VIRGINIA AQUATIC RESOURCES TRUST FUND ANNUAL REPORT - 2012

June 1, 2013

This document serves as the required annual reporting of the status and activities of the Virginia Aquatic Resources Trust Fund. The report includes a summary of the permitted impacts and liabilities; associated mitigation payments; and the projects and credits proposed, constructed/implemented, and released to mitigate those impacts. This report provides information on the history of the Fund (1995-2012) and detail specific activities conducted by the program in 2012 (January 1 – December 31, 2012).

The information is divided into the following sections:

- **I. Introduction** Provides general purpose and goals of the program, Conservancy's role and focus, and changes in the program based on the 2008 mitigation rule and new operating Instrument.
- **II. Program Summary** Provides summary information on payments into and credits generated by the program from 1995-2012.
- III. Summary of 2012 Credit Sales, Project Proposals, and Funding Authorizations Provides a summary of the credit sales, proposed projects, and funds authorized during 2012.
- IV. Basin Summaries Provides overview of basin status through projects, credits, and funding.
- V. Definitions Provides program specific definitions used throughout the report.
- VI. References Provides links to useful reference documents relevant to the program operation.

I. Introduction

The Virginia Aquatic Resources Trust Fund (Program or Fund) is an in-lieu fee program established to provide compensatory mitigation for permitted wetland and stream impacts in Virginia. The Fund is administered by The Nature Conservancy (Conservancy) in accordance with a Program Instrument (Instrument) approved on July 14, 2011 by the Norfolk District of the United States Army Corps of Engineers (Corps) and the Virginia Department of Environmental Quality (DEQ). The Instrument details the establishment and operational procedures for the Fund and supersedes and replaces the Virginia Aquatic Resources Trust Fund Program MOU, dated December 18, 2003 (2003 Amendment), which had in turn amended the Virginia Wetlands Restoration Trust Fund Program Memorandum of Understanding dated August 18, 1995 (1995 MOU).

A. PURPOSE AND GOALS

The purpose of the Fund is to provide a mechanism for compensatory mitigation for impacts to aquatic resources authorized by relevant federal and state laws and regulations, while maximizing the benefit to the aquatic environment and the public interest. The Program Instrument establishes guidelines, responsibilities and standards for the establishment, use, operation and maintenance of the Program in

a way that brings the Program into compliance with revised regulations, as set forth in 33 CFR Part 332, governing compensatory mitigation for activities authorized by Department of Army permits. The parties intend to achieve no net loss of existing wetland acreage and functions pursuant to Va. Code § 62.1-44.15:21(B), and to accomplish mitigation projects in Virginia efficiently and at meaningful scales and in beneficial ecological contexts so as to provide for a significant net gain of aquatic resource functions and values wherever possible.

The Program may be used for compensatory mitigation for unavoidable impacts to Waters, including wetlands, of the United States and State Waters that result from activities authorized under Section 404 and/or 401 of the Clean Water Act (33 U.S.C. § 1251 et seq.), the Virginia Water Protection Permit Regulation (9 VAC 25-210 et seg.), and/or Section 10 of the Rivers and Harbors Act (33 U.S.C. § 403). More specifically, the Program may be utilized to provide compensatory mitigation for impacts permitted by the Corps or DEQ involving: (a) Corps General Permits; (b) DEQ General Permits; (c) Corps and DEQ Individual Permits and unauthorized activities impacting less than three (3) acres of waters (including wetlands) other than streams and/or less than two thousand (2,000) linear feet of streams; and (d) in other cases if agreed upon by the Corps, DEQ and the Conservancy. The Conservancy may elect to reject any payments for impacts greater than three (3) acres of wetlands and/or two thousand (2,000) linear feet of streams, or payment from impacts to Heritage resources as defined by the Virginia Department of Conservation and Recreation, Division of Natural Heritage. In determining whether to accept a payment for any impact described in the preceding sentence, the Conservancy may consider various factors in its discretion, including but not limited to: (a) the effect of the impact(s) on the Conservancy's conservation priorities, and (b) the Conservancy's ability to mitigate for the impacts in the appropriate watershed.

The purpose of compensatory mitigation is to offset impacts to Waters of the U.S. and State Waters, including wetlands and streams. Therefore, priority is given to mitigation that replaces lost functions and values of waters, wetlands and streams, as determined by the Interagency Review Team (IRT). Additionally, it is the intent of the signatories to the Program Instrument that the standards of specific compensatory mitigation sites or projects authorized under the Instrument will be equivalent to the standards of mitigation banks. Where possible and appropriate, the Program uses equivalent templates and policies as those used for mitigation banks in Virginia.

B. PROGRAM SERVICE AREAS

The areas in which this Program is authorized to provide compensatory mitigation required by Corps and DEQ permits (Service Areas) are the whole or partial watersheds of the: Atlantic Ocean, Chesapeake Bay, Chowan River, Lower James River, Middle James River, Upper James River, New River, Potomac River, Rappahannock River, Roanoke River, Shenandoah River, Tennessee River and York River basins. These Service Areas are further described and illustrated in the Compensation Planning Framework for the Fund (www.nature.org/vartf - Trust Fund Instrument Exhibit A). The Fund's Annual Report tracks and reports program activities, including impacts, payments, and credits based on these larger basins (see Section IV). In its actual operations, Service Areas for specific Fund projects are often geographically limited within the major river watershed, and generally follow the Code of Virginia Section 62.1-44.15:23 which limits bank service areas to the same or adjacent fourth order subbasin within the same major river watershed., with further limitations based on physiographic province as appropriate and approved by the IRT. Please note that impacts from the Big Sandy River were received into the Fund historically, but since 2008, the Fund no longer accepts funds related to, or as compensation for, impacts in the Big Sandy River watershed.

C. CONSERVANCY FOCUS

The Fund solicits, locates, designs, and implements projects in accordance with its approved

Compensation Planning Framework. Largely based on the Conservancy's Conservation by Design approach, this framework helps to ensure that the Fund employs a watershed-based approach to compensatory mitigation. While the full Compensation Planning Framework is fairly complex and quite detailed, the hallmark of this approach is identifying a watershed's most ecologically diverse, resilient, and significant aquatic resources and locating and implementing compensatory mitigation projects that protect and restore those resources. Thus, in addition to the compensatory mitigation provided by the approved wetland and stream projects, many of the Fund projects provide habitat for state and/or federal threatened or endangered species and have documented occurrences of Virginia Department of Conservation and Recreation's Natural Heritage Elements and thus contribute to the protection of Virginia's rare plants, animals, and natural communities. And because they are located together in areas of significant aquatic resources, the Fund's mitigation sites provide greater ecological benefit than would an isolated project with the same mitigation activities. In addition, the large size of many of the projects (including both the mitigation areas and additional protected acreage) provide significant habitat for wildlife that depend upon large, contiguous forest blocks while providing additional buffering protection for aquatic resources. These projects may also provide corridors to connect other preserved properties. Examples of the Fund's contribution to larger conservation efforts include its work within the Clinch River watershed, along the Northwest River, and the Dragon Run (www.nature.org/vartf - 2011 Annual Report Attachments \underline{D} and \underline{E}).

