

**REPORT OF THE ACTIVITY OF THE  
NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES  
AQUATIC RESOURCE MITIGATION FUND PROGRAM  
FEBRUARY, 2012**

**INTRODUCTION**

This report is to fulfill the requirement of RSA 482-A: 33 that the Department of Environmental Services (DES) submit an annual report to the Chairpersons of the Fiscal Committee, the House Resources, Recreation and Development Committee and the Senate Energy and Natural Resources Committee (formerly the Senate Environment and Wildlife Committee) “summarizing all receipts and disbursements of the aquatic resource compensatory mitigation fund, including a description of all projects undertaken and the status of the administrative assessment account”. This report also fulfilled the requirement of the Memorandum of Agreement with the Corps of Engineers, New England District, to submit an annual report on the program. This report is for Fiscal Year 2011, from July 1, 2010 to June 30, 2011.

The New Hampshire Aquatic Resource Mitigation (ARM) Fund was established in 2006 by enactment of RSA 482-A:28 through RSA 482:33 to provide wetlands permit applicants with an additional option to address federal and state mitigation requirements when impacts to jurisdictional wetlands and other aquatic resources are permitted that require mitigation. DES manages and implements the ARM Fund in accordance with both the state statutory requirements (RSA 482-A:28-32) and a Memorandum of Understanding between DES and the United States Army Corps of Engineers that ensures consistency and compliance with federal standards.

The ARM Fund Program provides wetlands permit applicants with the option to contribute payments to this fund *in lieu of* implementation of several other possible and more traditional compensatory mitigation alternatives. These other wetlands mitigation options might include restoration of existing impaired wetlands, land acquisition and preservation, or construction of new wetlands. In many circumstances, these other options may be more costly, time consuming or complex to implement for the wetlands permit holder as compared with an ARM Fund contribution.

DES accounts for ARM Fund payments on a major watershed basis. When sufficient funds are accrued for a watershed, DES will issue a request for proposals, evaluate the proposals received, and award grants for the projects determined to have the highest long-term environmental benefits in the specific watershed. Projects that have been awarded funds include those that provide significant wetlands restoration or land conservation and are focused on areas of important and/or vulnerable wetlands with regional significance. A summary of the results for FY 2011 is provided below.

**FY 2011 Permits Issued with ARM Fund as Compensatory Mitigation and ARM Fund Receipts**

The ARM Fund program has been very successful for permit applicants and has resulted in many significant wetland preservation and restoration projects across the state. Table 1 provides a list of the projects permitted in FY 2011 where the wetlands permit holders selected payment to the ARM Fund to satisfy compensatory mitigation requirements. Permit holders have been separated into two categories: those that paid into the ARM Fund and those with delayed payments. The table also shows the project impacts to wetlands (i.e., the acres of wetlands permitted to be filled) and ARM Fund payments for each project. In FY 2011, twelve permits with 9.87 acres in cumulative impacts were issued where permit holders elected compensatory mitigation by payment to the ARM Fund. The ARM Fund received mitigation fees of \$627,860.00 for 7 projects. In addition, five projects were permitted with estimated total wetland impacts of 2.85 acres and expected ARM Fund compensatory mitigation fees of \$361,050.00 to be paid in either FY 2012 or FY 2013. Payments were delayed for these four projects because the projects were delayed either because the owner needed to wait until economic conditions improved or there were local permitting issues. In each case, DES granted an extension with the condition that the ARM Fund administrative fee (discussed further below) was submitted as a partial payment and to cover project review costs. Overall, the twelve projects approved for the payment option amount to an estimated \$988,910.00 into the Fund.

