# New Hampshire Department of Environmental Services
# Wetlands Bureau
# AQUATIC RESOURCE MITIGATION FUND PROGRAM

## Introduction

In March, 2004, the NH Department of Environmental Services (DES) wetlands program adopted a set of mitigation rules that establish what is necessary for an applicant to provide for wetland compensation. The rules spell out ratios for wetland creation, restoration and upland preservation relative to the type of wetland lost through the proposed development. During the 2006 legislative session, the General Court enacted Senate Bill 140, known as Aquatic Resource Compensatory Mitigation. The law became effective on August 18, 2006 and the DES adopted rules for operation of an aquatic resource mitigation fund on June 20, 2007.

The Aquatic Resource Mitigation (ARM) Fund has been created as an additional compensatory mitigation option available to applicants for impacts to wetlands and other aquatic resources. This mitigation option is available for use after avoidance and minimization of impacts to these aquatic resources has been achieved. The Department is authorized to collect mitigation funds *in lieu of* other forms of wetland mitigation as part of a wetlands application. DES holds and manages funds to be offered as grants for potential projects that will accomplish long-term environmental results. These projects must consider the service area goals and replace and/or protect wetland and other aquatic resource functions and values that were impacted by development projects in the service area.

ARM Fund payments are collected according to nine service areas. Projects that have deposited money into the ARM Fund and corresponding information about the wetland loss and the wetland functions and values associated with this loss, can be reviewed at: http://des.nh.gov/organization/divisions/water/wetlands/wmp/documents/arm-fund-ledger.pdf

A Site Selection Committee, made up of representatives from four state agencies and four non-governmental agencies, reviews ARM Fund grant proposals and recommends grant awards to the NH Wetland Council and a federal interagency review team composed of the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Fish & Wildlife Service, and the National Marine Fisheries Service. Funds awarded must be approved by Governor and Council before being disbursed. Details of the DES wetland mitigation program can be found at: http://des.nh.gov/organization/divisions/water/wetlands/wmp/index.htm.

An ideal ARM Fund grant project would provide resource restoration within the context of a proposed land conservation proposal. DES encourages projects that provide connectivity to other protected resources or are in close proximity to the wetland impacts. Opportunities to provide benefit to rare resources such as vernal pools are also looked upon favorably. *Applicants should highlight potential and confirmed vernal pools if possible.* Proposals will be scrutinized for the likelihood of project success and the sustainability of the resource functions and values that are proposed for restoration, enhancement, preservation, or creation. In addition, the overall mitigation potential, environmental significance of the project, cost-effectiveness and partnership potential will be assessed during the evaluation/ranking of applications. Detailed information on projects that have been funded can be provided upon request.

The key to success is the long-term protection of those wetland functions that are restored or enhanced. Where project scores are comparable, preference will be given to those projects that provide long term protection of the project area and its buffer or provide long term management to ensure the greatest environmental benefit from funds available.

## Pre-Proposal Submission Details

Applicants are required to submit a 1-2 page summary (no more than 1,000 words) detailing their service area proposal and a maximum of 2 maps or exhibits. The pre-proposal summary will be reviewed and feedback will be provided as to why the project may not meet the program criteria or how the proposal could be strengthened. The ARM Fund Program pre-proposal form can be found at:
http://www.des.nh.gov/organization/divisions/water/wetlands/wmp/categories/forms.htm