D. REGULATORY CHANGES AND TRANSITION

On April 10, 2008, the Corps and the Environmental Protection Agency (EPA) released the final rule on "Compensatory Mitigation for Losses of Aquatic Resources" (Federal Register Vol. 73, No. 70). The final rule issues "regulations governing compensatory mitigation for activities authorized by permits issued by the Department of the Army." These regulations establish equivalent performance standards for all forms of mitigation, including in-lieu programs. After the release of the final rule, the Conservancy worked with the Corps and DEQ to make the governance and operations changes necessary to comply with the new regulations. These included assigning advance credits and establishing the associated pricing structure, defining the Fund's Compensation Planning Framework, and determining credit releases for approved and successful projects. These and other changes were incorporated into the new Program Instrument, which was released for public comment in February 2011 and finalized and approved by the Corps, DEQ and the Conservancy in July 2011. Key operational changes made in 2011 to comply with the new Program Instrument included:

- Defining Service Areas for each project when proposed and providing additional project specifics in accordance with the mitigation template.
- Releasing proposed projects for public comment.
- Establishing a formal and broader Inter-Agency Review Team that includes the same agency members as the traditional mitigation banking IRT.
- Corps expanded RIBITS tracking and reporting system to include ILF sites, and TNC worked hard to populate site with present and historical information on Program sites.
- Utilization of full cost accounting, including capturing a higher management fee and accounting for all staff costs.
- Transferring unallocated pre-USM monies at the time of the Program Instrument's signing to USM funds and establishing associated USM mitigation liabilities.

Please see page 26 of the 2011 Annual Report (www.nature.org/vartf) for more information on the operational changes made by the Instrument and the actions the Conservancy, the Corps, and DEQ took to comply with these new provisions.

2012 represents the first full year of the Fund's operation in accordance with the new Instrument. While much of 2011 was devoted to finalizing the Instrument, the Conservancy, Corps, and DEQ have devoted considerable time in 2012 to finalizing new protocols to ensure efficient and effective operation of the Fund, including the establishment of equivalent processes for submitting project proposals and site development plans (similar to bank Mitigation Banking Instruments), all aspects of the IRT's review and approval of the Fund's mitigation projects, development of individual project mitigation plans, and credit request and approval. Where applicable and appropriate, all these processes are based on relevant portions of the Virginia Mitigation Banking Instrument Template and bank processes.

As noted in 2011, projects addressed in this report include those approved and, in many cases, completed under the previous 2003 MOU in addition to those approved and implemented in accordance with the new Instrument. It should be noted and clearly understood that projects approved under the previous MOU were grandfathered under the 2011 Instrument, and are not subject to many of the new requirements. All projects approved since July 14, 2011, including, of course, all projects in 2012, are subject to the terms outlined in the Instrument.

II. Program Summary 1995-2012.

From 1995 through December 31, 2012, the Fund has been used to mitigate for non-tidal wetland, tidal wetland, and stream impacts in the fourteen major river basins in Virginia. These impacts have generated \$57,883,900 in mitigation payments as summarized in Table 1. From these mitigation payments, the Corps and DEQ have authorized \$42,642,300 for the Conservancy to complete activities on 121 approved mitigation projects.

Table 1: Financial Account Summary (1995-2012); figures rounded to nearest hundred dollar

	Mitigation Payments (\$)	Other Revenues (\$) ¹	Allocated Funds (\$) ²	Allocated Funds (Other) (\$) ³	Total Balance (\$)
Non-Tidal Wetlands	21,496,600	406,000	15,935,400	n/a	5,967,200
Tidal Wetlands	743,900	0	552,500	n/a	191,400
Stream USM	13,191,700	0	1,538,600	n/a	11,653,100
Stream pre-USM	22,451,700	1,929,800	24,381,500	n/a	0
General ⁴	n/a	6,744,900	n/a	5,630,800	1,114,100
TOTALS	57,883,900	9,080,700	42,408,000	5,630,800	18,925,800

¹Includes proceeds from land sales, interest, and released credit sales. Only land sales are tracked and reported according to resource type. Interest proceeds and funds from released credit sales are being assigned to the Program's general account. Neither interest funds nor funds from sale of released credits (made only when relevant liabilities or budgets have been fully addressed) carry any associated mitigation liabilities, but both do have to be used, with approval of the IRT, to advance the purposes of the Fund.

Table 2 depicts the mitigation liability (in credits) for each resource for the Program through the end of 2012. Additionally, the table shows the number of credits proposed from the numerous mitigation projects approved, the number of credits that have been constructed or completed but not yet officially

²Includes both funds that have been spent and funds that the IRT has approved for allocation to an approved mitigation project.

³Includes corrective actions funds, administrative fee, equipment fund, Statewide Development fund, staff salaries and expenses, and bank service charges.

⁴Includes all Fund monies not tracked by aquatic resource type or by basin.

released, and the number of credits released. It should be noted that stream Unified Stream Methodology (USM) liabilities and credits represent only those impacts incurred and projects approved since the USM was approved and put into use in 2007. Pre-USM payments are discussed in Table 3.

Table 2: Liabilities and Credit Summary (1995-2012)

	Mitigation Liability (Credits) ¹	Proposed Credits ²	Completed/ Constructed Credits ³	Released Credits ⁴	Total Credits ⁵
Non-Tidal Wetlands	452.93	335.77	197.80	458.21	991.78
Tidal Wetlands	2.86	27.11	20.40	22.54	70.05
Stream USM	30,132	7,992	2,440	8,178	18,610

¹Includes all liability accepted by the Fund from 1995 through 2012. This figure does NOT equal the number of impacts into the Fund (either acres for wetlands or linear feet for streams).

Table 3 shows the number of pre-USM impacts the Fund received and the progress towards completing mitigation projects using the associated mitigation payments. These were impacts received prior to the initiation, approval and use of the USM methodology in January 2007. Due to the lack of standard stream mitigation crediting method prior to the USM, the programmatic goal agreed to by the Corps, DEQ and the Conservancy was to complete a combination of stream restoration, enhancement, and preservation projects with significant ecological benefit. Unlike with the wetland projects and subsequent USM liabilities, "crediting" of stream projects was not done for the Fund until projects were funded by impacts paid through the USM. Therefore, in this and previous annual reports, the mitigation activities for pre-USM stream projects are described with the associated linear footage and protected riparian buffer widths. With the approval of the Program Instrument in 2011, all un-allocated pre-USM stream monies were converted to USM stream liabilities using the established Advance Credit fee for those specific basins.

Table 3: Pre-USM Summary (1995-2012)

Impact (linear feet) ¹	Proposed Stream Mitigation (linear feet) ²	Constructed/ Protected Mitigation (linear feet) ³	Closed Mitigation (linear feet) ⁴
167,690	59,108	371,404	223,461

¹Includes all pre-USM stream impacts received by the Fund.

²Credits expected from Fund projects that have been approved by the IRT but have not yet been constructed/completed or released. These credits may ultimately be released as a result of meeting success criteria. While a certain number is proposed with each project, the actual number of credits released is a factor of design plans, any approved modifications, and the ability of the site to meet success criteria. This number can change.

