM AMENDMENT, IF APPROVED, PREJUDGE FUTURE DEVELOPMENT PROJECTS WITHIN THE SERVICE AREA.

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ROBERT J. DESISTA
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 #3 to the
New Hampshire Aquatic Resource Mitigation Fund
In-Lieu Fee Program Instrument

WHEREAS, the approved New Hampshire Aquatic Resource Mitigation (hereinafter "ARM") Fund Final In-lieu Fee Program Instrument (hereinafter "Instrument"), was signed by the New Hampshire Department of Environmental Services (hereinafter "NHDES") Commissioner on May 17, 2012 and signed by the New England District Corps of Engineers (hereinafter "Corps"), District Engineer on May 8, 2012. Amendment #1 was signed by NHDES on May 31, 2017 and the Corps on June 8, 2017. Amendment #2 was signed by NHDES on December 20, 2018 and the Corps on October 30, 2018.

NOW THEREFORE, the following changes shall be made to the Instrument with deletions indicated with ~~strike-outs~~ and additions underlined:

Section IV "INTERAGENCY REVIEW TEAM"

The Interagency Review Team (IRT) is chaired by the District Engineer (DE) of the Corps. Membership will be determined by the Corps but will generally include ~~includes~~ representatives of the USEPA, USFWS, NRCS, and NMFS. The primary role of the IRT is to evaluate mitigation plans, assist the DE in the review of monitoring reports, recommend remedial measures, approve credit releases, and approve modifications to this instrument, including approving additions of projects proposed for funding by the ARM Fund. The IRT's role and responsibilities are more fully set forth in Sections 332.8 of the Federal Mitigation Rule. The IRT will work to reach consensus on its actions.

Section VI.A "NH IN-LIEU FEE PROGRAM DESCRIPTION AND OPERATION; Establishment and Operation; Administrative Procedures", paragraph 5

The Corps, in coordination with the IRT, reviews all projects proposed to be funded. Projects are advertised for public comment in a 30-day Public Notice. Proposals recommended for funding are forwarded to the IRT for final approval. The NH Wetlands Council, established by statute, provides state oversight of the ARM Fund program by assisting in rule-making and approves the annual report prepared by the Program Administrator to be provided to the Corps, other federal agencies, and the legislature. The NH Wetlands Council and the Corps review the recommendations provided by the SSC and IRT. The Corps and the NH Wetlands Council must issue approval of the projects to be funded. The Governor and Executive Council must issue final approval for funds to be disbursed and has approved all projects submitted for funding as of January, 2012. Projects approved for funding by the Corps following review by the SSC and the IRT are listed in Appendix I. 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.

Section VI.D.2 "Administrative costs"

NHDES shall be entitled to deduct ~~overhead costs in the amount of~~ 10% to 20% of all fees entering the ARM Fund, at the time the funds are received, to defray such ordinary expenses involved in administering the program tasks including~~as~~:

- ~~the~~ Administration of contractual agreements;
- Database management and data analysis; ~~record keeping~~
- Communications with partners;
- Financial management and accounting,
- Review, management, and presentation of project proposals, including site visits and coordination with those seeking proposal information;
- Costs associated with program outreach such as brochures, fact sheets, guidance manuals, and the accommodations needed to hold public information sessions;
- Staff training and equipment needed to perform program tasks may also qualify as administrative expenses, including, e.g., computer software and hardware, field equipment to perform site assessments and project inspections, and registration fees and associated travel costs for staff to attend workshops, conferences, or other training enabling them to perform program tasks. ~~costs associated with coordinating project proposals as well as the management and presentation of proposals and coordination with those seeking proposal information~~.

It should be noted that the tasks involved in administering the ARM Fund program are not adequately covered if the administrative fee is less than 10%. As the program has grown to include stream mitigation, the work has also grown to administer this additional component. In addition, more applicants are using the ARM Fund as their form of mitigation so the work has increased substantially. As a result, NHDES has found that a percentage between 10% and 20% is appropriate for funding the necessary staff to manage the program needs. In January of each year, NHDES will propose a percentage for the administrative fee to the Corps and will provide an explanation if it is an increase or decrease from the previous year. The Corps, in consultation with the IRT, will provide acceptance or rejection of the proposed percentage in writing. If it is a rejection, the rationale will be provided and the percentage will remain unchanged.

Appendix I "Approved ARM Fund Projects"

2009 PROJECTS

2009 MERRIMACK Clay Pond Headwaters - Hooksett, NH

The objective for this project is the preservation in perpetuity of 539 acres of wetlands, waters, and their associated upland buffers.

The performance standard is receipt by the Corps and NHDES of the recorded preservation document and approved stewardship plan.

The project consists of the preservation of five parcels which include 3.53 acres of emergent wetlands, 104.26 acres of forested and scrub-shrub wetlands, 18.01 acres of pond, and the remaining upland buffers. The Town of Hooksett owns the parcels and Bear-Paw Regional Greenways holds the conservation easement. The state holds an executory interest through its New Hampshire Land and Community Heritage Investment Authority (LCHIP) and NHDES

2009 MERRIMACK Oxbow – Canterbury, NH

The objective of this project is the preservation in perpetuity of 294 acres of wetland, waters, and their associated upland buffers.

The performance standard is receipt by the Corps and NHDES of the recorded preservation document.

This project consists of the preservation of a large parcel owned by the New Hampshire Fish and Game Department with a conservation easement to the Society for the Preservation of New Hampshire Forests, an executory interest and grant of public access to the LCHIP. The site protects the quality and availability of groundwater and surface water resources and provides a buffer for the Merrimack River which runs along 10,559 linear feet of the property. The site will also provide for outdoor recreation, education, protection of habitats, and scenic enjoyment.

2009 MERRIMACK Stewart – Francestown, NH

The objective of this project is the preservation in perpetuity of 55 acres of wetland, waters, and their associated upland buffers plus enhancement of the buffer with woody plantings.

The performance standard is receipt by the Corps and NHDES of the recorded preservation document and documentation of the plantings.

This parcel was sold in fee to the Town of Francestown with a conservation easement to the Francestown Land Trust and a primary executory interest to the Piscataquog Land Conservancy and the NHDES. The property includes 1,300 linear feet along Rand Brook, which is a designated cool water stream, and 4,000 linear feet along the South Branch of the Piscataquog River. It also includes rare habitats and vernal pools and serves as a Wildlife Connectivity Zone.

2010 PROJECTS

2010 LOWER CT Brown Farm – Swanzey, NH – this project was withdrawn by the project proponent following approval. No funds were released.

2010 LOWER CT Colony Project – Chesterfield, NH

The objective of this project is the preservation of 265.6 acres of wetlands and their associated buffers.

The performance standard is receipt by the Corps and NHDES of the recorded preservation document.

A conservation easement was granted by the owners, Trustees of the John J. Colony Jr 1996 Trust B, to the Monadnock Conservancy. Also included was the granting of a primary executory interest to the NHDES and LCHIP and a secondary executory interest to the Town of Chesterfield. The property includes 29 acres of forested and scrub-shrub wetlands and open water and approximately 8,000 linear feet of stream. There is also an active heron rookery and eight vernal pools. The property is adjacent to five other Monadnock Conservancy easements which results in a very large area of protected lands.

2010 PEMI-WINNI Coffin Brook Road – Alton, NH

The objective of this project is to reconnect, through the installation of culverts, the hydrology of a floodplain wetland that was fragmented 140 years ago by Coffin Brook Road.

The performance standard is the submission of monitoring reports documenting the installation of the culverts in compliance with permits from NHDES and the Corps. This includes proper installation and removal of erosion controls and the installation of willow “whips” along the road.

The project consists of the installation of seven 34” x 22: pre-cast elliptical concrete culverts under Coffin Brook Road. The culverts provide a means for wildlife to move from the wetlands on one side of the road to the other. This installation also alleviates flooding, with 2-3’ of water, of the road during rain events.

2010 PEMI-WINNI Strolling Woods – Franklin, NH

The objective of this project is removal of fill and preservation of 15 acres of wetlands and a stream and associated upland buffers.

The performance standard is the receipt by the Corps and NHDES of the recorded preservation document and verification through monitoring that 0.6 acres of fill is removed.

The project involves of the preservation through a conservation easement of 15 acres and the removal of a gravel drive and tourist cabins located in wetlands and the associated restoration of wetlands. It also includes the installation of a new gravel drive to access a community septic system which will reduce pollution in the nearby Webster Lake. The 15 acres adjoin a 226 acre parcel protected with NRCS Wetlands Reserve Program funds.

2010 PEMI-WINNI Tioga River – Belmont, NH

The objective for this project is to remove the invasive species, Glossy Buckthorn (*Rhamnus frangula*) from 26 acres of preserved wetlands and spread a wetland seed mix.

The performance standard is to monitor the success of the work, monitor the land annually in accordance with the *Standards and Practices* for stewardship of the Land Trust Alliance, and to install a sign with the NHDES logo and wording acknowledging the NH ARM Fund contribution.

The project involves the Town of Belmont performing manual removal of the invasive shrubs from the Tioga Wildlife Conservation Area using weed wrenches and hand pulling, followed by spreading of a wetland seed mix.

2010 SALMON-PISC Berry Brook – Dover, NH

The objective of this project is to restore (through daylighting) and reconnect 0.9 of an urban stream and wetland complex and to protect the aquatic resources and their upland buffers.

The performance standards are receipt by the Corps and NHDES of monitoring reports documenting that the materials covering the stream have been removed, the stream is stable, and the wetland and upland buffers are vegetated.

The project funded is part of a larger program by the University of New Hampshire to improve water quality in Berry Brook, a mile-long stream that discharges into the Cocheco River. The portion of the program that was approved for funding involved removing soil and a buried water treatment filter system to daylight the stream. Because of the slope of the site, it included construction meanders and step pools. It also involved removing fill to reestablish an emergent wetland at the headwaters of the stream.