**DEADLINE FOR PRE-PROPOSALS - APRIL 29, 2016**

## 2016 Available Funding

| Service Area | Functions and Values to be Replaced | Wetland Loss (square feet) | Stream Loss (linear feet) | Total Funds Available |
|---|---|---|---|---|
| **1. Androscoggin River** | Carry over funds from 2015 | | | **$480** |
| **2. Saco River** | Carry over funds from 2015. Wildlife and fisheries habitat, shoreline anchoring, groundwater discharge. | **9,497** | **329 linear feet of intermittent stream** | **$22,500** |
| **3. Pemigewasset Winnipesaukee Rivers** | Carry over funds related to fisheries habitat. Floodflow alteration, nutrient removal, sediment retention, bank impacts. | **336 permanent impacts; 59,115 temporary impacts** | **21 linear feet (2015 carry over funds)** | **$107,500** |
| **4. Salmon Falls – Piscataqua Rivers** | Carry over funds from 2015. Nutrient removal and conversion in buffer to streams and forested wetlands (non-tidal). Tidal buffer zone impacts. | **7,779 non- tidal permanent impacts and 25,518 temporary impacts; 14,093 tidal** | | **$233,700 non-tidal; $103,900 tidal** |
| **5. Merrimack River** | Carry over funds from 2015. Nutrient removal, sediment retention, floodflow alteration, fish and wildlife habitat.<br><br>(Vernal pool buffer impacts.) | **466,161 permanent impacts and 50,068 temporary impacts** | **4,039 perennial and 4,135 intermittent** | **$313,000 entire watershed and $828,000 CTAP towns*** |
| **6. Lower Connecticut River** | Carry over funds from 2015. Wildlife habitat, flood storage, alteration, nutrient removal, production export (conversion of PFO to PEM). | **37,917 permanent impacts and 406,960 temporary impacts** | **32 intermittent** | **$319,500** |
| **7. Contoocook River** | Carry over funds from 2015. | | | **$24,000** |
| **8. Middle Connecticut River** | Carry over funds from 2015. Wildlife habitat, groundwater recharge/discharge, nutrient removal. | **48,245 permanent impacts and 114,321 temporary impacts** | **30 perennial** | **$367,500** |
| **9. Upper Connecticut River** | Shoreline stabilization | | **474 perennial** | **$94,800** |

* CTAP communities include: Allenstown, Atkinson, Auburn, Bedford, Bow, Candia, Chester, Concord, Danville, Deerfield, Derry, Dunbarton, Fremont, Goffstown, Hampstead, Hooksett, Hudson, Litchfield, Londonderry, Manchester, Pelham, Pembroke, Raymond, Salem, Sandown, and Windham.

**PRE-PROPOSALS should not be more than 1,000 words. Please include a full size USGS map with boundaries of the project and a second exhibit appropriate to the project (e.g. WAP map). Submittals in excess of these criteria may be disqualified.**

**DEADLINE FOR APPLICATIONS - AUGUST 31, 2016**

# Eligible Projects

Although all projects within project types below are technically eligible for an ARM Fund application submittal, some projects may not be competitive based on established ranking criteria. The ranking can be found in the DES administrative rules at: **http://des.nh.gov/organization/commissioner/legal/rules/index.htm#wetlands**

Because the ARM committee is responsible for selecting projects that are likely to be sustainable long-term, projects should propose methodologies based on success elsewhere and where a monitoring plan will be implemented long-term. The project budget needs to provide for **five years** of monitoring for restoration, enhancement or creation projects. We recommend that you maximize potential rank points by considering the following guidance and contact the DES mitigation coordinator for early input.

**Land/Wetland Acquisition/Legal Protection**

- A rare resource (natural community or threatened/endangered plant/wildlife, or vernal pool complex) will benefit.
- Area was identified in NH Wildlife Action Plan as being of statewide or regional significance.
- Project is adjacent to other conservation lands or provides linkage to other protected parcels.
- Aquatic resources and their associated buffers will be protected.
- Easement language will ensure permanent protection of resources.

**Wetland Restoration/Creation**

- Wetland restoration will enhance/restore/create functions lost in the same HUC 10 watershed. Wetland restoration is not required. However, applicants can increase potential points by including it.
- Include a land protection component as part of the project or project should occur on a property that has already been permanently protected. To receive maximum points, a land protection component must be part of the project proposal.
- Wetland restoration/creation is identified as a priority in a regional or statewide plan.
- A rare resource (natural community or threatened/endangered plant/wildlife) will benefit.
- Restoration plans should be detailed and illustrate a clear link to improving wetland functions.
- Project will demonstrate sustainability of restoration/enhancement effort by including a provision for monitoring.