³Credits from projects that have been constructed or completed but which have not yet met success criteria and been released by the IRT.

⁴Credits that have met success criteria, as determined by the IRT. This may include credits that do not address NNL and are thus are not available for debiting or sale until paired 1:1 with credits that do address NNL.

⁵Total credits expected based upon successful completion of all approved project sites.

²The remaining amount of linear footage from previously approved projects that has yet to be constructed or protected

³Includes all work that has been constructed and/or protected, but have not received project closure status.

⁴Includes all work at sites that have received project closure status.

III. Summary of 2012 Credit Sales, Project Proposals, and Funding Authorizations (January 1, 2012 – December 31, 2012)

As required by the 2008 Mitigation Rule, a complete listing of permits and impacts paid into the Fund, including advance credit sales, is provided below in Table 4. This provides the detail of credit sales and use of the Program as a mitigation provider throughout 2012. The permit number, date of credit sale, location, resource type and amount, as well as the credit type are provided. Credit type is either Advance Credit or Released Credit, as defined in the Definitions section of this report and further in the program Instrument.

Table 4: Summary of 2012 Permits and Credit Sales

				Impa	act	Required	Mitigation	
Permit Number	Sale Date ¹	Basin	HUC	Wetland (acres)	Stream (If)	Wetland (credits)	Stream (credits)	Credit Type ²
10-1256	1/27/12	YK	02080106	0.050		0.050		Adv
11-V0171	3/30/12	NW	05050001	0.630		0.630		Adv
WP4-09-0960	5/2/12	RO	03010101	0.010		0.010		Adv
11-4103	5/24/12	TN	06010101	0.057		0.057		Adv
11-4117	6/28/12	СВ	02080108	0.068		0.136		Adv
11-4117	6/28/12	СВ	02080108	0.010		0.015		Adv
11-6800	7/11/12	СВ	02080108	0.142		0.284		Adv
11-6800	7/11/12	СВ	02080108	0.005		0.008		Adv
11-6800	7/11/12	СВ	02080108	0.005		0.005		Adv
12-0482	9/18/12	PO	02070008	1.900		1.900		Rel
12-4120	9/21/12	TN	06010102	0.390		0.390		Adv
11-1835	10/3/12	NW	05050002	0.193		0.290		Adv
12-1017	10/30/12	AO	02040303	0.022		0.022		Adv
12-1147	11/1/12	AO	02040303	0.070		0.070		Adv
0058-017-E13, C-501	10/17/12	NW	05050001	0.008		0.012		Adv
0058-017-E13, C-501	10/17/12	NW	05050001	0.107		0.107		Adv
11-1535	11/26/12	RO	03010101	0.025		0.050		Adv
11-1535	11/26/12	RO	03010101	0.015		0.015		Adv
12-0076	11/27/12	AO	02040303	1.951		2.986		Adv
12-0366	12/10/12	CH	03010205	0.020		0.020		Rel
11-4103	5/24/12	TN	06010101		665		412	Adv
CSO ³	5/24/12	NW	05050001		100		100	Adv
VMRC # 08- 2168	5/30/12	TN	06010205		200		200	Adv
0058-017-E13, C-501	10/3/12	NW	05050001		944		944	Adv
11-1835	10/3/12	NW	05050002		200		128	Adv
10-1499⁴	1/25/12	YK	02080105	0.001		0.001		Adv
10-1499	1/25/12	YK	02080105	0.001		0.001		Adv
12-0433	10/24/12	AO	02040303	0.020		0.020		Adv
12-0366	12/10/12	СН	03010205	0.060		0.060		Adv
Total Advance				5.760	2,109	5.219	1,784	
Total Released						1.92		
Grand Total				5.760	2,109	7.139	1,784	

¹The date on which the VARTF assumes the mitigation liability.

²Adv = Advance credit Rel = Released credit

³Consent agreement

⁴Bolded wetland entries are tidal wetland sales. All non-bolded wetland entries are non-tidal wetland sales.

During 2012, the Fund has been used to mitigate for non-tidal wetland, tidal wetland, and stream impacts throughout Virginia. These impacts from the 29 permits detailed above generated \$1,083,100 in mitigation payments to the Fund as summarized in Table 5. At the end of 2012, the unallocated balance within the Fund was \$18,925,800.

Table 5: 2012 Financial Summary

	Mitigation Payments (\$)	Other Revenues (\$) ¹	Allocated Funds (\$) ²	Allocated Funds (Other) (\$) ³	Total Balance for 1995-2012 (\$)
Non-Tidal Wetlands	354,900	0	1,815,200	n/a	5,967,200
Tidal Wetlands	43,900	0	10,700	n/a	191,400
Stream USM	684,300	0	961,800	n/a	11,653,100
Stream pre-USM	0	0	0	n/a	0
General ⁴	n/a	254,100	n/a	344,000	1,114,100
TOTALS	1,083,100	254,100	2,787,700	344,000	18,925,800

¹Includes proceeds from land sales, interest, and released credit sales. Only land sales are tracked and reported according to resource type. Interest and released credits sales are assigned to the Program's general account, as neither carries with it any mitigation liability but both do have to be used to advance the purposes of the Fund. ²Includes both funds that have been spent and funds that the IRT has approved for allocation to an approved mitigation project.

During 2012, the Fund proposed five new projects that have the potential to generate 6.7 non-tidal wetland credits and nearly 6,000 stream credits. Construction was completed on several previously approved wetland restoration sites that are expected to generate both non-tidal and tidal wetland credits. Additionally, the Fund received approval on two wetland sites (CH-10 and MJ-1) and one stream site (SH-2) for the release of both non-tidal wetland and stream credits based on meeting success criteria and project milestones as shown in Table 6.

Table 6: 2012 Mitigation Liabilities and Credit Activities

	Mitigation Liabilities Received (Credits) ¹	Proposed Credits ²	Completed/ Constructed Credits ³	Released Credits⁴
Non-Tidal Wetlands	7.06	5.75	29.65	9.64
Tidal Wetlands	0.08	0	3	0
Stream USM	1,784	5,933	0	129

¹Includes all liability accepted by the Fund in 2012. This does NOT equal impacts into the Fund.

³Includes corrective actions funds, administrative fee, equipment fund, Statewide Development fund, staff salaries and expenses, and bank service charges.

⁴Includes all Fund monies not tracked by aquatic resource type or by basin.

²Credits expected from Fund projects that have been approved by the IRT but have not yet been constructed/completed or released. These credits may ultimately be released as a result of meeting success criteria. While a certain number is proposed with each project, the actual number of credits released is a factor of design plans and modifications and the ability of the site to meet success criteria. This number can change.

³Credits from projects that have been constructed or completed but which have not yet met success criteria and been released by the IRT.

⁴Credits that have met success criteria, as determined by the IRT.

In 2012, the IRT authorized \$886,560 for the Conservancy to complete activities on five new projects and additional funding for three previously approved mitigation projects, as described below in Table 7.