2010 SALMON-PISC Evans Mountain – Strafford, NH

The objective of this project is the preservation in perpetuity of 1015 acres of wetlands and their associated buffers and the restoration of seven stream crossings impacted by

road building and other activities associated with heavy resource extraction by prior owners.

The performance standards are receipt by the Corps and NHDES of the recorded preservation document and documentation of the crossing restorations.

The project combines the fee ownership by the Town of Strafford and the Blue Hills Foundation with a conservation easement held by Bear-Paw Regional Greenways. It will be managed according to a Stewardship Plan required by the easement. More than 980 acres of the site are ranked as either "highest ranked in the state" or "highest ranked in the biological region" by the state's Wildlife Action Plan. This parcel is part of a 6,000-acre unfragmented forest that includes headwater streams of Bow Lake and the Nippo Brook/Isinglass River in the Salmon Falls - Piscataqua River watershed and the Big River in the Merrimack River watershed, as well as 67 acres of wetlands (almost evenly split between the two watersheds). This project includes a wetland restoration and aquatic resource improvement component, which proposes to restore 18 sites covering 7,000 square feet impacted by roads and other activities from resource extraction by prior owners. The property includes exemplary natural communities including vernal pools. The restoration of the crossings will enhance the ecological integrity of the property.

2010 SALMON-PISC Exeter River – Brentwood, NH

The objective of this project is to preserve 16.30 acres of riparian buffer and correct and prevent further water quality impairments to the Exeter River and to provide an upland buffer and habitat connectivity along the river.

The performance standards are receipt by the Corps and NHDES of the recorded preservation document and receipt of monitoring reports documenting the effectiveness of the work.

A conservation easement will be placed on the property to be held by the Rockingham Country Conservation District with an executory easement to the Town of Brentwood. The property has 5,600 linear feet of frontage on the Exeter River. Rowell Road runs near the Exeter River and runoff has caused stream bank damage and erosion. There is concentrated stormwater runoff from both ends of the roads. There is also a loss of riparian vegetation between the road and the river. The project involves supplemental buffer plantings and grassed filter strip. There will also be some engineered stabilization to repair the especially damaged banks.

2010 SALMON-PISC Odiorne – Rye, NH

The objective of this project is to restore two rare aquatic resource communities in a coastal salt pond system located at the Odiorne State Park.

The performance standard is the receipt of annual qualitative monitoring reports for ten years, submission of invoices to NHDES to document expenses, and the placement of a sign acknowledging the ARM Fund contribution to the project.

The Rockingham County Conservation District will restore 3.8 acres and rehabilitate 6.45 acres at the Odiorne State Park. The NH Natural Heritage Bureau defines the site as including "exemplary natural communities" of which the coastal salt pond marsh is the only one of its kind in the State. These significant habitats are home to two endangered, and two state listed threatened plant species. The project involves mechanical removal and mowing of *Phragmites australis* and subsequent herbicide application. This is to be followed up with hand removal and small power equipment use by volunteers. There is to be planting of native species in the upland buffer. The herbicide treatments are to be repeated as needed.

2010 SALMON-PISC River Road Marsh – New Castle, NH

The objectives of this project are to restore tidal marsh and reestablish the ecological integrity of a degraded ecosystem.

The performance standards is receipt of two years of monitoring reports and invoices documenting expenses.

The project, to be conducted by the New Castle Conservation Commission, will restore tidal flow to 0.5 acre of high marsh along the Piscataqua River. The habitat modifications will positively impact native fisheries and wildlife species and perform multiple functions as it will provide high wildlife habitat value, sediment retention, nutrient removal, educational and aesthetic potential. A colony of *Phragmites australis* will be eliminated with herbicides and the pipe connecting the wetland to tidal waters will be extended to reduce blockage with flotsam at high tide. Native *Spartina* sp. will be planted.

2010 SALMON-PISC Siemon Family Trust – Milton, NH

The objective for this project is the preservation in perpetuity of 366.1 acres of aquatic resources and associated upland buffers.

The performance standard is receipt by the Corps and NHDES of the recorded preservation document.

The New Hampshire Department of Fish and Game will acquire a conservation easement to the property. The acquisition will connect other conservation lands to 3,578 acres of the Moose Mountain Reservation and the Jones Brook Wildlife Management Area. The property includes 9,970 linear feet along Jones Brook as well as

wetlands and upland forest that buffer the aquatic resources. Low-impact non-commercial outdoor recreation by the public will be permitted.

2010 SALMON-PISC Sprucewood Forest – Durham, NH

The objective for this project is the preservation in perpetuity of 176 acres of aquatic resources and associated upland buffers.

The performance standard is receipt by the Corps and NHDES of the recorded preservation documents.

The project enables the Trust for Public land to acquire a fee interest in the property. The property includes 142 acres of uplands, 34 acres of wetlands, 0.9 acres of floodplain forest, containing diverse wildlife habitat, natural communities, and frontage 15,640 linear feet of on the Oyster River, a tidal tributary to the Great Bay and primary drinking water source for the Town of Durham and the University of New Hampshire. A significant portion of the property is contained within the Oyster River Conservation Focus Area identified in the NH Coastal Plan. This is a keystone property connecting over 2,200 acres of existing conservation land - including the isolated 36 acres Spruce Hole Conservation Area and other protected lands owned by UNH, Durham, and land trusts. The Trust will convey the land to the Town of Durham which will then give a perpetual easement to the Southeast Land Trust of New Hampshire and will set up a stewardship endowment for monitoring. Some minor stream restoration is included.

2010 UPPER CT Potter Farm – Northumberland, NH

The objective for this project is the preservation in perpetuity of 252 acres of aquatic resources and associated upland buffers and the enhancement of 33 acres of agricultural fields to floodplain forest.

The performance standard is receipt by the Corps and NHDES of the recorded preservation document.

The Nature Conservation will acquire the parcel in fee to restore and enhance native floodplain forest, provide long term protection for rare species and exemplary natural communities, allow for natural river processes, limit the establishment and spread of invasive plant species, provide for long-term protection of upland forests, and maintain hay-field management to support traditional agricultural use on part of the property. This property also has historical significance. Subsequent to purchase, 178.79 acres on the east side of Route 3 will be transferred to the State of New Hampshire Department of Resources and Economic Development to be added to the Cape Horn State Forest.

2010 SALMON-PISC Upper Oyster River – Barrington, NH – this project was withdrawn by the project proponent following approval. No funds were released.

2011 PROJECTS

2011 ANDROSCOGGIN Greenough Ponds – Wentworth Location, NH

The objective for this project is the preservation in perpetuity of 938 acres including over 56 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Trust for Public Lands will acquire the parcel and then transfer it to the New Hampshire Fish and Game Department. The parcel includes the entire shorefront of Greenough Plan and Little Greenough Plan, which are two of only three non-stocked ponds in New Hampshire with naturally-reproducing brook trout populations. It connects to the 13-Mile Woods Community Forest and the Umbagog National Wildlife Refuge. The parcel will be managed for fisheries and wildlife habitat protection, scientific study and public recreation. Several state threatened and endangered species occur on or near the parcel including the American marten, common loon, finescale dace, and osprey.

2011 PEMI-WINNI Snake River/Baird Property – New Hampton, NH

The objective for this project is the preservation in perpetuity of 8.1 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Town of New Hampton will purchase fee ownership of the parcel and convey a conservation easement to the Town of Meredith and an executory easement to the State of New Hampshire Department of Environmental Services. The property includes 2,841 linear feet of frontage on the Snake River which flows into Lake Waukewan, the largest drinking water supply for the Town of Meredith.

2012 PROJECTS

2012 LOWER CT Beaver Brook – Keene, NH

The objective of this project is the restoration of one acre of historically filled wetlands.

The performance standards are: documentation of removal of one acre of fill, verification of seeding with wetland seed mix, verification of incorporation of coarse woody material, and verification of invasives control.

The City of Keene will restore approximately one acre within the Beaver Brook watershed. The restoration advances the on-going effort to restore Beaver Brook, augment flood storage in this area of the City, and creates additional scientific and educational opportunities that complement on-going projects within the Watershed. The parcel is contiguous with Robin Hood Park, which is a 110-acre conservation parcel. Invasive species will be removed, mainly a large Japanese knotweed colony. Research of the parcel deed and two abutting parcels is also proposed to potentially protect the area in perpetuity.

2012 LOWER CT Hanchetts Brook Forest – Plainfield, NH

The objective for this project is the preservation in perpetuity of 101 acres including aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Upper Valley Land Trust will purchase a conservation easement to protect 1,750 linear feet of stream, 0.5 acres of wetland along Hanchetts Brook, and upland buffer for the aquatic resources. Preservation of this parcel along with an adjacent preservation area will benefit water quality in the area and may serve to benefit potential rare species. Hanchetts Brook flows into the Connecticut River and contributes to the protection of its waters.

2012 MERRIMACK Avery Brook – Francestown, NH

The objective for this project is the preservation in perpetuity of 182 acres including aquatic resources and associated upland buffers and the lowering of a perched culvert, installation of water bars, and enhancement of a riparian buffer.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan, documentation of riparian plantings, and documentation of the replacement of the 17" culvert with a 48" culvert.

The project involves the purchase of a conservation easement by the Francestown Land Trust to protect land which is the entire catchment of Avery Brook as it meanders through forestland and exemplary wetland communities to its confluence with the Piscataquog River. No-cut buffers around aquatic resources are included in the conservation easement. The Avery Brook catchment connects and enhances the ecological function of over 3,700 acres of biologically diverse protected land. The property includes the entire length of Avery Brook west, nearly all of Avery Brook East, and frontage along the South Branch of the Piscataquog River.