**Stream Restoration**

- Stream restoration will enhance/restore/create functions lost in the same HUC 10 watershed. Stream restoration is not required. However, applicants can increase potential points by including it.
- Include a land protection component as part of the project or the project should occur on a property that has already been permanently protected. To receive maximum points, a land protection component must be part of the proposal.
- Stream restoration is identified as a priority in a regional or statewide plan.
- A rare resource (natural community or threatened/endangered plant/wildlife) will benefit.
- Bank stabilization, if proposed, is required to improve the system ecologically, not just the human infrastructure.
- Bank stabilization projects where erosion appears natural or where the cause is unknown, in general, are less likely to be funded.
- Restoration plans should be detailed and illustrate a clear link to improving aquatic functions.

**Culverts/Dams**

- Culvert/dam removal or replacement is identified as a priority in a regional or statewide plan. Because culvert and dam removal/replacements are often extremely expensive, there are numerous culverts/dams needing replacement/removal statewide, and there are limited funds in the ARM Fund, the ARM committee is unlikely to recommend full funding for these types of projects unless applicants demonstrate the project is exceptional and has numerous and significant ecological benefits.
- Culvert/dam replacement or removal will enhance or restore functions lost in the same HUC 10 watershed. Wildlife habitat (especially fish) is often the primary function enhanced or restored by these projects but other functions may

be enhanced occasionally.

- Include a land protection component as part of the project or the project should occur on a property that has already been permanently protected. To receive maximum points, land protection must be part of the project proposal.
- A rare resource (natural community or threatened/endangered plant/wildlife) will benefit.
- Aquatic organism passage is improved; preferably goes from non-passable to fully passable to all organisms.
- Number of stream miles connected are maximized. For example, a project that opens up 50 miles of barrier free river is likely to be more competitive than a project site that has additional barriers just up and down river.
- Culvert replacement is not a part of a current or future planned development project requirement.

**Invasive Species Management**

- Invasive Species Management will enhance or restore functions lost in the same HUC 10 watershed. Application should clearly demonstrate which functions are being improved.
- Include a land protection component as part of project. To receive maximum points, a land protection component must be part of the project proposal or the project should occur on a property that has already been permanently protected.
- Treatment methods are known and will not cause negative effects on aquatic resource.
- A long-term treatment plan, if needed, has been established. The ARM Fund is unlikely to fund repeated treatments for a particular area.
- A monitoring plan has been established and a landscape plan for treatment is in place (not just a single parcel).
- A rare resource (natural community, threatened/endangered plant/wildlife) will directly benefit from the treatment.

## Eligible Applicants

Any of New Hampshire's communities wholly or partially located within the service areas are eligible to apply. Other eligible organizations include County governments, Regional Planning Commissions, County Conservation Districts, Watershed/River Associations, state agencies, departments within the University of New Hampshire and other institutions of higher education, community public school districts, and nonprofit organizations. Projects submitted for funding should have the support of the host municipality and this should be clearly documented in a letter of support or in minutes of a meeting where a vote was taken to proceed with the proposal.

## Eligible Activities

To be eligible, every project must be aimed at restoring or protecting wetlands and other aquatic resource functions and values in the service area announced in the application cycle. Projects may also address potential opportunities that improve or protect habitats identified through the Compensation Planning Framework contained in the Final In-Lieu Fee Program Instrument (hereinafter "Instrument") found at:
http://www.nae.usace.army.mil/Portals/74/docs/regulatory/Mitigation/NHinstrument051812.pdf Information in the Instrument as well as regional priority lists and resources developed to address climate change issues should also be closely reviewed. The following categories of project elements are eligible for consideration. Other categories may be considered and should be discussed with the DES Coordinator.

**1. Wetland and Other Aquatic Resource Restoration**

Funds can be used for wetland or other aquatic resource restoration, including the re-establishment of a filled, dredged or otherwise altered resource to its natural condition, in order to restore or enhance lost functions to the greatest extent practicable. This can be accomplished through the removal of fill, restoration of hydrology to the area, or by other means. The request for funds can include development of final restoration plans and the costs associated with the proposed restoration work such as site clearing and excavation, construction management, consulting fees, permit costs, grading and soil augmentation, disposal costs of excavated materials, and planting. The funds can also go towards the permanent legal protection of areas adjacent to the restored resource to insure long-term sustainability, and for subsequent monitoring and maintenance expenses that may be necessary until the site is successfully restored.