**TABLE 1. WETLAND PERMITS ISSUED IN STATE FY 2011 WHERE APPLICANT USED ARM FUND FOR COMPENSATORY MITIGATION.**

<b>TOWN/ DES/CORPS FILE NUMBER</b>	<b>WATERSHED</b>	<b>DATE PERMIT ISSUED</b>	<b>WETLANDS IMPACTS (acres)</b>	<b>ARM FUND REVENUES</b>	<b>PAYMENT DEPOSIT DATE (FISCAL YEAR)</b>
<b>PROJECTS WITH ARM FUND PAYMENTS MADE BY PERMIT HOLDERS IN FY 2011</b>					
<b>Durham 2005-556/2005-1863</b>	Salmon Falls to Piscataqua River	7/6/2010	0.41	\$55,561	July, 6 2010 (FY 2011)
<b>Hooksett 2010-1370/2010-1957</b>	Merrimack River	8/31/2010	0.11	\$9,813	August 31, 2010 (FY 2011)
<b>Enfield 2010-1525/2010-1320</b>	CT to White River to Bellows Falls	10/1/2010	2.64	\$322,892	October 1, 2010 (FY 2011)
<b>Lebanon 2009-2853/2010-128</b>	CT to White River to Bellows Falls	10/12/2010	2.65	\$71,250	October 12, 2010 (FY 2011)
<b>Alton 2010-1261/2010-1419</b>	Winnepesaukee River	10/21/2010	1.13	\$157,802	October 21, 2010 (FY 2011)
<b>Lincoln 2010-2355/2010-2486</b>	Pemigewasset River	1/14/2011	0.04	\$4,364	January 14, 2011 (FY 2011)
<b>Concord/Penacook 2010-1970/2010-2507</b>	Contoocook	1/18/2011	0.04	\$6,178	January 18, 2011 (FY 2011)
<b>Subtotal</b>			<b>7.02</b>	<b>\$627,860.00</b>	
<b>PROJECTS WITH PERMITS ISSUED IN FY 2011 AND PAYMENTS DELAYED UNTIL FUTURE YEARS</b>					
<b>Newbury-Goshen 2010-26/ 2010-337</b>	CT River to White River to Bellows Falls		0.51	\$74,180	June 11, 2012 (FY 2012)
<b>Berlin, 2009-2366/2010-2544</b>	Upper Androscoggin		0.65	\$76,410	August 31, 2012 (FY 2013)
<b>Berlin/Milan 2009-2989/2010-130</b>	Upper Androscoggin		1.10	\$123,971	August 31, 2012 (FY 2013)
<b>Epsom 2009-396/2009-2494</b>	Merrimack		0.53	\$77,891	June 20, 2012 (FY 2012)
<b>Hanover, 2010-428/2010-2284</b>	CT River to Waits to White Rivers		0.06	\$8,598	March 22, 2013 (FY 2012)
<b>Subtotal</b>			<b>2.85</b>	<b>\$361,050.00</b>	
<b>TOTAL, ALL PROJECTS.</b>			<b>9.87</b>	<b>\$988,910.00</b>	

**ARM Fund Disbursements in FY 2011**

The ARM Fund program grants funds to projects involving wetland and/or stream restoration, wetland enhancement, and/or preservation of upland buffers associated with high quality aquatic resources. The Fund has been utilized by projects in several watersheds since the program inception. The projects that completed the restoration or preservation tasks and were provided payment during the 2011 fiscal year are noted in Table 2.

**TABLE 2. ARM FUND DISBURSEMENTS FOR COMPLETED PROJECTS IN STATE FY 2011**

<b>PROJECT NAME/APPLICANT</b>	<b>WATERSHED</b>	<b>TOWN</b>	<b>ARM FUNDS DISBURSED</b>	<b>MATCHING FUNDS</b>	<b>PROJECT DESCRIPTION</b>
<b>Hooksett Clay Pond Headwater Project, Hooksett</b>	Merrimack River	Hooksett	\$200,000	\$1,065,000	733+/- acres of high value wildlife habitat in the Clay Pond Headwaters area, including over 130 acres of wetlands, vernal pools, and exemplary natural communities. It was protected by combining town ownership with a conservation easement(s) held by Bear-Paw Regional Greenways.
<b>Oxbow Property, Canterbury</b>	Merrimack River	Canterbury	\$300,000	\$510,000	A conservation easement will be held by the Forest Society protecting a 294-acre parcel in Canterbury. Protecting this land is of critical conservation importance as it includes 26 acres of wetlands and two miles of undeveloped shoreline on the Merrimack River, as well as exemplary plant communities and habitat for several state-listed plant and animal species.
<b>Stewart Property, Francestown,</b>	Merrimack River	Francestown	\$48,000	\$0	The funds were used to purchase, fee simple, 55 acres of the Stewart land in Francestown with an easement held by the Francestown Land Trust. This purchase will protect over 5,000 linear feet of shoreline along Rand Brook and the South Branch of the Piscataquog River, including enhancement involving 2 acres of wetland restoration of the riparian buffer and the removal of invasive species in both wetlands and uplands.
<b>Potter Farm Conservation/Wetland Enhancement Project, Northumberland</b>	Upper Connecticut River	Norhumberland	\$135,687	\$233,702	326 acre property purchased by The Nature Conservancy for protection and restoration of floodplain forests, maintain agricultural land uses, and protect uplands and rivershore connectivity. The project is an entire ridgeline-to-rivershore swath. This parcel is part of TNC's "Kilkenny Matrix Forest Block", comprising 119,600 acres of unfragmented forest.
<b>Nesenkeag Brook Headwaters Project, Londonderry</b>	Merrimack River	Londonderry	\$19,399	\$5,970	The Town of Londonderry used funds to review the hydrologic conditions for future wetland enhancement opportunities. The restoration of the Nesenkeag Brook Headwaters site attempts to return a degraded ecosystem to its natural potential.
<b>TOTAL FUNDS DISBURSED</b>			<b>\$703,086.00</b>	<b>\$1,814,672.00</b>	