2012 MERRIMACK Crooked Run – Barnstead/Pittsfield/Strafford, NH

The objective for this project is the preservation in perpetuity of 600 acres of aquatic resources and associated upland buffers and restoration of stream crossings.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan and documentation of the removal of the bridge and fill and slope stabilization.

Bear-Paw will purchase a conservation easement. The parcel includes 85 acres of wetlands, 3 miles of perennial streams, most of the frontage on the 30 acre Adams Pond, and almost half of the frontage on Wild Goose Pond. The wetlands include 57 acres of marshland, 26 acres of other wetlands, 2 acres of peatland and the 30 acre Adams Pond. The unfragmented forest that includes Crooked Run is large – more than 2,000 acres in extent connecting a 6,000 acre block that includes the Evans Mountain property and a 16,000 acre block just to the north. Nine restoration sites that total 16,900 square feet were restored including removal of a bridge from a perennial stream, fill removal and slope stabilization adjacent to high value peatlands.

2012 MERRIMACK Hinman Pond I – Hooksett, NH

The objective for this project is the preservation in perpetuity of 460 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

Bear-Paw and NHFG will conserve high value wildlife habitat on Hinman Pond. The property will be purchased by Bear-Paw with a conservation easement held by NHFG. The parcel lies within a Wildlife Action Plan conservation focus area that is greater than 20,000 acres in size. The parcel is primarily hemlock-hardwood-pine forest and includes the largest 100 acres of Appalachian-oak-pine exemplary forest known in the state. Twenty seven wetlands on the property total 76 acres including the prime wetland, Hinman Pond and approximately 43 vernal pools. Three perennial streams provide almost 1 mile of riparian habitat which flow to Dubes Pond and one flows north to Head Pond and then the Merrimack River. The Hinman Pond property provides critical habitat for several rare or endangered species including Blandings and spotted turtles. The property abuts Bear Brook State Park and Manchester Water Works properties and lies within the Lake Massabesic watershed, Manchester's public drinking water supply.

2012 MERRIMACK Merrimack Riverfront – Hooksett, NH

The objective for this project is the preservation in perpetuity of 122 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Town of Hooksett will purchase the parcel to be protected by a conservation easement held by the Forest Society. The parcel includes 3,900 linear feet of frontage on the Merrimack River, 37 acres of wetlands within the 100-year floodplain of the Merrimack River, and 30.5 acres of one prime wetland. The entire parcel overlies a stratified drift aquifer and is within a source water protection area. The project has been identified by the Hooksett Open Space Plan as a high priority for protection. The project area contains Tier 1 and Tier 2 habitats as identified by the NH Fish & Game Wildlife Action Plan.

2012 MERRIMACK Pennichuck Brook – Merrimack, NH

The objective for this project is the preservation in perpetuity of 192 acres of aquatic resources and associated upland buffers and restoration of impacts from previous activities.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan and documentation that the restoration activities occurred.

The Forest Society will purchase a conservation easement on two parcels located north of Pennichuck Brook. The western parcel includes one mile of shoreline on Pennichuck Brook which leads to the Pennichuck water supply— the City of Nashua's drinking water supply. The parcel contains endangered plants and exemplary communities. The eastern parcel contains a 26 acre beaver pond used as a heron rookery. Restoration includes removing fill in a beaver pond, regrading ruts caused by ATV activity, unblocking an existing ditch to restore 3.35 acres of wetlands, and improving a small woods road crossing on the western parcel.

2012 MERRIMACK Plaistow Town Forest – Plaistow, NH

The objective for this project is the preservation in perpetuity of 350 acres including aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Town, with assistance from the Southeast Land Trust, will place conservation easements on lands acquired through tax default totaling 350 acres. There are 17 parcels known, or believed to be owned, by the town which have been managed as town forests for the forest resources. The town forests are mature forests dominated

by Appalachian Oak-pine and more than 1.2 miles of riparian corridor along Kelly Brook. There are at least 6 beaver impoundments that encompass more than 60 acres along inlet streams and main stem of Kelly Brook with numerous vernal pools and an active heron rookery.

2012 MERRIMACK Soucook River Headwaters – Canterbury, NH

The objective for this project is the preservation in perpetuity of 119 acres including aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Five Rivers Conservation Trust will purchase a conservation easement that protects forest and wetland in the headwaters of the Soucook River watershed. The property includes 16 acres of marsh and open water, 2,240 feet of streams, and 5 vernal pools with more than 12,630 feet of riparian shoreline. Otter Pond and New Pond are on the property and this area is a conservation priority in the Canterbury Master Plan. Water bars and erosion improvement measures will be constructed along the road to eliminate drainage into the pond, a portion of the road will be relocated to avoid sensitive shoreline plants, and roads will be closed to ATV and 4-wheelers.

2012 MIDDLE CT Ammonoosuc Floodplain Acquisition – Lisbon, NH

The objective for this project is the preservation in perpetuity of 275 acres including aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Ammonoosuc Conservation Trust will preserve the parcel. It includes almost a mile of riparian buffer on the Ammonoosuc River as well as a complex of wetland and agricultural fields surrounding Hanno Pond, a six acre oxbow pond. The parcel is within the highest yielding and deepest aquifer in the Ammonoosuc River Valley and most of it is in the river's floodplain. It is upstream of municipal water sources.

2012 MIDDLE CT Mink Brook – Hanover, NH – this project was withdrawn by the project proponent following approval. No funds were released.

2012 PEMI-WINNI Hazelton Farm – Hebron, NH

The objective for this project is the preservation in perpetuity of 275 acres including aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Society for the Preservation of New Hampshire Forests will acquire a conservation easement over the parcel. The site include two streams, overlies a stratified drift aquifer, and helps to protect water quality of Newfound Lake. The property has 0.6 miles of frontage on the Cockermouth River, and 1.5 miles of frontage on Wise Brook—a stream designated by the Town for buffer protection. There are 35 acres of agricultural field with important agricultural soils that are managed for hay. The parcel is within a focus area of the Quabbin to Cardigan Conservation Initiative, Lakes Region Conservation Plan, and is a priority area for the Hebron Conservation Commission, Newfound Lake Region Association (NLRA) Watershed Master Plan (2009), and the NLRA Land and Watershed Committee.

2012 SALMON-PISC Thompson Brook – Greenland, NH – this project was withdrawn by the project proponent following approval. No funds were released.

2013 PROJECTS

2013 CONTOOCOOK Green Crow – Stoddard, NH

The objective for this project is the preservation in perpetuity of 361 acres including aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Harris Center will acquire a conservation easement over the parcel. Adjacent to the south is other land owned by the Harris Center. Together these parcels provide linkage to and enhance the size and ecological function of lands in Stoddard, Nelson, and Hancock. Most of the site is forested, including some forested wetlands, with the balance as emergent wetland. This area drains into off-site wetlands, a stream, and a pond which then drain into the North Branch of the Contoocook River, a New Hampshire designated river.

2013 MERRIMACK McQuesten Pond Dams – Manchester, NH

The objective of this project is to provide brook trout habitat through the removal of small dams.

The performance standards are:

- Three specified sites will have dissolved oxygen and water temperatures within the ranges specified
- No fish barriers remain higher than 10".

NH Rivers Council will remove two dams within McQuesten Pond that disrupt hydraulic connectivity, stream geomorphology, and wetland functions, and are one of the primary sources of water quality impairment along with stormwater runoff. The two obsolete stream dams impound water upstream to form McQuesten Pond. They will be removed to restore stream and wetland functions, providing an additional 1,500 linear feet of brook trout habitat.

2013 MIDDLE CT Ammonoosuc River II Restoration – Lisbon, NH

The objective of this project is to restore floodplain habitats on a parcel acquired with funds from the 2012 round of grants.

The performance standards are: provide a natural resources inventory, document plantings along the riverbank and in the floodplain, and document removal of the culvert.

The Ammonoosuc Conservation Trust's long-term goals are to restore and protect floodplain forest and restore riparian areas and wetlands. The project will buffer and enhance the Hanno Pond wetland complex and provide increased educational and recreational values. A hay field will be restored to a riparian forested buffer. A culvert will also be removed.

2013 MIDDLE CT Bailey/Clay – Lyme, NH

The objective of this project is the preservation in perpetuity of 50 acres including wetlands, streams, and their associated buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Upper Valley Land Trust will hold a conservation easement deed on the parcel which includes 4.8 acres of wetlands and 2,044 linear feet of streams. The property is adjacent to other preserved parcels and created a protected corridor important to wildlife and for ecological integrity.

2013 PEMI-WINNI Fogg Hill Bog – Center Harbor, NH

The objective for this project is the preservation in perpetuity of 192 acres including aquatic resources and associated upland buffers and the restoration of a small area degraded by dumping.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Lakes Region Conservation Trust will acquire the property and grant a conservation easement to the Town of Center Harbor and Third Party Right of Enforcement to the State of New Hampshire Department of Environmental Services. The property includes: a prime wetland; the only kettle hole bog in Center Harbor; several significant ecological areas with extensive wildlife habitat for moose, bear, deer, and turkey; rare plant species; two old growth forest patches; one of the highest hills in town with high visibility; and the immediate watershed to Lake Waukewan (a public water supply). The property is located within one of the highest conservation priority areas based on the Town Natural Resources Inventory (2011). It lies within Center Harbor's largest unfragmented forest block (950 acres).

2013 PEMI-WINNI Frazian – Hebron, NH

The objective for this project is the preservation in perpetuity of 197 acres including aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

This property is located near the north end of Newfound Lake at the end of Braley Road. Its entire western boundary abuts the 272-acre Hazelton easement and its southernmost boundary is directly across the road from conserved land on Newfound Lake. The property includes over 32 acres of wetlands, 770 linear feet of undeveloped shoreline along the Cockermouth River, and two small brooks which all drain to Newfound Lake.