**2. Land Preservation**
DES recognizes the importance and the long-term benefits of protecting upland areas associated with wetlands and other aquatic resources. The greater the buffer provided to the wetland or surface water, the more likely the area will continue to provide valuable functions. Requested funds can be used for land preservation, which includes the permanent protection of aquatic resources and associated upland areas using legal mechanisms so that the resource remains in a natural or undeveloped condition. Funds can be used for acquisition of conservation easements or fee simple ownership of land for protection in perpetuity. The conservation interest to be acquired must be land that is not already permanently protected and is not currently owned by the applicant. Allowable expenses include purchase of the fee or easement and associated transaction costs such as property surveys, baseline documentation reports, appraisals, environmental hazard assessments, title review, closing costs, legal fees, registry fees, and subdivision fees. In addition, ARM monies may be used to establish dedicated stewardship funds to ensure the long-term management and protection of the land. If multiple parcels are involved in the conservation project, the DES Coordinator should be contacted to determine if each parcel should be a separate application.

**3. Aquatic Resource/Stream Passage Improvements**
A request for funds can be used for projects that produce habitat improvements so as to provide enhancement of functions within a degraded wetland or improved connectivity in a riparian system. Possible improvements include water quality improvements, tidal flow manipulations, culverts and dam removal, as well as stream or river restoration/enhancement activities. The DES Coordinator should be contacted relative to information on deficient culvert crossing locations and analyses available for assessing geomorphic compatibility and aquatic organism passage.

**4. Wetland Creation**
Funds can be used to implement projects that propose to transform upland areas to wetland areas at a site where the upland was not originally wetland and created by human activity such as by filling or water diversion. A request for funds may include development of final creation plans and the costs associated with the proposed work such as site clearing and excavation, construction management, consulting fees, permit costs, wetland grading and soil augmentation, disposal costs of excavated materials, and planting. Preferably, the funds should also go towards acquisition of areas adjacent to the created resource to insure long-term sustainability. In addition, monitoring and maintenance of the areas should also be included in the request.

## Leveraging of Funds

Leveraged funds are defined as additional non-ARM funding for a project that is counted toward completion of the project. Applicants are encouraged to pursue partnerships as much as possible and leveraged funds should be noted in the budget materials. Having more partners that assist with funding a project is often a key to success. Please note most of the ARM funds are collected to meet state and federal requirements. **Therefore ARM funds *cannot* be used as match for other federal grant programs that require non-federal match. If there is a question about leveraging funds, the DES ARM Fund coordinator should be contacted.**

## Application Submission Details

One hard copy and one electronic copy (pdf format on a cd) of the completed application and all associated documentation are due at the DES Wetlands Bureau office no later than **4:00 PM** on the application deadline date. The application should take into consideration comments provided by DES on the pre-proposal summary.

**When submitting an application, please provide: a project narrative (page 6), maps and other supporting information (pages 7 & 8), and a completed application form.**

All application materials shall be submitted to:

**Lori Sommer, NHDES-Wetlands Bureau, PO Box 95, Concord, NH 03302-0095**
***Lori.Sommer@des.nh.gov*** ***(603) 271-4059***

# Project Narrative

**The application requests submission of a narrative that answers the following questions. An application will likely rank higher if the project narrative addresses the evaluation criteria in the DES rules (Env-Wt 807.18) found at: http://des.nh.gov/organization/commissioner/legal/rules/index.htm#wetlands**

**1. What are the project's goals and how will you accomplish them? Include a description of how the project proposes to gain or protect functions and values similar to those impacted in the service area.**

Describe what the project is attempting to accomplish with respect to wetland or other aquatic resource restoration, protection, or habitat improvement. Explain how protection measures, including conservation easement terms where relevant, will explicitly protect the functions and values of wetlands on the property. Discuss any existing or potential threats to the property's wetland resources. To the extent possible, include what will be achieved and how the results will be measured and monitored.