**TABLE 3. ARM FUND: PROJECTS AWARDED FUNDS BY WATERSHED IN STATE FY 2011**

<b>PROJECT NAME/APPLICANT</b>	<b>WATERSHED</b>	<b>TOWN</b>	<b>ARM FUNDS OBLIGATED</b>	<b>MATCHING FUNDS</b>	<b>PROJECT DESCRIPTION</b>
<b>WINNIPESAUKEE RIVER WATERSHED</b>					
<b>Tioga River Wildlife Conservation Area/ Town of Belmont</b>	Winnepesaukee River	Belmont	\$30,000	\$4,600	The Town of Belmont proposed to eradicate the current infestation of Glossy Buckthorn on the Tioga River Wildlife and Conservation Area. The most significant threat of the invasion is to Prime Wetland 18, one of the highest ranking wetlands in Belmont. Wetland enhancement is within 25 acres of wetland habitat with control methods implemented to eliminate and manage invasive species on the site.
<b>Coffin Brook Road Floodplain Connectivity Improvement Project/ Town of Alton</b>	Winnepesaukee River	Alton	\$23,000	\$35,707	Enhancement of 30 acres of a floodplain wetland system through the installation of a series of floodplain culverts in a specific area of the floodplain to restore hydrologic connectivity of the floodplain and prevent flooding into the road surface by allowing flow during storm events. Installation of selected 45" wide by 29" high elliptical culverts improves passage in the floodplain.
<b>WINNIPESAUKEE RIVER WATERSHED SUBTOTAL</b>			<b>(\$53,000.00)</b>	<b>(\$40,307.00)</b>	
<b>SALMON FALLS RIVER-PISCATAQUA RIVER WATERSHED</b>					
<b>Siemon Family Charitable Trust Conservation Land/ N.H. Fish and Game Department.</b>	Salmon Falls – Piscataqua Rive	Milton	\$29,300	\$191,800	The NHFG was donated the value of a conservation easement on the 366.1 acres of land with 1.9 miles of riparian corridor along Jones Brook. The funds were used to complete components of the land transaction. The property consists of 44.75 acres of NH Wildlife Action Plan (WAP) Tier 1, Highest Ranked Wildlife Habitat by Ecological Condition in the State; 73.65 acres of WAP Tier 2, Highest Ranked in Biological Region; and 239.23 acres of WAP Supporting Landscape.
<b>Upper Oyster River Channel and Fish Passage Restoration Project, Barrington./ Piscataqua Region Estuaries Partnership</b>	Salmon Falls – Piscataqua Rive	Barrington	\$100,000	\$101,250	Culvert removal to improve fish passage to approximately 4 miles of upstream riverine habitat in the headwaters of the Oyster River. The project will improve habitat for the American brook lamprey (state endangered species), wild eastern brook trout, American eels, and other aquatic life. The project will provide protection of 18 acres of land along the river.