2013 SACO Green Hills – Conway, NH

The objective for this project is the preservation in perpetuity of 1,014 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The parcel will be acquired by The Nature Conservancy. It includes 56 acres of headwater wetlands. The parcel links the Green Hills Preserve and other conservation lands to the north as others to east, resulting in a 6,500 acre preserved habitat block. It also include 6.5 miles of tributary streams which is most of the Mason Brook watershed. Thus the property is important for maintaining water quality for downstream wells.

2013 SALMON-PISC Calef Isinglass River – Barrington, NH

The objective for this project is the preservation in perpetuity of 270 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Town of Barrington will acquire and manage the property. The project permanently conserves 16 wetland complexes (75.81 acres), 13 vernal pools, 70.3 acres of floodplain forest, 1.5 miles of frontage on the Isinglass River, and 261 acres of forested uplands. According to the NH Natural Heritage Bureau, both Spotted Turtle and Wood Turtle have been identified on the property. Blandings Turtle have been identified within close proximity to the subject property.

2013 SALMON-PISC Huppe Preservation – Farmington, NH

The objective for this project is the preservation in perpetuity of 96 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Strafford Rivers Conservancy will obtain a conservation easement to protect 96 acres of land and establish a 200 foot no-cut buffer around the wetland and the portion of Berry Brook that flows through the land. The project will permanently protect 6 acres of wetland and 2,370 linear feet of Berry Brook and its tributary, which flows to the Isinglass River. The protection of this parcel is a priority by the state funded Land Conservation Plan for the Coastal Watershed and the Isinglass River Management Plan.

2014 PROJECTS

2014 LOWER CT Falls Brook Culvert – Swanzey, NH

The objective for this project is the removal of a small culvert that is a barrier for aquatic organisms and replace it with an arched culvert that will span the stream to restore connectivity and eliminate dangers to infrastructure.

The performance standards are documentation of removal of the undersized culvert and replacement with an arched culvert at 1.2 times bankfull width. Slopes must be documented as stable. Installation of designed plantings must be documented. The stream channel planform must be documented.

The Cheshire County Conservation District, with assistance from Trout Unlimited, will replace the culvert on Hale Hill Road which is two miles upstream of the mainstem Ashuelot River. The Falls Brook sub-watershed was identified as the second highest priority due to the amount of high quality cold water headwaters habitat. The majority of the brook consists of excellent brook trout thermal refugia and spawning habitat.

2014 LOWER CT West Hill – Keene, Swanzey, Chesterfield, NH

The objective for this project is the preservation in perpetuity of 552 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Monadnock Conservancy will protect the project with conservation easements which include 25.8 acres of wetland, 526 acres of upland buffer, 16,850 linear feet of streams, and 16 potential vernal pools. There are six wetlands that provide shoreline stabilization along four streams which flow into Ashuelot River.

2014 MERRIMACK Guinea Ridge Road – Gilmanton, NH

The objective for this project is the preservation in perpetuity of 86 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

Lakes Region Conservation Trust will protect the parcel is located within the focus area of the Belknap Range Conservation Coalition. The project includes approximately 21 acres of wetlands and 65 acres of upland along a significant wetland and perennial stream resource. Approximately 3,600 linear feet of perennial stream buffers will be protected as well as upland buffers along the stream and complex of wetlands. The parcel will establish connections between lands that are not protected and protects over-land connections between a wetland that is part of a large system that covers 91.6 acres and includes a perennial stream that is one of the headwater tributaries to the Suncook River and one 10-acre upland island.

2014 MERRIMACK Hinman Pond II – Hooksett, NH

The objective for this project is the preservation in perpetuity of 218 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

Bear-Paw will acquire the property which lies within a conservation focus area identified in the 2010 NH Wildlife Action Plan WAP map that is more than 18,000 acres in size. The property contains 21 wetland complexes totaling 25 acres. They range in size from 0.02 acre vernal pools to a ten acre beaver flowage. The majority of the wetland complexes are associated with depression systems and forested drainage ways. Nine vernal pools were identified throughout the site; however, NHFG has identified other potential vernal pools that may be productive in wetter years.

2014 MERRIMACK Shost – Goffstown, NH

The objective for this project is the preservation in perpetuity of 177 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Forest Society will permanently protect the property through the purchase of a conservation easement working in partnership with the Goffstown Conservation Commission to protect important wetland and stream buffers, vernal pools, and approximately 16.9 acres of active open fields for hay production and wildlife habitat, and about 147 acres of managed, working forests. The property includes one large, 22-acre open wetland complex that was designated as prime in 2005, several smaller forested wetlands, at least three vernal pools, and an unnamed perennial stream which drains south to the Piscataquog River and then to the Merrimack River. The Shost property has 1,275 feet of frontage along Snook Road.

2014 PEMI-WINNI Lake Wicwas – Meredith, NH

The objective for this project is the preservation in perpetuity of 27.44 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Lakes Region Conservation Trust will acquire four parcels, three in fee and one as a conservation easement. The parcels include one mile of shoreline on Lake Wicwas in Meredith. The parcels protected include four potential vernal pools, an island, and the largest marsh area (12.5 acres) within the lake that provides habitat for the only nesting loon pair in the area.

2014 SALMON-PISC Berry's Brook/Rand – Rye, NH

The objective for this project is the preservation in perpetuity of 73 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Rye Conservation Commission will purchase the parcel in fee with a conservation easement to be held by the Natural Resource Conservation Service. This parcel will contribute to existing protected lands, as it located within a large contiguous block of open lands. A significant wildlife corridor extends easterly toward the Bellyhack Bog and tidal estuary that is within a mile. The wetlands found on site are mainly forested with several potential vernal pools.

2014 SALMON-PISC Exeter Great Dam – Exeter, NH

The objective for this project is the removal of the Great Dam in downtown Exeter.

The performance standards are:

- Design meets fish passage criteria
- 75% vegetative cover on stream banks
- Minimum 4' wide channel based on as-built
- Minimum 6" channel depth
- Maximum 3% slope
- Maximum hump height of 9"
- Presence of alewife adults

The project benefits the diadromous fish populations in the Exeter River and the wider Great Bay Estuary, enhances the natural and human ecosystem by improving water quality, and reduces Exeter's vulnerability to the growing risk of flooding. The removal project restores approximately 15 miles of the Exeter River and its tributaries to a free-flowing condition, eliminating a barrier to migrating anadromous fish and improving water quality. The project also includes reshaping the river channel within the footprint of the existing dam and the area immediately upstream and downstream using a natural channel design approach based on established fluvial geomorphic principles.

2014 SALMON-PISC Thompson Brook Fish Passage – Greenland, NH – this project was withdrawn by the project proponent following approval. No funds were released.

2014 SALMON-PISC Spruce Swamp/Keliher Forest – Fremont, NH

The objective for this project is the preservation in perpetuity of 32 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Natural Resources Conservation Service will acquire a conservation easement with the assistance of the Southeast Land Trust of New Hampshire. The property includes 8 acres of wetlands in the regionally significant Spruce Swamp. This property will add to the adjoining Kelliher WRP which is also owned by SELT. A focus area and research site for Blanding's turtles, NHF&G considers this wetland complex to be one of the most important Blanding's nesting sites in the region, and ranks the overall wildlife habitat as "highest rank in NH". In addition, the Eastern Brook Trout Joint Venture and the NH Coastal & Estuarine Land Protection Plan both consider this property to be within their primary focus area. The forest is relatively mature and diversity is typical of beaver-influenced shorelines including high percentages of hemlock, beech, birch, and red maple.

2015 PROJECTS

2015 ANDROSCOGGIN Milan Forest – Milan, NH

The objective for this project is the preservation in perpetuity of 6.6 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Town of Milan will acquire a conservation easement and will then confer another conservation easement to the Society for the Protection of New Hampshire Forests. The parcel includes 420 linear feet of frontage on the Androscoggin River and 13% of the land is in the 100-year floodplain. The proximity of this parcel to a school facilitates use for education.

2015 CONTOOCOOK Brown – Sutton, NH

The objective for this project is the preservation in perpetuity of 236 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Forest Society will purchase the property. This parcel abuts the Forest Society's 1,054 Black Mountain Forest. These parcels, in addition to other protected parcels result in a block of over 9,000 ac of contiguous conservation land. This parcel includes the protection of 2,100 linear of an un-named perennial stream. This stream was identified by the New Hampshire Fish and Game as having the highest documented wild brook trout density in the Lower Warner River watershed. The parcel also includes very high quality wildlife habitat and three state listed rare species.

2015 LOWER CT Swanzey Floodplain Forest/Ballou – Swanzey, NH

The objective for this project is the preservation in perpetuity of 29 acres of aquatic resources and associated upland buffers and the enhancement of floodplain forests and riparian forest that is current in hay.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan, documentation of plantings, and monitoring for plant survival for five years.

The Monadnock Conservancy will acquire a conservation easement on the property. The hayfield will be retired and invasive species control initiated. The floodplain and riparian areas will be planted with floodplain forest tree and shrub species. This work will benefit soil and water quality, attenuation of downstream flooding, and provide habitat for fish and wildlife.

2015 LOWER CT Smith Pond Shaker Forest – Enfield, NH

The objective for this project is the preservation in perpetuity of 995 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Upper Valley Land Trust will acquire a conservation easement on the property. The property includes 114 acres of wetlands, 16,900 linear feet of perennial streams, 13,100 linear feet of intermittent streams, and 68 acre Smith Pond. There are many different types of aquatic resources on the site: large pond, forested wetlands, high-gradient streams, medium gradient streams with associated riparian wetlands, emergent marsh, vernal pools, and two waterfalls.