Table 7: Projects Approved and Funding Authorized in 2012

Duningt ID	Due is at Name	Resource	New Proposed USM Stream Crediting	New Proposed Wetland Crediting	From the Ariah anime of
Project ID	Project Name	Туре	(credits)	(credits)	Funds Authorized
AO-4	Oyster (Cubberly)	stream, wetland	n/a	3.65	\$31,000
CB-21*	Deep Creek (Level Ponds)	wetland	n/a	n/a	\$50,000
CB-22	Church Neck (Oliver)	wetland, open water	n/a	1.94	\$220,500
CH-17	Piney Grove	stream	4,823	n/a	\$175,000
LJ-14	Lower Chickahominy River (Fowlkes)	stream, wetland	94	0.16	\$50,000
NW-1*	New River (Phipps)	stream	n/a	n/a	\$41,000
TN-11	Pinnacle (Underwood)	stream	1,016	n/a	\$307,060
UJ-1*	Warm Springs Mountain (Phillips)	wetland	n/a	n/a	\$12,000
		Total:	5,993	5.75	\$886,560

^{*}Indicates additional funding approved for projects that had been proposed and approved prior to 2012.

IV. Summary of Credit Sales, Project Proposals, and Funding Authorizations per Basin

As stated in its Instrument, the Fund tracks and reports its activities, including impacts, payments, and credit balances, based on Virginia's major river basins. This section of the report consists of this basin-specific information, usually presented in three tables for each basin. Additional information about these tables is provided below, including a discussion of issues that may arise from reporting credit balances on a basin-wide basis when actual, operational service areas are smaller than the entire basin.

A. Basin Financial Summary Tables – The first table provided for each basin outlines the funding information related to each resource type (non-tidal wetlands, tidal wetlands, USM streams, and pre-USM streams). Funding information is provided for mitigation payments, funds returned through land sales, funds allocated to approved projects, and the resulting balances.

It is important to note that the pre-USM information in these tables is provided simply to give the reader information on how much funding the Program received for this resource type through historic mitigation payments. The Fund receives no pre-USM payments at present (nor will it in the future), and all existing pre-USM monies have been allocated to approved projects.

- **B.** Basin Pre-USM Impacts and Mitigation Activity Summary Tables These tables provide information on pre-USM impacts and associated mitigation activities on a basin-wide basis. While these projects do not have a credit-based mitigation liability and will not generate credits when completed, they do represent on-going work by the Fund to address pre-USM mitigation impacts.
- **C.** Basin Liabilities and Credit Balance Summary Tables Following the 2008 federal mitigation rule and the approval of the Instrument, the operational currency of the Fund has been wetland and stream credits. These tables provide the Fund's version of a basin-wide credit ledger and address mitigation liabilities and credits within each basin for non-tidal wetlands, tidal wetlands, and USM streams.

These tables provide information on the status of the Fund's credit liabilities and balances in a given basin, including total and no net loss (NNL) liabilities, released credits, released credits applied to liabilities, sold released credits, available released credits, and remaining credit release potential based on approved projects.

Below, please find some explanations for the information that is provided in each row of the Basin Liabilities and Credit Balance Summary Tables. Section V (Definitions) may provide additional useful information.

Row Identifier	Notes
Total Credit Liability (including advance credit liability)	Includes all liabilities accepted by the Fund in this basin from 1995 through 2012, including liabilities from Advance Credit sales.
Total No Net Loss (NNL) Liability (including advance credit liability)	A subset of Total Credit Liability. While expressed in credits, NNL Liability for wetlands equals the number of acres impacted. For streams, NNL is ½ of Total Credit Liability.
Released Credits addressing NNL	For wetlands, credits generated by restoration and/or creation activities. For streams, credits generated by restoration and/or enhancement activities.
Released Credits not addressing NNL	The Fund is required to address mitigation liabilities using at least 50% NNL credits. Thus, the number of Released Credits not addressing NNL can be less than or equal to but cannot exceed the number of Released Credits addressing NNL.
Total Released Credits	The Fund's credits are not released in a given service area unless all the liabilities (including NNL liability) in that service area have been met. The Fund's operational Service Areas may be smaller than and not equal to the entire basin.
Released Credits Applied to Total Liability	Since an individual project's Service Area may not equal the full basin, released credits within a basin may not be approved to service all the liabilities within the full basin.
Released Credits Available	Assuming Total Credit Liability and NNL liability are met, Total Available Released Credits = Total Released Credits – Released Credits Applied to Liability – Sold Released Credits.
Advance Credits Available	Advance Credits will only be sold in areas not serviceable by released credits.
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	These are credits that have met success criteria and are ready for release. The IRT will officially release them when they can be paired 1:1 with Released Credits addressing NNL. Until then, these credits are held in reserve.
Potential Credits	The remaining number of credits from approved Fund project sites that may be released if they meet success criteria (does not include figure from row above).

There are challenges with reporting credit balances at a basin wide level when liabilities and credit balances are ultimately calculated at the scale of smaller Service Areas. When the Fund tracks its liabilities, determines released credit balances, or sells released credits to address a specific impact, the smaller project-specific Service Areas are determinative, not the overall basin. Indeed, credits in a basin's total come from individual projects that may have smaller, more confined geographic service areas. Thus, while these tables report figures such as "Total Available Released Credits" for each basin, in many cases not all of those credits are available to mitigate for impacts across the entire basin. For purposes of demonstration, consider this hypothetical example: Basin X has a total of 100 credits released and available for sale. But 60 of those credits can only service the northern half of that basin, while the remaining 40 credits service the southern half. One hundred credits is an accurate figure overall, but it is not directly relevant at the scale that these credits will actually be debited and sold.

Based on these unavoidable reporting issues with a basin-wide credit ledger and the fact that this annual report provides a snapshot in time of credit balances, it is recommended that the reader consult the RIBITS website (http://geo.usace.army.mil/ribits/index.html) for up to date information on released credit balances and associated Service Areas. Additional information regarding individual project crediting is also available at the Program website (www.nature.org/vartf; see Project Credit Balances per Basin).

Atlantic Ocean

Within the Atlantic Ocean basin, the Fund has four approved projects to address wetland impacts. Three of the projects approved involve submerged aquatic vegetation restoration and oyster restoration. The results of these projects are not shown on the following tables, as they are considered 'out of kind' mitigation. To date, there have been no stream impacts within this basin.