PROJECT NAME/APPLICANT	WATERSHED	TOWN	ARM FUNDS OBLIGATED	MATCHING FUNDS	PROJECT DESCRIPTION
<b>River Road Marsh Restoration, New Castle/New Castle Conservation Commission</b>	Salmon Falls–Piscataqua River	New Castle	\$27,993	\$27,250	The New Castle Conservation Commission in partnership with the Rockingham County Conservation District will provide 0.5 acres of salt marsh restoration. Once restored, this wetland is expected to have high wildlife habitat value, sediment retention/ nutrient removal , educational and aesthetic potential.
<b>Odiorne Point State Park Maritime Cobble Beach and Coastal Salt Pond Marsh Restoration Project, Rye/ Rockingham County Conservation District</b>	Salmon Falls – Piscataqua Rive	Rye	\$43,000	\$6,100	The Rockingham County Conservation District was awarded \$43,000 for 3.8 acres of restoration and 6.45 acres of enhancement work at the state park. Located at Odiorne Point State Park in Rye NH, the NH Natural Heritage Bureau defines the aforementioned sites as “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
<b>Berry Brook Watershed Restoration through Stream Restoration, Buffer Development, and LID Retrofits/ UNH Stormwater Center and City of Dover.</b>	Salmon Falls – Piscataqua River	Dover	\$440,000	\$198,100	The project will significantly restore and reconnect 0.9 miles of 1 <sup>st</sup> order stream, Berry Brook to the Cochecho River. The work includes restore/daylight/recreate 1,960 feet of stream channel, remove fish passage barriers, and provide significant treatment of 164 acres of watershed for diadromous fish and other aquatic species. Berry Brook is an urban stream which will be improved through two efforts: 1) Wetland and stream restoration, buffer development and conservation, and 2) Base flow and water quality improvements.
<b>Exeter River Water Quality Improvements and Buffer Preservation/Town of Brentwood</b>	Salmon Falls – Piscataqua River	Brentwood	\$78,468	\$50,420	The Brentwood Conservation Commission will preserve 16 acres of frontage on the Exeter River, and 0.3 acres of riparian enhancement to improve water quality and habitat. The project targets and expands on projects identified in the Exeter River Geomorphic Assessment and Watershed-Based Plan: Middle Exeter River (2010). In that plan, these are Projects #1-3 which include stormwater retrofits, riverbank stabilization, buffer plantings, and conservation easements totaling approximately 16 acres.

PROJECT NAME/APPLICANT	WATERSHED	TOWN	ARM FUNDS OBLIGATED	MATCHING FUNDS	PROJECT DESCRIPTION
<b>Sprucewood Forest/Trust for Public Lands</b>	Salmon Falls – Piscataqua River	Durham	\$500,000	\$500,000	The primary goal for the project is to permanently conserve 176 acres comprised of 142 acres of uplands, 34.04 acres of wetlands, 0.9 acres of floodplain forest, diverse wildlife habitat and natural communities and frontage on Oyster River. Town of Durham will work with the Southeast Land Trust of NH to develop a stewardship/management plan after they have assumed ownership of the property. A significant portion of the subject property is contained within the 2,690 ac 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, the Town and private land trusts.
<b>Evans Mountain/Town of Strafford, Bear-Paw Regional Greenways</b>	Salmon Falls – Piscataqua River	Strafford	\$367,750	\$580,105	The goal of the project is to permanently protect the 1,015-acre Evans Mountain property in Strafford by combining fee ownership by the Town of Strafford and the Blue Hills Foundation with a conservation easement(s) held by Bear-Paw Regional Greenways. 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. The project includes a wetland restoration and aquatic resource improvement component which proposes to restore 18 degraded sites. More than 980 acres of the property are ranked as either "highest ranked in the state" or "highest ranked in the biological region" in the 2010 Wildlife Action Plan.
<b>SALMON FALLS RIVER-PISCATAQUA RIVER WATERSHED SUBTOTALS</b>			<b>(\$1,586,511.00)</b>	<b>(\$1,655,025.00)</b>	
<b>TOTAL, ALL WATERSHEDS</b>			<b>\$1,639,511.00</b>	<b>\$1,695,332.00</b>	

### ARM Fund Projects Awarded Funds in FY 2011

In March, 2010, DES announced the availability of ARM funds accrued in the following two watersheds: Winnepesaukee River watershed, and the Salmon Falls to Piscataqua River watershed. These two watersheds had accumulated funds over a two year period and were required by administrative rules to be advertised for release. Pre-proposals were requested to be submitted by April. The projects that propose restoring or protecting similar functions as those lost by the projects that generated the funds were reviewed by the ARM Fund Site Selection Committee. Upon their review, the selected projects are invited to provide full applications to be submitted by August, 2011. The SSC then conducts meetings, field inspections, and utilizes evaluation criteria to score and rank the projects for funding. Their recommendations are provided to the Army Corps of Engineers and the Wetland Council for final approval.