2015 MERRIMACK Black Brook – Goffstown, NH

The objective for this project is the preservation in perpetuity of 101 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Town of Goffstown will acquire a conservation easement on the property. The property abuts and expands the 126-acre Blackbriar Woods Preserve, and provides protection for 23.24 acres of wetlands, a third of which are designated Prime Wetlands along the entire southern boundary, 13 vernal pools, 2,900 linear feet of Black Brook, 2,500 linear ft. of intermittent stream and approximately 4 acres of open water beaver ponds. The property has over 3,000 ft. of intermittent streams and approximately 4 acres of beaver ponds. The property's entire southern boundary along Black Brook is designated as Prime Wetland. There are documented sightings of Blanding's and Wood Turtles on the property.

2015 MERRIMACK Haller Farm – Concord, NH

The objective for this project is the preservation in perpetuity of 100 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The City of Concord will acquir two parcels located off of Lakeview Road and West Parish Road in the Penacook Lake Watershed. Penacook Lake is the City of Concord's primary source of drinking water and is designated as a class "A" water body. The majority of the Haller Farm property consists of forested upland, with sloping hills that drain toward the lake, and contains palustrine wetlands, intermittent and perennial streams, and vernal pools. Acquisition of the Haller land will link other protected land in the area, adding to a block of approximately 900 acres of conservation land within the Penacook Lake Watershed.

2015 MERRIMACK McQuesten Brook – Bedford, NH

The objective is to restore hydraulic and sediment transport capacity throughout the reach above Eastman Avenue and below Wathen Road.

The performance standards are:

- Sediments are document to have transitioned from fine sediment (<4mm) to a more even distribution of fine and coarse material.
- Dissolved oxygen will be >5.0 mg/L and >75% saturated
- There will be fewer group III invertebrates
- The geomorphic and aquatic organism passage compatibility scores will imprive
- >50% of vegetation is native
- Slopes are stable

McQuesten Brook originates in Bedford, flows into Manchester, collects outlet waters from McQuesten Pond before flowing under Second Street, through the Eastman Avenue and Wathen Road wetland complex in Bedford, and under the Everett Turnpike to meet the Merrimack River. The two stream crossings that carry McQuesten Brook through the wetland complex are severely undersized and listed in the 2012 305(b)/303(d) Surface Water Quality Assessment for failure to support aquatic life due to insufficient dissolved oxygen concentrations and saturation, and excessive chlorides. These impairments threaten survival of the naturally reproducing Eastern Brook Trout population present in portions of McQuesten Brook. The project is to install an adequately sized (14-foot width) stream crossing at Eastman Avenue and remove the culvert at Wathen Road to restore hydraulic and sediment transport capacity throughout the reach. Restoring full aquatic organism passage at both Eastman Avenue and Wathen Road will increase access to about 1,950 feet of McQuesten Brook between I-293 and South Main Street. It will remove barriers and re-connect 2.57 acres of wetland habitat within this reach of McQuesten Brook.

2015 MERRIMACK Wild Goose Pond – Pittsfield, NH

The objective for this project is the preservation in perpetuity of 500 acres of aquatic resources and associated upland buffers as well as the restoration of poor culverted crossings.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan and the documentation of the removal of culverts and replacement with bridges or stone fords.

Bear-Paw will protect two properties in the Wild Goose Pond watershed. The conservation easements include 38 wetland areas covering over 68 acres (including 12 vernal pools), over one mile of riparian habitat, and 1,000 linear feet of frontage on Wild Goose Pond. The project includes restoration sites which are associated with woods road culvert crossings.

2015 MIDDLE CT Ammonoosuc River/Brebner – Bethlehem, NH

The objective for this project is the preservation in perpetuity of 203 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Ammonoosuc Conservation Trust will preserve the parcel. It will protect 4,327 linear feet of frontage on the Ammonoosuc River and over 7,500 linear feet of stream that drain across the site and into the river. It also includes emergent/scrub-shrub

wetlands and forested wetlands. The Ammonoosuc River in this area is an excellent fresh water fishery. It is upstream from municipal water sources and is in New Hampshire's "Highest Ranked Habitat in the Biological Region" or associated supporting area.

2015 SALMON-PISC Cutts Cove – Portsmouth, NH

The objectives of the project is to replace an armored shoreline with saltmarsh and improve the adjacent tidal buffer zone to allow for marsh migration and to enhance mudflats through placement of native shell.

The performance standards are:

Documentation of the shell placement, successful stabilization of the new slope, elimination of any invasive species found during the monitoring period, and successful establishment of saltmarsh vegetation.

The project involves the UNH Stormwater Center restoring several tidal marsh types that reflect the current distribution of low and high marsh, and tidal buffer zones, relative to the tidal regime in Cutts Cove by: 1) enhancing the diversity and quality of 90,000 sq ft of mudflat habitat through addition of native shell substrate; 2) creating a living shoreline of rock sill with shellfish and expanding a remnant patch of existing salt marsh by 40,500 sq ft and creating a vegetated tidal buffer zone (8,000 sq ft); 3) removing 700 linear feet of armoring along the Cutts Cove shoreline; and 4) improving Tidal Buffer Zone) with functional connections to marsh and upland along 700 feet of artificial shoreline providing for future marsh migration in the future.

2015 SALMON-PISC Oyster Reef – Greenland, NH

The objective of this project is the improvement of water quality in the Great Bay Estuary.

The performance standard is documentation of successful establishment of live oyster mounds on 0.65 acre of new oyster reef habitat, all located within a five acre area.

The UNH Jackson Estuarine Laboratory will use funds to improve water quality in the Great Bay Estuary (GBE) by retaining nutrients and trapping sediments through oyster reef restoration. Secondary goals and benefits will restore fish and aquatic habitat, ecological integrity, and wetland dependent wildlife habitat. The project proposes to restore five acres of oyster reef. Reefs will be restored by placing a total of 500 yd3 of clean surf clam into the estuary, and seeding these areas with live oysters raised at the Jackson Estuarine Laboratory.

2015 SALMON-PISC Powder Major's Farm, Goss – Durham/Madbury/Lee, NH

The objective for this project is the preservation in perpetuity of 195 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Forest Society will purchase 195 acres of land to create a new forest reservation open to the public. The three towns in which the project is located will hold conservation easements on their respective portions of the project in exchange for town funding to the project. The parcel contains 84 acres of wetlands, 5,100 feet of frontage on the Oyster River (the drinking water source for Durham and UNH), 800 feet of frontage on Dube Brook, and overlies an aquifer. Three confirmed vernal pools are on the parcel, with several rare plants, documentation for Blanding's turtle, American eel, and 12 other occurrences of rare and threatened wildlife within the Oyster River corridor. The property is entirely within the focus area of The Nature Conservancy's Land Conservation Plan for NH Coastal Watersheds and is part of a larger, 3-town greenbelt conservation initiative. It abuts and enlarges other conservation lands including tow town-owned conservation easements, and wraps around a newly acquired 87 acre town property.

2015 UPPER CT Nash Stream – Strafford/Odell, NH

The objective of this project is to restore the channel processes and habitat quality and connectivity functions of streams in the Nash Stream watershed through the addition of coarse woody material in 2.6 miles of streams.

The performance standards are the documentation of the installation of strategic wood additions, an average of one pool develops each year of monitoring for a total of at least five pools, and provide information on aggradation of sediments, recruited large wood, and rafted organic materials.
Trout Unlimited will use the Student Conservation Corps to fell trees such that most of the trunks or crowns span or are within the bankfull channel. Care is taken to avoid creating large holes in the tree canopy. The trees are placed in a manner that promotes stability and reduces the potential for movement during high flows.

2016 PROJECTS

2016 CONTOOCOOK Azalea Park – Henniker, NH

The objective for this project is to improve water quality and minimize stormwater erosion along the bank of the Contoocook River at Azalea Park.

The performance standard is the documentation of the installation of the bioretention systems with an as-built and photos.

Azalea Park is a historical landmark in downtown Henniker along the Contoocook River. Much of the upland has been paved and it is the stormwater from this that is adversely impacting the aquatic resources. The Town of Henniker will install stormwater management structures along the bank of the river to manage the upland stormwater runoff which is currently directed into a wetland which is causing erosion and the addition of sediments and salt into the wetland and ultimately into the river. The work will involve the installation of bioretension systems.

2016 LOWER CT Sip Pond – Fitzwilliam, NH

The objective for this project is the preservation in perpetuity of 72 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Monadnock Conservancy will acquire the parcel which is located on the southern shore of Sip Pond. The wetland on the site is part of the 352-acr Sip Pond Peatland Complex. It also has 2,200 feet of frontage on the pond and 2,100 linear feet of frontage on Sip Pond Brook. The parcel with within two wellhead protection areas and most of the parcel overlies a stratified drift aquifer. The wetland complex represents one of the highest quality wetlands in Fitzwilliam, if not the region.

2016 LOWER CT Ticknor Woods Addition – Lebanon, NH

The objective for this project is the preservation in perpetuity of 110 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Upper Valley Land Trust will acquire the 110 acre parcel with a conservation easement which will protect 18 acres of wetlands, 1,300 linear feet of perennial stream, 855 liinear feet of frontage of the Mascoma River, and 2,400 linear feet of intermittent stream. It is adjacent to a 76 acre parcel which is already protected.

2016 MERRIMACK Austin Parcel – Brookline, NH

The objective for this project is the preservation in perpetuity of 23 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Brookline Conservation Commission will acquire the parcel which has 3,000 linear feet of riparian frontage along the Nissitissit River. The Town will place a conservation easement on the property to be held by the Piscataquog Land Conservancy. The parcel contains a riverine complex with an intermittent stream, and palustrine forested, emergent, and scrub-shrub wetlands. Protection of the frontage and upland buffer is a high priority in the region and this is one of the last large sections of the river that has not been protected or developed in New Hampshire. This river reach offers an impressive Eastern Brook Trout fishery and both NHFG and Trout Unlimited have expressed interest in seeing it protected. The Wildlife Action Plan "WAP" depicts the property as being a combination of Highest Ranked Habitat in NH and Highest Ranked Habitat in Biological Region.