Table 8: Atlantic Ocean Basin Financial Summary (1995-2012)

	Mitigation Payments	Land Sales	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$329,300	\$0	\$50,600	\$278,700
Tidal Wetlands	\$227,700	\$0	\$170,300	\$57,400
Stream USM	\$0	\$0	\$0	\$0
Pre-USM Stream	\$0	\$0	\$0	\$0
TOTALS	\$557,000	\$0	\$220,900	\$336,100

Table 9: Atlantic Ocean Basin Liabilities and Credit Balance Summary (1995-2012)

	NON-TIDAL WETLANDS	TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	5.18	1.11	0	es
Total No Net Loss (NNL) Liability (including advance credit NNL liability)	3.32	1.11	0	Liabilities
Released Credits addressing NNL	0.00	0.00	0	
Released Credits not addressing NNL	0.00	0.00	0	redits Status
Total Released Credits	0.00	0.00	0	Released Credits and Liability Status
Basin NNL Liability Met?	No	No	N/A	
Basin Total Liability Met?	No	No	N/A	
Released Credits Applied to Total Liability	0.00	0.00	0	Jits
Released Credits Sold	0.00	0.00	0	ilable Credits
Released Credits Available	0.00	0.00	0	Availab
Advance Credits Available	1.92	1.90	5,000	
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	0.00	0.00	0	Credit Potential
Potential Credits	3.65	0.00	0	Credit

Big Sandy River

The Fund no longer accepts impacts from the Big Sandy, but has remaining liabilities that need to be addressed. The Conservancy continues pursuing development of a project in response to an RFP that was issued in October 2011. Previous decisions were made to allow use of some stream funds from the Big Sandy to fund several projects in the Tennessee River basin. The mitigation activities summary for those projects are included on Table 44.

Table 10: Big Sandy River Basin Financial Summary (1995-2012)

	Mitigation Payments	Land Sales	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$8,000	\$0	\$0	\$8,000
Tidal Wetlands	\$0	\$0	\$0	\$0
Stream USM	\$460,300	\$0	\$21,300	\$439,000
Pre-USM Stream	\$251,600	\$0	\$251,600	\$0
TOTALS	\$719,900	\$0	\$272,900	\$447,000

Table 11: Big Sandy River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2012)

	Proposed Stream	Constructed/ Protected	Closed Mitigation (linear
Impact (linear feet) ¹	Mitigation (linear feet) ²	Mitigation (linear feet) ³	feet) ⁴
1,972	-	-	-

¹Includes all pre-USM stream impacts received by the VARTF from 1995 through 2012.

²The remaining amount of linear footage from previously approved projects that have yet to be constructed or protected

³Includes all work that has been constructed and/or protected, but have not received project closure status.

⁴Includes all work at sites that have received project closure status.

Table 12: Big Sandy River Basin Liabilities and Credit Balance Summary (1995-2012)

	NON-TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	0.15	1,293	ties
Total No Net Loss (NNL) Liability (including advance credit NNL liability)	0.11	647	Liabilities
Released Credits addressing NNL	0.00	0	
Released Credits not addressing NNL	0.00	0	l Credits ity Status
Total Released Credits	0.00	0	Released Credits and Liability Status
Basin NNL Liability Met?	No	No	
Basin Total Liability Met?	No	No	
Released Credits Applied to Total Liability	0.00	0	dits
Released Credits Sold	0.00	0	le Cre
Released Credits Available	0.00	0	Available Credits
Advance Credits Available	n/a	n/a	
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	0.00	0	Credit Potential
Potential Credits	0.00	0	Credit I

Chesapeake Bay

The Chesapeake Bay basin has seen considerable non-tidal wetland impacts, and the Conservancy has pursued twenty-two projects within this basin. Several of these projects are well established, while several others are in the planning and development stage and are expected to be constructed in 2013. There have been no stream (USM) impacts within this basin.

Table 13: Chesapeake Bay Basin Financial Summary (1995-2012)

	Mitigation Payments	Land Sales	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$6,373,700	\$182,300	\$3,668,800	\$2,887,200
Tidal Wetlands	\$328,100	\$0	\$235,100	\$93,000
Stream USM	\$0	\$0	\$0	\$0
Pre-USM Stream	\$272,600	\$85,000	\$357,600	\$0
TOTALS	\$6,974,400	\$267,300	\$4,261,500	\$2,980,200

Table 14: Chesapeake Bay Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2012)

	Proposed Stream	Constructed/ Protected	Closed Mitigation (linear
Impact (linear feet) ¹	Mitigation (linear feet) ²	Mitigation (linear feet) ³	feet) ⁴
1,399	17,000	1,133	10,368

¹Includes all pre-USM stream impacts received by the VARTF from 1995 through 2012.

²The remaining amount of linear footage from previously approved projects that have yet to be constructed or protected

³Includes all work that has been constructed and/or protected, but have not received project closure status.

⁴Includes all work at sites that have received project closure status.

Table 15: Chesapeake Bay Basin Liabilities and Credit Balance Summary (1995-2012)

	NON-TIDAL WETLANDS	TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	89.26	1.07	0	ties
Total No Net Loss (NNL) Liability (including advance credit NNL liability)	47.37	1.07	0	Liabilities
Released Credits addressing NNL	16.84	0.00	0	
Released Credits not addressing NNL	16.84	0.00	0	Credits y Status
Total Released Credits	33.68	0.00	0	Released Credits and Liability Status
Basin NNL Liability Met?	No	No	N/A	
Basin Total Liability Met?	No	No	N/A	
Released Credits Applied to Total Liability	33.68	0.00	0	lits
Released Credits Sold	0.00	0.00	0	le Crec
Released Credits Available	0.00	0.00	0	Available Credits
Advance Credits Available	19.25	2.00	5,000	,
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	8.44	8.83	0	Credit Potential
Potential Credits	171.2	29.55	0	Credit

Chowan River

The Fund has pursued many non-tidal wetland restoration projects within this basin. As a result, there are a number of wetland credits released available for sale to service the eastern HUC's within this basin. Advance credits are available for sale in areas of the basin where Released Credits are not yet available.

Table 16: Chowan River Basin Financial Summary (1995-2012)

	Mitigation Payments	Land Sales	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$1,712,300	\$116,300	\$1,762,900	\$65,700
Tidal Wetlands	\$35,100	\$0	\$2,200	\$32,900
Stream USM	\$471,400	\$0	\$179,000	\$292,400
Pre-USM Stream	\$94,700	\$0	\$94,700	\$0
TOTALS	\$2,313,500	\$116,300	\$2,038,800	\$391,000

Table 17: Chowan River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2012)

	Proposed Stream	Constructed/ Protected	Closed Mitigation
Impact (linear feet) ¹	Mitigation (linear feet) ²	Mitigation (linear feet) ³	(linear feet)⁴
911	-	6,460	-

¹Includes all pre-USM stream impacts received by the VARTF from 1995 through 2012.

²The remaining amount of linear footage from previously approved projects that have yet to be constructed or protected

³Includes all work that has been constructed and/or protected, but have not received project closure status.

⁴Includes all work at sites that have received project closure status.

Table 18: Chowan River Basin Liabilities and Credit Balance Summary (1995-2012)

	NON-TIDAL WETLANDS	TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	79.08	0.08	1,307	ties
Total No Net Loss (NNL) Liability (including advance credit NNL liability)	43.30	0.07	654	Liabilities
Released Credits addressing NNL	104.76	0.00	0	
Released Credits not addressing NNL	77.69	0.00	0	Released Credits nd Liability Status
Total Released Credits	182.45	0.00	0	Released Credits and Liability Status
Basin NNL Liability Met?	Yes	No	No	
Basin Total Liability Met?	Yes	No	No	
Released Credits Applied to Total Liability	76.45	0.00	0	dits
Released Credits Sold	0.02	0.00	0	ile Cre
Released Credits Available	105.98	0.00	0	Available Credits
Advance Credits Available	2.41	1.94	5,000	
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	0.00	1.40	0	Credit Potential
Potential Credits	118	0.00	4,823	Credit

Lower James River

The Fund has pursued a number of wetland restoration sites within the Lower James basin, and has received appropriate credit releases from several projects. With completion of a large restoration site and expected credit released in 2013, the Fund should have released non-tidal wetland credits available for sale in the relatively near future.