Two projects were awarded funds from the Winnepesaukee River watershed account and eight projects were awarded funds in the Salmon Falls to Piscataqua River watershed. Table 3 provides details of the past fiscal year's disbursements and a brief description of the gain in resources from each completed project.

### Status of the Administrative Assessment Account

One component of an ARM Fund payment is an administrative assessment established by RSA 482-A:30, III and RSA 482-A:30-a, II. Such account assessments collected shall be used to support up to two full-time positions for administration of the fund. During fiscal year 2011, the assessment was revised from 5% to 20% of the sum of a total payment. Table 4 notes the revenue accrued that supports one full-time position.

**TABLE 4. Status of Administrative Assessment Account**

<b>Administrative Assessment</b>	<b>Revenue</b>
<b>Projects with 5% administrative fee</b>	\$43,979.94
<b>Projects with 20% administrative fee</b>	\$2,108.59
<b>Total for FY 2011</b>	<b>\$46,088.53</b>

### Overall Status of the ARM Fund Account (as of June 30, 2011)

The 2011 fiscal year ended with 10 of the 16 ARM Fund watersheds having accumulated funds. Table 5 describes revenues, expenses, encumbered funds and a balance by each watershed. It should be noted that the following watersheds were advertised in March 2011 with a pre-proposal due in April and full applications due by August, 2011: Upper Androscoggin River, Connecticut River from White River to Bellows Falls, and the Winnepesaukee River watershed. The results of this grant round will be reported in the fiscal year 2012 report.

**TABLE 5. Status of ARM Fund accounts according to watersheds.**

<b>FY 2011 Quarter</b>	<b>Beginning Balance (7/1/10)</b>	<b>Revenues</b>	<b>Expenses</b>	<b>Encumbered</b>	<b>Ending Balance (6/30/211)</b>
<b>Upper Androscoggin River</b>	\$93,819.23	\$9,276.96	\$13,744.55	\$89,000.00	\$351.64
<b>Lower Androscoggin River</b>	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Saco River</b>	\$46,223.29	\$0.00	\$0.00	\$0.00	\$46,223.29
<b>Winnepesaukee River</b>	\$153,737.16	\$165,692.62	\$7,890.12	\$53,000.00	\$258,539.66
<b>Salmon Falls – Piscataqua Rivers</b>	\$1,540,871.89	\$58,339.06	\$2,778.05	\$1,586,511.00	\$9,922.90
<b>Merrimack River</b>	\$652,331.13	\$14,015.11	\$490.68	\$569,000.00	\$96,855.56
<b>Nashua River</b>	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>CT to Millers River</b>	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>CT-Ashuelot to Vernon Dam to Millers River</b>	\$183,533.82	\$0.00	\$0.00	\$178,000.00	\$5,533.82
<b>CT to Bellows Falls to Vernon Dam</b>	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Contoocook River</b>	\$0.00	\$1,235.67	\$1,235.67	\$0.00	\$0.00
<b>CT to White to Bellows Falls</b>	\$0.00	\$414,037.39	\$19,894.50	\$0.00	\$394,142.89
<b>CT to Waits River to White River</b>	\$0.00	\$429.88	\$429.88	\$0.00	\$0.00
<b>Pemigewasset River</b>	\$140,042.02	\$5,237.53	\$872.92	\$113,500.00	\$30,906.63
<b>CT to Johns River to Waits River</b>	\$220,446.53	\$0.00	\$3,448.06	\$0.00	\$216,998.47
<b>Upper CT River</b>	\$148,723.43	\$0.00	\$0.00	\$148,000.00	\$723.43
<b>Total All Watersheds</b>	<b>\$3,179,728.50</b>	<b>\$668,264.22</b>	<b>\$50,784.43</b>	<b>\$2,737,011.00</b>	<b>\$1,060,198.29</b>

Additional information on the ARM Fund program, annual reports noting project awards and announcement of funds available can be found at the NHDES web site at:

<http://des.nh.gov/organization/divisions/water/wetlands/wmp/index.htm>