**2. If the project involves manipulation of the site, describe how the construction practices will be carried out and methods to be used to stabilize the site. Include the provisions for long-term monitoring and maintenance.**

Describe how the project will be carried out to achieve the project goals. Items to address include the techniques to be used, items to be removed or installed, soil and plant needs for the wetland area and buffer, and other items necessary to implement the plan. Details on the history of the site and the methodology to gain wetland functions and values should be provided. This should include a review of questions in the *New Hampshire Method* that can indicate potential need for restoration or improved ecological function found at: http://extension.unh.edu/resources/files/Resource001874_Rep3164.pdf

Describe the restoration/creation/habitat improvement work to be completed and the proposed plans for construction, and any long-term measures necessary for the overall success of the project. The DES rules that note these details are Part Env-Wt 805 found at: http://des.nh.gov/organization/commissioner/legal/rules/documents/env-wt800.pdf

**3. If the project involves preservation of uplands adjacent to aquatic resources, describe how long-term protection will be provided. Describe how the parcel provides connectivity to other protected resources and how it relates to the resources impacted.**

Provide details of how permanent land conservation will be accomplished through conservation easements or fee simple acquisition. Information about the project location relative to source water protection areas, wellhead protection areas, and if it is within a high-yield stratified drift aquifer is used in the site selection committee's assessment and can be found at: http://des.nh.gov/onestop/index.htm The NH Fish & Game Wildlife Action Plan at: http://www.wildnh.com/Wildlife/wildlife_plan.htm provides information relative to restoring or maintaining critical habitats and populations of the state's species of conservation and management concern. An application may score higher if the proposed parcel lies in close proximity to habitats of high value and in areas of where the impact(s) occurred. It is suggested to perform a check with the NH Natural Heritage Bureau for endangered, threatened, special concern species (wildlife or plants), or exemplary natural communities found at: https://www2.des.state.nh.us/nhb_datacheck/ A review of the project location relative to the overall landscape context is also important, especially if the area adds to existing protected resources, provides a connection between other protected lands that are currently unconnected, is within a large contiguous block of land, or relates to existing conservation plans. Information regarding the location of other existing protected lands is available at: http://granitview.unh.edu/. The narrative should include information if the project is identified in any regional, state or federal environmental priority plan such as a prime wetland by a municipality or recognized in a regional resource study.

4. **What are the schedule and costs for the project?**

Describe the project tasks, when work will be carried out, and what the end results will be. Provide a proposed budget that shows the costs for each task to be paid by ARM funds and those supported by matching funds. While matching funds are not required to fund a project, preference may be given to projects that have leveraged more matching funds. Matching funds can include in-kind services. This proposal MUST reflect all costs that are necessary to achieve a completed project.

## Supporting Information for All Applications

**Please submit the following information with the application form and project worksheet:**

* A USGS topographic map that identifies the property(ies) that are the subject of this application for mitigation funds, and any other protected lands within the immediate service area or in the vicinity of the property. An electronic shape file of the site presented in polygon form should also be submitted.

* A tax map or other appropriate map, at a scale that ensures all details are legible, which identifies the property noted in the application. Provide detailed instructions on how to gain access to the property to view it.

* A property map of each parcel to be acquired with mitigation funds under this application, at a scale that ensures all details are legible, that identifies the approximate areas of wetlands, surface waters, streams, confirmed vernal pools, uplands, fields, forest, all structures or land alterations, utilities, wells, roads or trails, gravel pits or disturbed areas, and any easements or rights-of-way. All wetlands shall be classified using cover classes defined by the US Fish and Wildlife Service Manual FWS/OBS-79/31 Classification of Wetlands and Deepwater Habitats of the United States, Cowardin et al, 1979: www.des.nh.gov/organization/divisions/water/wetlands/documents/cowardin.pdf. Both the wetland and upland classification codes can also be provided in accordance with the Natural Communities of New Hampshire. Note: a wetland base map for a given region can be found at: http://nhwetlandmapper.unh.edu/.