Table 19: Lower James River Basin Financial Summary (1995-2012)

	Mitigation Payments	Land Sales	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$4,594,100	\$0	\$3,852,800	\$741,300
Tidal Wetlands	\$88,800	\$0	\$98,500	(\$9,700)
Stream USM	\$3,048,600	\$0	\$48,700	\$2,999,900
Pre-USM Stream	\$2,405,700	\$0	\$2,405,700	\$0
TOTALS	\$10,137,200	\$0	\$6,405,700	\$3,731,500

Table 20: Lower James River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2012)

	Proposed Stream	Constructed/ Protected	Closed Mitigation (linear
Impact (linear feet) ¹	Mitigation (linear feet) ²	Mitigation (linear feet) ³	feet) ⁴
20,361	4,861	18,680	104

¹Includes all pre-USM stream impacts received by the VARTF from 1995 through 2012.

²The remaining amount of linear footage from previously approved projects that have yet to be constructed or protected

³Includes all work that has been constructed and/or protected, but have not received project closure status.

⁴Includes all work at sites that have received project closure status.

Table 21: Lower James River Basin Liabilities and Credit Balance Summary (1995-2012)

	NON-TIDAL WETLANDS	TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	132.69	0.43	6,823	ties
Total No Net Loss (NNL) Liability (including advance credit NNL liability)	70.34	0.43	3,412	Liabilities
Released Credits addressing NNL	73.49	0.00	0	
Released Credits not addressing NNL	41.04	0.00	0	redits Status
Total Released Credits	114.53	0.00	0	Released Credits and Liability Status
Basin NNL Liability Met?	Yes	No	No	
Basin Total Liability Met?	No	No	No	
Released Credits Applied to Total Liability	114.53	0.00	0	lits
Released Credits Sold	0.00	0.00	0	le Crec
Released Credits Available	0.00	0.00	0	Available Credits
Advance Credits Available	20.00	2.00	9,246	ď
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	0.00	1.00	0	Credit Potential
Potential Credits	145.30	15.00	94	Credi

Middle James River

In 2012, there was a non-tidal wetland credit release from the MJ-1 site. The Fund also completed construction on its largest stream restoration project to date at Meadow Creek in 2012.

Table 22: Middle James River Basin Financial Summary (1995-2012)

	Mitigation Payments	Land Sales	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$1,731,700	\$74,900	\$577,800	\$1,228,800
Tidal Wetlands	\$0	\$0	\$0	\$0
Stream USM	\$429,700	\$0	\$12,100	\$417,600
Pre-USM Stream	\$5,030,300	\$147,500	\$5,177,800	\$0
TOTALS	\$7,191,700	\$222,400	\$5,767,700	\$1,646,400

Table 23: Middle James River Pre-USM Impacts and Mitigation Activity Summary (1995-2012)

	•		, ,
	Proposed Stream	Constructed/ Protected	Closed Mitigation (linear
Impact (linear feet) ¹	Mitigation (linear feet) ²	Mitigation (linear feet) ³	feet) ⁴
32,679	-	18,217	42,187

¹Includes all pre-USM stream impacts received by the VARTF from 1995 through 2012.

²The remaining amount of linear footage from previously approved projects that have yet to be constructed or protected

³Includes all work that has been constructed and/or protected, but have not received project closure status.

⁴Includes all work at sites that have received project closure status.

Table 24: Middle James River Basin Liabilities and Credit Balance Summary (1995-2012)

	NON-TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	37.40	516	ies
Total No Net Loss (NNL) Liability (including advance credit NNL liability)	20.45	258	Liabilities
Released Credits addressing NNL	16.96	0	
Released Credits not addressing NNL	9.81	0	Credits y Status
Total Released Credits	26.77	0	Released Credits and Liability Status
Basin NNL Liability Met?	No	No	
Basin Total Liability Met?	No	No	
Released Credits Applied to Total Liability	26.77	0	lits
Released Credits Sold	0.00	0	le Crec
Released Credits Available	0.00	0	Available Credits
Advance Credits Available	10.00	5,000	
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	0.00	0	Credit Potential
Potential Credits	3.73	0	Credii

Upper James River

Work in the Upper James has been limited to non-tidal wetlands, with just a few acres of impacts in the basin. There have been no stream impacts paid into the Fund.

Table 25: Upper James River Basin Financial Summary (1995-2012)

	Mitigation Payments	Land Sales	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$154,900	\$0	\$146,700	\$8,200
Tidal Wetlands	\$0	\$0	\$0	\$0
Stream USM	\$0	\$0	\$0	\$0
Pre-USM Stream	\$0	\$0	\$0	\$0
TOTALS	\$154,900	\$0	\$146,700	\$8,200

Table 26: Upper James River Pre-USM Impacts and Mitigation Activity Summary (1995-2012)

	•	<u> </u>	
	Proposed Stream	Constructed/ Protected	Closed Mitigation (linear
Impact (linear feet) ¹	Mitigation (linear feet) ²	Mitigation (linear feet) ³	feet) ⁴
-	-	-	7,609

¹Includes all pre-USM stream impacts received by the VARTF from 1995 through 2012.

²The remaining amount of linear footage from previously approved projects that have yet to be constructed or protected

³Includes all work that has been constructed and/or protected, but have not received project closure status.

⁴Includes all work at sites that have received project closure status.

Table 27: Upper James River Basin Liabilities and Credit Balance Summary (1995-2012)

	NON-TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	5.29	0	ties
Total No Net Loss (NNL) Liability (including advance credit NNL liability)	3.31	0	Liabilities
Released Credits addressing NNL	0.00	0	
Released Credits not addressing NNL	0.00	0	Credits :y Status
Total Released Credits	0.00	0	Released Credits and Liability Status
Basin NNL Liability Met?	No	N/A	
Basin Total Liability Met?	No	N/A	
Released Credits Applied to Total Liability	0.00	0	lits
Released Credits Sold	0.00	0	le Crec
Released Credits Available	0.00	0	Available Credits
Advance Credits Available	10.00	5,000	
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	0.00	0	Credit Potential
Potential Credits	4.20	0	Credit

New River

The New River basin has seen a small amount of wetland impacts, and has one approved stream project to address the existing liabilities in the basin. The stream project is expected to go to construction in 2013.