2016 MERRIMACK Brennan Brook Confluence – Francestown, NH

The objective for this project is the preservation in perpetuity of 7.6 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Francestown Land Trust will purchase a 7.6 acre property along the South Branch of the Piscataquog River and protect an additional 33 acres of land with conservation easements donated by abutting landowners. The Piscataquog Land Conservancy will hold the conservation easement for the property. The project will permanently protect 2,155-feet of the South Branch of the Piscataquog River, its associated riparian and upland forest, as well as eight acres of wetlands at the confluence of Brennan Brook. Approximately 10.5 acres in this project area is classified by the WAP as highest ranked habitat (Tier 1), 17 acres is considered Tier 2 habitat, and 4.5 acres is ranked as supporting landscape (Tier 3). The endangered Blanding's turtle, and two species of special concern – smooth green snake and wood turtle, have been found in the area. The Brennan Brook-South Branch Confluence Project connects to and enhances the ecological function of over 4,500 acres of biologically diverse protected land.

2016 MERRIMACK Hitchiner Town Forest – Milford, NH

The objective for this project is the preservation in perpetuity of 193 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Milford Conservation Commission will permanently protect the 193 acre Hitchiner Town Forest and the natural resources on the property with a conservation easement to be held by the New England Forestry Foundation (NEFF). Management will be guided by a Forest Management Plan which was updated in 2008 and a Field Management Plan created in 2012. A chestnut oak forest/woodland occupies approximately 30 acres on the upper slopes of Milford's Hitchiner Town Forest property. This forest type reaches the northern extent of its range in New Hampshire, and is ranked imperiled/critically imperiled in the state. Much of the parcel serves as buffer to aquatic resouirces.

2016 MERRIMACK Mathes Property – Londonderry, NH

The objective for this project is the preservation in perpetuity of 149 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The project will permanently conserve two parcels adjacent to the Musquash Conservation Area through a partnership between Southeast Land Trust and the NH Fish and Game Department. Parcel #1 is 140 acres with 18.7 acres of wetlands and includes a large wetland system and nine documented (confirmed wood frog and spotted salamander egg masses) and five additional potential vernal pools. These features are a part of the large Musquash Swamp wetland system. Parcel #2 is 10 acres and located northeast of Parcel #1 and is adjacent to the Musquash Swamp Conservation Area and contains one acre of wetland. A recent timber harvest on the parcel impacted the landscape surrounding the pools. The property is also located in a focus area identified for recovery of the New England cottontail (NEC), a state endangered species. Parcel #1 has the potential for the creation of high quality habitat for the species through management in the upland forest present on the property.

2016 MERRIMACK Portsmouth St Stream Restoration – Concord, NH

The objective of the project is to restore floodwater access to former floodplain wetlands.

The performance standards are:

- Soil is stable with no substantial erosion
- Check dams and level spreaders are maintaining channel stability
- Non-biodegradable erosion controls have been removed
- Tolerances for width, depth, and slope are within specific limits
- There are <25% invasives and >75 cover by native species in the planting area

The City of Concord will restore Mill Brook and Merrimack River floodplain connectivity by installation of a 16 foot wide x 3 foot high x 40 foot long, 3-sided box culvert to replace a 42 inch diameter pipe which was back-watered at the base flow water stage and contained very little natural substrate. The existing crossing does not provide aquatic passage for the full range of flows between base and bankfull stages because of the rise in velocity within the pipe associated with small changes (< 1 foot) in water surface elevation upstream of the crossing. The existing crossing is a physical barrier to semi-aquatic organisms which travel upon banks and floodplains and also restricts the transport of woody debris and some coarse particulate organic materials. The constricted crossing results in supercritical flows below the bankfull stage which scoured and degraded approximately 70 linear feet of channel bed downstream of the crossing. The crossing restricts sediment transport capacity as is evidenced by the hourglass pools which have formed on either side of the crossing and by the difference in riffle bed material particle size between upstream and downstream reaches. Removing this aquatic life barrier will restore access to 1,700 linear feet of perennial channel upstream of Portsmouth Street. This expands the habitat available to aquatic life in the Merrimack River that use small tributaries for spawning or as nursery areas. It will also improve treatment of stormwater run-off from Portsmouth Street prior to entering the adjacent associated floodplain and wetlands located upstream of the crossing and limit invasive species within the roadway right-of-way to the extent practicable.

2016 MERRIMACK Salem Town Forest – Salem, NH

The objective for this project is the preservation in perpetuity of 100 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Southeast Land Trust will work with the Town to acquire a conservation easement on approximately 100 acres along the Hittytity Brook which abuts the 206-acre Salem Town Forest. Conserving this parcel will create a contiguous block of 345-acres of conservation land in Salem. The property includes approximately 22.5 acres of a high transmissivity aquifer that is located in the area of Hittytity Brook. This aquifer has been considered as a potential water supply by the Town due to its productivity.

2016 MERRIMACK Tower Hill Pond – Candia/Hooksett, NH

The objective for this project is the preservation in perpetuity of 1,870 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Forest Society will conserve the property, including Tower Hill Pond in Manchester. The project will permanently conserve 45 separate wetlands encompassing 280 acres, over 2 miles of undeveloped shoreline of Tower Hill Pond, 6.3 miles of perennial streams, 1.6 miles of intermittent streams, 74 vernal pools and 1,590 acres of upland and lowland forest. The land contains a portion of the 8,000 acres owned and managed by Manchester Water Works that provides drinking water to the over 160,000 residents of the City of Manchester and surrounding towns.

2016 MIDDLE CT Shumway Forest – Hanover, NH

The objective for this project is the preservation in perpetuity of 268 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Hanover Conservancy will acquire a permanent conservation easement on the parcel which includes 23.5 acres of wetland and 10,900 linear feet of riparian corridor. This acquisition will result in nearly 3,800 acres on Moose Mountain being preserved. The property includes Tier 1 and Tier 2 habitats; a length of the Appalachian Trail; ten types of wetlands and 1st, 2nd, and 3rd order streams and their floodplains; pond and pond edges; a shrub/moss fen; red spruce swamp; and probably vernal pools.

2016 PEMI-WINNI Page Pond Community Forest – Meredith, NH

The objective for this project is the preservation in perpetuity of 198.79 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Trust for Public Lands will acquire the parcel and transfer it to the Town of Meredith Conservation Commission which will be the long-term manager. The area includes prime wetlands, 330 linear feet of Page Brook, and 2,875 linear feet of an unnamed brook that flows directly into Lake Winnipesaukee. This project builds connectivity across Meredith Neck to create a large block of conserved land.

2016 SALMON-PISC Horsburgh Property – Fremont, NH

The objective for this project is the preservation in perpetuity of 343 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Southeast Land Trust will acquire a conservation easement on 343 acres of land, including 4,107 linear feet of Brown Brook, which is a tributary to the Piscassic River. The property includes several streams that flow into Brown Brook and 3,135 linear feet of an unnamed tributary to the Exeter River. The property includes 71.5 acres of high value wetlands, including portions of 5 Prime Wetlands, and 29 probable vernal pools. The property is almost entirely ranked as "Highest Ranking Habitat in the State" in the NH WAP and is within a "High Priority" site for Blanding's turtles identified in the "Conservation Plan for Blanding's Turtle and Associated Species of Conservation Need in the Northeastern United States".

2016 SALMON-PISC Isinglass River Floodplain Protection – Barrington, NH

The objective for this project is the preservation in perpetuity of 53 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Southeast Land Trust will obtain a conservation easement on the property with an executory interest to the Town of Barrington. The property includes nearly six-acres of important high value wetlands and one documented functioning vernal pool and two probable vernal pools. This parcel creates a contiguous block of 380-acres of conservation land, all of which is located just down river from the 300-acre Calef Forest project. In addition, the conservation easement will ensure that the approximately 3 mile long "Barrington Trail," which extends along the property's Isinglass River frontage all the way to the Town ball fields on Smoke Street, remains open to public access. The property is located within a 1,200-acre unfragmented forest block.

2016 SALMON-PISC Oyster River Passage Restoration – Barrington, NH – this project was withdrawn by the project proponent following approval. No funds were released.

2016 SALMON-PISC Rollins Brook Headwaters-Zanard – Nottingham, NH

The objective for this project is the preservation in perpetuity of 70 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Southeast Land Trust will acquire a conservation easement to protect 70 acres of forest and 17 acres of wetlands, including a 13-acre beaver pond. The property's aquatic resources serve as the headwaters for Rollins Brook, a tributary to the North River, Lamprey River, and the Great Bay Estuary. The property has 3 confirmed vernal pools,

1,000 feet of headwater stream (currently impounded by beaver dam), and 52 acres of associated upland habitat. The project proposes to restore and enhance critical wildlife habitat, with a particular focus on the state endangered Blanding's turtle, which is known to occupy this parcel. This property connects to more than 2,000 acres of protected lands east of Pawtuckaway State Park.

2016 SALMON-PISC Sawyer Mill Dams Removal – Dover, NH

The objective for this project is the removal of the Upper and Lower Sawyer Mill Dams to restore aquatic organism passage.

The performance standard is to document construction was done in accordance with approved permits, plans, and narratives with no water quality violation.