*A functional assessment of each of the wetlands to be restored, protected, enhanced, and/or created should be provided using the Method for Inventorying and Evaluating Freshwater Wetlands in New Hampshire (2013) found at: www.nhmethod.org (NH Method) or Method for the Evaluation and Inventory of Vegetated Tidal Marshes in New Hampshire (1993) (Coastal Method), as amended. The name and qualifications of the person completing this evaluation should accompany this analysis. Should the number of wetlands on the parcel be of such number as to be cost prohibitive in performing an evaluation of wetland functions, an alternative assessment of wetland functions and values to be replaced shall be provided and the preparer's qualifications and methodology for determination shall be noted with the application form. Preference will be given to those projects for which a detailed wetland evaluation has been completed by a Certified Wetland Scientist. A summary table of the wetlands on site and the functions and values associated with each wetland shall be included with this application package. For restoration projects, an indication of which functions will be enhanced or restored should be highlighted in this table.

*A map of the soil types on the project site showing the greatest detail available. If more specific data is unavailable, a U.S Department of Agriculture, Natural Resource Conservation Service (NRCS) map may be prepared using the Web Soil Survey at http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

*Information relative to any state or federal threatened or endangered species or exemplary natural communities should be obtained from the Natural Heritage Bureau (NHB). Natural Heritage information can be obtained at: https://www2.des.state.nh.us/nhb_datacheck/. If you do not have Internet access, you may contact NHB directly at (603) 271-2215 x 323 for information about obtaining the required documentation.

* A summary of known or potential contaminant sources as identified in the NHDES GIS "One-Stop" program (see http://des.nh.gov/onestop/index.htm)

* A brief description of the proposed management or stewardship plan for the property.

**For restoration, creation, or habitat improvement proposals, submit the documentation as follows:**

1. Confirmation that the applicant is a political subdivision, a governmental agency, or a non-profit, 501(c)(3) organization having land conservation as a principal element of its mission, or a signed and dated statement from such an entity stating the willingness of the entity to carry out the proposed project.

2. Information on how the property will be acquired or written permission signed by the landowner and notarized giving the applicant permission to perform the proposed work;

3. Information on the necessary local, state, and federal authorizations or permits to be applied for or acquired to conduct the wetland restoration/creation/habitat improvement work.

**For land protection proposals, submit the documentation as follows:**

1. Confirmation that the applicant is a political subdivision, a governmental agency, or a non-profit, 501(c)(3) organization having land conservation as a principal element of its mission, or a signed and dated statement from such an entity stating the willingness of the entity to negotiate the proposed acquisition.

2. A written acknowledgement signed by the landowner, stating that the landowner is aware of this Aquatic Resources Mitigation proposal and approves of its submission. If the applicant has a signed Purchase and Sales Agreement or other legally binding contract to acquire a legal interest in the property, that document may serve in place of the landowner acknowledgement.

3. Documentation of how the applicant determined the market value of the legal interest (fee simple or conservation easement) to be acquired. If a fair market value appraisal prepared by certified appraiser does not already exist for the property, then: a) the applicant should provide a brief explanation of how the purchase price for the fee or easement was determined for the purposes of the budget contained in this proposal; and b) the applicant shall obtain an appraisal after the applicant receives notification from DES that the applicant's application for funding has been selected and prior to the funding being provided.

## Application Process

Once applications are received, they are evaluated by the DES Mitigation Coordinator for eligibility and provided to the US Army Corps of Engineers for public notice and to the NH Department of Historic Resources for review and comment. The applications are then ranked according to set criteria (see evaluation criteria in the DES rules, Env-Wt 807.18) by the Site Selection Committee. Once the projects are chosen, the Site Selection Committee decisions are forwarded to the Wetlands Council and federal agencies for approval. Upon approval, the applicant shall be contacted with a letter that notes the documents and agreements necessary for final submittal to the Governor and Executive Council. For those projects that are not selected for funding, a letter will be sent to the applicant. Disbursal of ARM Funds will occur after grant agreements have been submitted and authorized by the Governor and Council.