Table 28: New River Basin Financial Summary (1995-2012)

	Mitigation Payments	Land Sales	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$159,300	\$0	\$2,700	\$156,600
Tidal Wetlands	\$0	\$0	\$0	\$0
Stream USM	\$617,300	\$0	\$174,200	\$443,100
Pre-USM Stream	\$290,300	\$0	\$290,300	\$0
TOTALS	\$1,066,900	\$0	\$467,200	\$599,700

Table 29: New River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2012)

Impact (linear feet) ¹	Proposed Stream Mitigation (linear feet) ²	Constructed/ Protected Mitigation (linear feet) ³	Closed Mitigation (linear feet) ⁴
3,078	5,370	-	-

¹Includes all pre-USM stream impacts received by the VARTF from 1995 through 2012.

²The remaining amount of linear footage from previously approved projects that have yet to be constructed or protected

³Includes all work that has been constructed and/or protected, but have not received project closure status.

⁴Includes all work at sites that have received project closure status.

Table 30: New River Basin Liabilities and Credit Balance Summary (1995-2012)

	NON-TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	3.01	1,646	ties
Total No Net Loss (NNL) Liability (including advance credit NNL liability)	2.82	823	Liabilities
Released Credits addressing NNL	0.00	0	
Released Credits not addressing NNL	0.00	0	Credits y Status
Total Released Credits	0.00	0	Released Credits and Liability Status
Basin NNL Liability Met?	No	No	
Basin Total Liability Met?	No	No	
Released Credits Applied to Total Liability	0.00	0	lits
Released Credits Sold	0.00	0	le Crec
Released Credits Available	0.00	0	Available Credits
Advance Credits Available	3.96	3,828	
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	0.00	0	Credit Potential
Potential Credits	0.00	1,370	Credit

Potomac River

There has been considerable mitigation activity in the Potomac River basin, especially with stream impacts. The Fund has developed several wetland sites that have generated Released Credits, including some that are currently available for sale. Several stream projects were pursued to address pre-USM stream impacts. Monitoring is ongoing for the restoration sites, although these sites do not generate stream credits.

Table 31: Potomac River Basin Financial Summary (1995-2012)

	Mitigation Payments	Land Sales	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$1,508,500	\$0	\$1,508,500	\$0
Tidal Wetlands	\$38,900	\$0	\$38,000	\$900
Stream USM	\$2,636,600	\$0	\$69,800	\$2,566,800
Pre-USM Stream	\$9,029,000	\$0	\$9,029,000	\$0
TOTALS	\$13,213,000	\$0	\$10,645,300	\$2,567,700

Table 32: Potomac River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2012)

Impact (linear feet) ¹	Proposed Stream Mitigation (linear feet) ²	Constructed/ Protected Mitigation (linear feet) ³	Closed Mitigation (linear feet) ⁴
73,142	31,877	10,451	110,242

¹Includes all pre-USM stream impacts received by the VARTF from 1995 through 2012.

²The remaining amount of linear footage from previously approved projects that have yet to be constructed or protected

³Includes all work that has been constructed and/or protected, but have not received project closure status.

⁴Includes all work at sites that have received project closure status.

Table 33: Potomac River Basin Liabilities and Credit Balance Summary (1995-2012)

	NON-TIDAL WETLANDS	TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	15.54	0.11	5,394	ties
Total No Net Loss (NNL) Liability (including advance credit NNL liability)	10.68	0.11	2,697	Liabilities
Released Credits addressing NNL	13.29	0.00	0	
Released Credits not addressing NNL	13.29	0.00	0	Credits y Status
Total Released Credits	26.58	0.00	0	Released Credits and Liability Status
Basin NNL Liability Met?	Yes	N/A	No	
Basin Total Liability Met?	Yes	N/A	No	
Released Credits Applied to Total Liability	15.54	0.00	0	lits
Released Credits Sold	1.90	0.00	0	le Crec
Released Credits Available	9.14	0.00	0	Available Credits
Advance Credits Available	5.00	2.00	10,000	,
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	33.31	9.71	0	Credit Potential
Potential Credits	11.31	0.00	0	Credit

Rappahannock River

The Fund has pursued a number of wetland projects within the Rappahannock River basin, which have generated credits in excess of the existing liability and has Released Credits available for sale.

Table 34: Rappahannock River Basin Financial Summary (1995-2012)

	Mitigation Payments	Land Sales	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$1,471,600	\$0	\$1,471,600	\$0
Tidal Wetlands	\$0	\$0	\$0	\$0
Stream USM	\$2,613,500	\$0	\$318,500	\$2,295,000
Pre-USM Stream	\$2,029,300	\$7,000	\$2,036,300	\$0
TOTALS	\$6,114,400	\$7,000	\$3,826,400	\$2,295,000

Table 35: Rappahannock River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2012)

		Proposed Stream	Constructed/ Protected	Closed Mitigation (linear
	Impact (linear feet) ¹	Mitigation (linear feet) ²	Mitigation (linear feet) ³	feet)⁴
Ī	10,771	-	264,738	7,742

¹Includes all pre-USM stream impacts received by the VARTF from 1995 through 2012.

²The remaining amount of linear footage from previously approved projects that have yet to be constructed or protected

³Includes all work that has been constructed and/or protected, but have not received project closure status.

⁴Includes all work at sites that have received project closure status.

Table 36: Rappahannock River Basin Liabilities and Credit Balance Summary (1995-2012)

	NON-TIDAL WETLANDS	TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	19.28	0.00	5,592	ties
Total No Net Loss (NNL) Liability (including advance credit NNL liability)	10.21	0.00	2,796	Liabilities
Released Credits addressing NNL	18.86	0.00	0	
Released Credits not addressing NNL	6.43	0.00	0	Credits :y Status
Total Released Credits	25.29	0.00	0	Released Credits and Liability Status
Basin NNL Liability Met?	Yes	N/A	No	
Basin Total Liability Met?	Yes	N/A	No	
Released Credits Applied to Total Liability	19.28	0.00	0	its
Released Credits Sold	0.00	0.00	0	e Cred
Released Credits Available	6.01	0.00	0	Available Credits
Advance Credits Available	5.00	2.00	7,194	
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	0.00	1.6	6,450	Credit Potential
Potential Credits	2.79	0.00	817	Credit

Roanoke River

The Fund has only had moderate wetland impacts within the Roanoke River basin, and has constructed one wetland restoration site to address a significant portion of the liability. Several stream projects have been implemented to address stream impacts. One restoration site experienced significant damage during a high flow event and is being re-constructed to ensure stability. Additionally, late in 2012, the Conservancy requested approval to purchase stream credits from an existing bank to address some of the existing liabilities. That purchased will be finalized in 2013.

Table 37: Roanoke River Basin Financial Summary (1995-2012)

	Mitigation Payments	Land Sales	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$497,200	\$0	\$264,500	\$232,700
Tidal Wetlands	\$0	\$0	\$0	\$0
Stream USM	\$1,680,100	\$0	\$120,300	\$1,559,800
Pre-USM Stream	\$564,000	\$190,900	\$754,900	\$0
TOTALS	\$2,741,300	\$190,900	\$1,139,700	\$1,792,500

Table 38: Roanoke Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2012)

Impact (linear feet) ¹	Proposed Stream Mitigation (linear feet) ²	Constructed/ Protected Mitigation (linear feet) ³	Closed Mitigation (linear feet) ⁴
4,635	-	17,915	6,008

¹Includes all pre-USM stream impacts received by the VARTF from 1995 through 2012.