The Sawyer Mill Dam Removal project on the Bellamy River will restore fish passage; improve instream habitat; improve water quality; and reduce flood hazards. Removal of the two mill dams will restore access for American eels, passage for alewife, blueback herring, and sea lamprey, which are identified as species of "special concern" and "species of greatest conservation need" by NHFG. The project will reconnect 11.2 miles of main-stem riverine habitat to Great Bay.

2016 SALMON-PISC Upper North Branch River – Candia, NH

The objective for this project is the preservation in perpetuity of 14.85 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Southeast Land Trust of New Hampshire will purchase a conservation easement on the parcel which includes 8 large vernal pools, nearly 900 feet of river/stream shoreline, and approximately 102 acres of upland buffer in the regionally significant Upper North Branch River Core Focus Area. As part of a large unfragmented block over 5,000 acres in size, the property contains 88 acres of Tier 1 habitat and 33 acres of Tier 2 habitat. A Natural Heritage Bureau report shows that the property has a population of the state threatened Appalachian barren-strawberry within the proposed conservation easement area. The property is within a Blanding's turtle priority conservation area. This site ranks second out of the top 10 focus areas in the state and connects the property's habitat to an existing 388-acre block of conservation land.

2016 UPPER CT Nash Stream Phase 2 – Stratford/Odell, NH

The objective of this project is to restore the channel processes and habitat quality and connectivity functions of streams in the Nash Stream watershed through the addition of coarse woody material in 3.2 miles of streams.

The performance standards are the documentation of the installation of strategic wood additions, an average of one pool develops each year of monitoring for a total of at least five pools, and provide information on aggradation of sediments, recruited large wood, and rafted organic materials.
Trout Unlimited will use the Student Conservation Corps to fell trees such that most of the trunks or crowns span or are within the bankfull channel. Care is taken to avoid creating large holes in the tree canopy. The trees are placed in a manner that promotes stability and reduces the potential for movement during high flows.

2016 UPPER CT Upper Conn R Floodplain Protection & Restoration/Brunault – Colebrook, NH

The objective of this project is to protect and restore 71.57 acres of river riparian areas, wetlands, and associated upland buffers along the Connecticut River.

The performance standards are;

1. Documentation of acquisition and planting of 5,000 native trees and shrubs, including a list of the species and numbers of each.
2. By December 31 of the year of plantings, receipt by DES of a sketch showing areas of plantings and the numbers and species in each area ("as-built").
3. By the fifth year after planting, the estimate of aerial coverage by trees and shrubs will be at least 25%.
4. Exposed soil from culvert removals is stable as documented with photographs.
5. Monitoring reports shall be submitted to DES by December 31 every year for five years.

The Nature Conservancy will preserve the parcel which include riverine habitat, floodplain forest, and farmland along 1.6 miles of the river. The property will then be transferred to the New Hampshire Department of Fish and Game for management. The parcel will contribute to a 970 acre block of protected lands on both sides of the river. The restoration will create a more resilient ecosystem, ensure dynamic river processes, and ensure the protection of four state-listed endangered plants.

2018 PROJECTS

2018 LOWER CT Bearce – Jaffrey & Rindge, NH

The objective for this project is the preservation in perpetuity of 200 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Monadnock Conservancy will acquire a conservation easement on the property which includes 61 acres of wetlands, 9,241 linear feet of streams, and one confirmed vernal pool. Forest management will be allowed in the uplands except a 100 foot buffer for the aquatic resources.

2018 LOWER CT Cranberry Bog Culvert – Winchester, NH

The objective of this project is to replace the failing Cranberry Bog culvert to provide 2.68 miles of stream connectivity both upstream and downstream. A small area of wetland restoration and floodplain establishment are also included.

Performance standards are:

- Document replacement of the 48' pipe with a 5x12' box culvert with photos.
- Document slope of 2%, and the installation of equally distributed weirs in the culvert and downstream with as-built drawings.
- Document sediment buildup is not occurring with longitudinal cross-sections
- Document proper installation of filter strips and BMP erosion controls with as-built drawings.
- Document that outlet height has decreased to 1.5' due to the 2% slope of new culvert, the new channel slope, and installing weirs both inside and outside the culvert with as-built drawings and photos.
- Document the lack of perch and that sediment continues through the culvert with as-built drawings and photos.
- Document at least 75% aerial cover with native plantings in the planting areas with text and photos.
- Document that there is less than 5% non-native invasive species in the disturbed areas with text and photos.

The existing culvert is considered a Tier 3 crossing and is located on Snow Brook which flows to the Ashuelot River under Back Ashuelot Road. The existing culvert, a 48" x 60' long corrugated metal pipe will be replaced with a 5' x 12' x 60' long closed bottom pre-cast concrete box structure be installed in accordance with the NH Stream Crossing guidelines. The work includes wetland restoration and will create 4-foot wide floodplain

benches on both sides of the stream and stabilize a total of 160 sq.ft. of the upstream bank and 610 sq.ft. of the downstream bank by installing biodegradable coir fabric and replanting native species. The hydraulic capacity of the stream crossing will be improved. In addition, with the improvement to outlet grade and a series of stone weirs installed to retain sediment, aquatic passage through the culvert will be restored.

2018 LOWER CT Granite Lake Headwaters – Stoddard, NH

The objective for this project is the preservation in perpetuity of 515 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Harris Center for Conservation Education will preserve the parcel. It abuts 2,275 contiguous acres of conserved land and is adjacent to a 11,500 acre corridor of protected lands. The parcel has two confirmed vernal pools as well as several small headwater streams which drain into Nye Meadow, a 45-acre natural wetland, and then into Granite Lake.

2018 LOWER CT North Branch Sugar River (Ruger) – Croydon, Grantham & Newport, NH

The objective for this project is the preservation in perpetuity of 3,181 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The New Hampshire Department of Fish and Game will acquire two adjacent properties in the watershed of the North Branch of the Sugar River. They include 416 acres of wetlands, 28 vernal pools, and 10.85 miles of streams. The project will expand the extent of protected lands in a 48,750 acre unfragmented block.

2018 LOWER CT Thompson Brook Restoration – Surry, NH

The objective of this project is improving aquatic organism passage, particularly of the Eastern Brook Trout, in the Ashuelot River Watershed. Native brook trout are listed as a "species of concern" in NH's Wildlife Action Plan.

The project goals are restoring fish passage between the mainstem Thompson Brook and a coldwater tributary that has been identified in regional conservation plans as important habitat for Eastern Brook Trout. The goals of the restoration are to: 1) Reduce the outlet perch for Brook Trout passage, 2) Reduce the downstream gradient, 3)

Restore hydraulic continuity between the coldwater tributary and the mainstem Thompson Brook, and 4) Increase stream stability at the tributary confluence. The associated performance standards are documentation of the perch reduction, gradient reduction, and stream stability with both lateral and longitudinal cross-sections.

The Cheshire County Conservation District will use a backwater technique to bring the water level up to the culvert. This project will make about 2.5 miles of stream barrier-free. There are two components to the project: redirect high-energy stormwater flows away from the confluence of the tributary and Thompson Brook, and create a step pool structure to restore passage over the perched outflow end of the culvert.

2018 LOWER CT Tunis District – Hanover, NH

The objective for this project is the preservation in perpetuity of 200 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Upper Valley Land Trust will acquire the conservation easement which will protect 30 acres of Black Ash-Northern Hardwood-Conifer Swamp, several acres of wet meadow shrub and forested swamp, 3000 linear feet of intermittent streams, 1700 linear feet along Tunis Brook which hosts wild Eastern brook trout, and numerous vernal pools. The property lies within a 12,000± acre unfragmented forest block which is home to bear and moose and other wide-ranging species.

2018 MERRIMACK Brox Community Lands Conservation – Milford, NH

The objective for this project is the preservation in perpetuity of 75 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Milford Conservation Commission will protect the Brox Community Lands which include a mix of waterbodies, associated marsh and shrub wetlands, and vernal pools. The wildlife habitats on the property have been ranked as Tier 2 in the Wildlife Action Plan. Wildlife includes Blanding's turtle, spotted turtle, and eastern hognose snake.

2018 MERRIMACK Country Hill Estates Preservation – Concord, NH

The objective for this project is the preservation in perpetuity of 227.39 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Concord Conservation Commission will acquire two adjacent parcels with conservation easements. This will add to a large block of conservation land. There are 27 acres of wetlands on the parcel. They are associated with two streams. The properties also include potential vernal pools and ephemeral pools north of Ash Brook.

2018 MERRIMACK Jennings Conservation Easement – Goffstown, NH

The objective for this project is the preservation in perpetuity of 200 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Piscataquog Land Conservancy will preserve 52 acres with a conservation easement. The parcel includes 11.6 acres of wetlands, 10.2 of which are prime wetland in Paige Hill Marsh and along Harry Brook. The property also includes 1,380 linear feet of riparian corridor along Harry Brook and a tributary. Spotted turtles and northern black racers have been documented nearby and may be on the property.

2018 MERRIMACK Parker Farm's Forest – Auburn, NH

The objective for this project is the preservation in perpetuity of 87 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Forest Society will protect the parcel with a conservation easement. The property includes 2,050 feet of shoreline on Lake Massabesic, which is the surface water drinking source for the City of Manchester and surrounding towns. The land contains 4.9 acres of wetland and several intermittent streams which drain towards the lake. The property will add to the thousands of contiguous acres of Manchester Water Works land around the lake.

2018 MERRIMACK Piscataquog South Branch Project – Francestown, NH

The objective for this project is the preservation in perpetuity of 23.6 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Francestown Land Trust will preserve the land partially with a conservation easement and partially own it in fee. The property includes 2,000 linear of the South Branch of the Piscataquog River and its tributaries. The land includes a 1.46 acre red mape-black ash swamp, a floodplain forest which includes forested wetlands, and vernal pools. This section of the river is also listed as wild eastern brook trout habitat.

2018 MERRIMACK Robert French Fee – Weare, NH

The objective for this project is the preservation in perpetuity of 205 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Piscataquog Land Conservancy will place a conservation easement on the property which include 22.58 acres of wetlands and at least 11 vernal pools. One of the vernal pools has trees that are approximately 400 years old. It also includes a riparian corridor along Bartlett Brook. The parcel provides an ecological link to previously unconnected, by preservation, conservation lands.

2018 MERRIMACK Stillhouse Forest – Canterbury & Northfield, NH

The objective for this project is the preservation in perpetuity of 215 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Society for the Protection of New Hampshire Forests will acquire the parcel. The property includes over a mile of frontage on the Merrimack River and is across the river from three main drinking water wells. The site includes 20 acres of wetlands which are oxbows that support silver maple floodplain forest. A mile of perennial stream containing brook trout is also on the parcel. Other resources include rare and threatened species, two exemplary natural communities, and 14 confirmed vernal pools.

2018 MIDDLE CT Jean Chamberlin North – Bath, NH

The objective for this project is the preservation in perpetuity of 10 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Ammonoosuc Conservation Trust will acquire a conservation easement over this parcel which will protect an area near the confluence of the Connecticut and Ammonoosuc Rivers. It includes 1,138 linear feet of frontage on the Ammonoosuc and three acres of Flood Hazard Area.

2018 MIDDLE CT Jean Camberlin South – Haverhill, NH

The objective for this project is the preservation in perpetuity of 32.5 acres of aquatic resources and associated upland buffers and enhancement of buffer to the river.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan. Enhancement measures include 1.5 acres of riparian lands will be planted with native trees and shrubs and restored to increase wooded buffer widths to at least 50ft. As proposed, the buffer planting includes almost 1-acre of supplemental planting, where native trees and shrubs will be planted at a lower density to complement existing native regeneration.

The Ammonoosuc Conservation Trust will acquire a conservation easement over this parcel. It includes 1.5 acres of riparian enhancement through planting the buffer to provide at least 50 feet of woody buffer. The parcel include 23 acres of Tier 1 grassland habitat and is in a flood hazard zone.

2018 MIDDLE CT Neil Chamberlin – Bath, NH

The objective for this project is the preservation in perpetuity of 204 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Ammonoosuc Conservation Trust will acquire a conservation easement over this parcel. The parcel includes 2,409 feet of riparian frontage on the Upper Connecticut River and supports continuous riparian forest with wooded buffer widths exceeding 100 feet. It also include 3,837 linear feet of 1st order streams, vernal pools, and four acres of High Priority Water Supply land.

2018 PEMI-WINNI Great Meadow – Tuftonboro, NH

The objective for this project is the preservation in perpetuity of 140 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Tuftonboro Conservation Commission will protect the property which includes part of the Great Meadow, a 509 acre wetland that contains most of the headwaters of the Melvin River which flows to Lake Winnipesaukee. The parcel contains an intact aquatic resource buffer of over 11,000 linear feet. The wildlife habitat is exceptional. The property is part of a 2,600 acre unfragmented forest block.

2018 SACO World Fellowship Center – Albany, NH

The objective for this project is the preservation in perpetuity of 422 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Upper Saco Valley Land Trust will conserve the parcel with a conservation easement. It includes 3,150 feet of shoreline on Whitton Pond, 2,200 linear feet of the Chocorua River, four pond-wetland complexes, one large and two small river floodplain wetlands, and two or more vernal pools. The undeveloped shoreline around Whitton and Back Ponds and the riparian forest and wetlands along the Chocorua River represent 76 acres of Tier 1 WAP Habitat.

2018 SALMON-PISC Birch Ridge Forest – New Durham, NH

The objective for this project is the preservation in perpetuity of 2,019 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Southeast Land Trust will acquire a conservation easement over the parcel which cover 12% of the watershed of Merrymeeting Lake. The parcel includes vernal pools and other wetlands.

2018 SALMON-PISC Governor's Run – Epping, NH

The objective for this project is the preservation in perpetuity of 18 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Southeast Land Trust will acquire and manage the parcel. The property includes 3.4 acres of wetlands and floodplains, 2 confirmed vernal pools, 1,015 linear feet of two

tributary streams that feed into the Wild and Scenic Lamprey River, and 2,800 linear feet along the Lamprey. Wood turtles have been documented on the property. There are 15.6 acres of high transmissivity aquifer on the parcel.

2018 SALMON-PISC Lamprey River Shoreline – Durham, NH

The objective for this project is the preservation in perpetuity of 10.5 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Nature Conservancy will acquire the parcel which will be added to their 233 acre Lamprey River Preserve. It includes 1,660 feet of frontage on the Lamprey and nearly an acre of floodplain forest along the river. It is an important link in a block of conserved properties along the Wild and Scenic Lamprey River. It is also in an important Blanding's turtle protection area.

2018 SALMON-PISC Lubberland Creek Acquisition – Durham, NH

The objective for this project is the preservation in perpetuity of 30 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Nature Conservancy will purchase the property which is in the Crommet Creek Conservation Area and will add to the Conservancy's Lubberland Creek Preserve. The entire parcel is ranked as Tier 1 within the Wildlife Action Plan and it is within an important Blanding's turtle protection area. The property contains 12.36 acres of Appalachian rich swamp wetlands and includes part of a 40-acre ponded marsh in a matrix of wetlands and forest. There is one potential vernal pool.

2018 SALMON-PISC Lubberland Creek Restoration – Newmarket, NH

The project will achieve three primary objectives: (1) to restore aquatic connectivity at the system's tidal/freshwater interface allowing diadromous fish passage at the perched Bay Road culvert, (2) to enhance the resilience of Lubberland Creek salt marsh, Great Bay estuary's second largest contiguous salt marsh and documented exemplary natural community, by removing the existing tidal restriction at Bay Road with a structure that will allow upstream salt marsh migration, and (3) to remediate the flood hazard of this road-stream crossing, which overtops during flood events and thereby compromises public safety and contributes excess sediments and nutrients to Great Bay.

The ecological goals for this stream restoration project include (1) fully restoring aquatic organism passage at the site for diadromous and resident fish, (2) eliminate the existing tidal restriction and reconstruct the crossing to allow upstream salt marsh migration, and (3) mitigate a problematic flood hazard by reconstructing the crossing to accommodate the Northeast Regional Climate Center based 100-year precipitation event, coinciding with a king tide while accounting for 3.74' of sea-level rise (National Research Council Scenario II curve at year 2115). The associated performance standards are: documenting of restored AOP and elimination of the tidal restriction with as-builts consisting of both lateral and longitudinal cross-sections.

Lubberland Creek currently passes through a 36-inch squashed and perched corrugated metal pipe at Bay Road. To accommodate at least 1.2 times bankfull width of the natural stream channel, sea level rise and 100-year storm events, the replacement box culvert will span 16 feet. The invert will drop approximately three feet to restore full aquatic organism passage from its current barrier status, with a vertical structural span of 8.5 feet. Approximately two of the 8.5 feet will be embedded substrate, leaving 6.5 feet of vertical open height from channel bottom to structure ceiling. Proposed work includes, but is not limited to: implement road closure of Bay Road and traffic management plan, installation of temporary erosion control measures, installation of temporary cofferdam, installation of new concrete box culvert and headwalls, reconstruction of a more natural stream channel through the culvert structure while using the existing structure to pass flows, redirect stream flow through new crossing structure, removal of existing crossing structure and reconstruction of Bay Road in the vicinity of the culvert, removal of temporary cofferdam, loaming and seeding of road slopes and disturbed areas, guardrail installation, removal of temporary erosion control measures, and environmental monitoring.

2018 SALMON-PISC Mathes Family – Epping, NH

The objective for this project is the preservation in perpetuity of 129.6 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Southeast Land Trust will conserve the parcel which is on the west bank of the Wild and Scenic Lamprey River. It includes 2,330 linear feet of a tributary stream, 4,560 linear feet along the Lamprey, 40.4 acres of wetlands and floodplains, and three confirmed vernal pools. It is also part of a 1,670 acre unfragmented forest block and will result in it being 56% conserved.

2018 SALMON-PISC Mullen Tract – Fremont, NH

The objective for this project is the preservation in perpetuity of 33.8 acres of aquatic resources and associated upland buffers.

The performance standards are receipt by the Corps and NHDES of the recorded preservation documents and approved stewardship plan.

The Southeast Land Trust will preserve the parcel which includes 1,290 linear feet of a tributary to Brown Brook which is a tributary to the Piscassic River. It includes 12.5 acres of wetlands, including 12.1 acres of Prime Wetlands and one vernal pool. Blanding's turtles have been documented on the property. About a third of the parcel is identified as Wildlife Action Plan Tier 1 habitat.

2018 SALMON-PISC Wagon Hill Farm – Durham, NH

The objective for this project is to restore 0.36 acre of salt marsh habitat (296 linear feet) and reduce erosion using the living shoreline approach.

The performance standards are:

- Establishment of erosion resistant sill with new shoreline grades that prevent shoreline erosion at both lower and upper salt marsh faces resulting in no loss or stable /gain in elevation.
- Restoration of approximately 8,500 square feet of low and high marsh with 75% native vegetative cover
- Improved Tidal Buffer Zone; marsh able to migrate into the tidal buffer zone as sea levels rise.
- Public outreach and interpretation using signage and Town of Durham web site.

The Town of Durham will construct and monitor the project. Construction will include grading, planting with native saltmarsh species, and enhancement of the tidal buffer to enable marsh migration as a result of sealevel rise.

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

_____ Date:_____

Robert R. Scott
Commissioner
New Hampshire Department of Environmental Services

_____ Date:_____

Robert J. DeSista
Chief, Regulatory Division
New England District Corps of Engineers