²The remaining amount of linear footage from previously approved projects that have yet to be constructed or protected

³Includes all work that has been constructed and/or protected, but have not received project closure status.

⁴Includes all work at sites that have received project closure status.

Table 39: Roanoke River Basin Liabilities and Credit Balance Summary (1995-2012)

	NON-TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	10.18	4,534	ties
Total No Net Loss (NNL) Liability (including advance credit NNL liability)	6.09	2,267	Liabilities
Released Credits addressing NNL	0.00	116	
Released Credits not addressing NNL	0.00	116	redits / Status
Total Released Credits	0.00	232	Released Credits and Liability Status
Basin NNL Liability Met?	No	No	
Basin Total Liability Met?	No	No	
Released Credits Applied to Total Liability	0.00	232	its
Released Credits Sold	0.00	0	e Credi
Released Credits Available	0.00	0	Available Credits
Advance Credits Available	4.93	5,000	
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	0.00	734	Credit Potential
Potential Credits	5.12	1,467	Credit

Shenandoah River

The Fund implemented a wetland restoration project in 2012 to address the majority of the wetland impacts within this basin. Several stream projects have been developed and are in the monitoring phase, including one that had stream credits released in 2012.

Table 40: Shenandoah River Basin Financial Summary (1995-2012)

	Mitigation Payments	Land Sales	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$846,900	\$0	\$578,800	\$268,100
Tidal Wetlands	\$0	\$0	\$0	\$0
Stream USM	\$977,200	\$0	\$288,100	\$689,100
Pre-USM Stream	\$1,614,100	\$1,466,900	\$3,081,000	\$0
TOTALS	\$3,438,200	\$1,466,900	\$3,947,900	\$957,200

Table 41: Shenandoah River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2012)

	Proposed Stream	Constructed/ Protected	Closed Mitigation (linear
Impact (linear feet) ¹	Mitigation (linear feet) ²	Mitigation (linear feet) ³	feet) ⁴
12,128	-	4,941	32,223

¹Includes all pre-USM stream impacts received by the VARTF from 1995 through 2012.

²The remaining amount of linear footage from previously approved projects that have yet to be constructed or protected

³Includes all work that has been constructed and/or protected, but have not received project closure status.

⁴Includes all work at sites that have received project closure status.

Table 42: Shenandoah River Basin Liabilities and Credit Balance Summary (1995-2012)

	NON-TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	11.61	2,387	ies
Total No Net Loss (NNL) Liability (including advance credit NNL liability)	9.30	1,194	Liabilities
Released Credits addressing NNL	0.00	762	
Released Credits not addressing NNL	0.00	0	Credits y Status
Total Released Credits	0.00	762	Released Credits and Liability Status
Basin NNL Liability Met?	No	No	
Basin Total Liability Met?	No	No	
Released Credits Applied to Total Liability	0.00	762	lits
Released Credits Sold	0.00	0	le Crec
Released Credits Available	0.00	0	Available Credits
Advance Credits Available	5.00	10,000	
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	1.10	0	Credit Potential
Potential Credits	11.10	621	Credit

Tennessee River

The Fund implemented construction on a sizable wetland restoration site in 2012. Construction was completed and year one monitoring is expected for 2013. Several stream projects have been developed and are nearing implementation in 2013. Credit releases from these projects are expected in 2013.

Table 43: Tennessee River Basin Financial Summary (1995-2012)

	Mitigation Payments	Land Sales	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$940,600	\$0	\$915,300	\$25,300
Tidal Wetlands	\$0	\$0	\$0	\$0
Stream USM*	\$251,600	\$0	\$305,100	(\$53,500)
Pre-USM Stream	\$706,900	\$0	\$706,900	\$0
TOTALS	\$1,899,100	\$0	\$1,927,300	(\$28,200)

^{*}Negative balance indicates that more funds have been approved than have been paid into that specific resource and basin. This negative balance will be reconciled through credit sales, or through a transfer of unallocated and available funds from the General account.

Table 44: Tennessee River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2012)

	Proposed Stream	Constructed/ Protected	Closed Mitigation (linear
Impact (linear feet) ¹	Mitigation (linear feet) ²	Mitigation (linear feet) ³	feet) ⁴
5,332	-	18,569	6,000

¹Includes all pre-USM stream impacts received by the VARTF from 1995 through 2012.

²The remaining amount of linear footage from previously approved projects that have yet to be constructed or protected

³Includes all work that has been constructed and/or protected, but have not received project closure status.

⁴Includes all work at sites that have received project closure status.

Table 45: Tennessee River Basin Liabilities and Credit Balance Summary (1995-2012)

	NON-TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	26.97	631	ties
Total No Net Loss (NNL) Liability (including advance credit NNL liability)	18.92	316	Liabilities
Released Credits addressing NNL	0.00	0	
Released Credits not addressing NNL	0.00	0	Credits ity Status
Total Released Credits	0.00	0	Released Credits and Liability Status
Basin NNL Liability Met?	No	No	
Basin Total Liability Met?	No	No	
Released Credits Applied to Total Liability	0.00	0	dits
Released Credits Sold	0.00	0	le Cre
Released Credits Available	0.00	0	Available Credits
Advance Credits Available	4.55	4,388	
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	1.44	0	Credit Potential
Potential Credits	24.49	1,240	Credit

York River

Several wetland projects have been implemented to address the wetland liability within the York River basin. Activities are ongoing for several of them to ensure success criteria are met. There is one tidal restoration project in the ground to address the tidal impacts within this basin. There have been relatively few stream impacts in this basin.

Table 46: York River Basin Financial Summary (1995-2012)

	Mitigation Payments	Land Sales	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$1,168,500	\$32,500	\$1,134,400	\$66,600
Tidal Wetlands	\$25,300	\$0	\$8,400	\$16,900
Stream USM	\$5,400	\$0	\$1,500	\$3,900
Pre-USM Stream	\$163,200	\$32,500	\$195,700	\$0
TOTALS	\$1,362,400	\$65,000	\$1,340,000	\$87,400

Table 47: York River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2012)

Impact (linear feet) ¹	Proposed Stream Mitigation (linear feet) ²	Constructed/ Protected Mitigation (linear feet) ³	Closed Mitigation (linear feet) ⁴
impact (imear reet)	willigation (illiear leet)	willigation (intear feet)	ieet)
1,282	-	10,300	978

¹Includes all pre-USM stream impacts received by the VARTF from 1995 through 2012.

²The remaining amount of linear footage from previously approved projects that have yet to be constructed or protected

³Includes all work that has been constructed and/or protected, but have not received project closure status.

⁴Includes all work at sites that have received project closure status.

Table 48: York River Basin Liabilities and Credit Balance Summary (1995-2012)

Table 48: York River Basin Liabilities and	NON-TIDAL WETLANDS	TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	17.29	0.06	9	ties
Total No Net Loss (NNL) Liability (including advance credit NNL liability)	9.12	0.06	5	Liabilities
Released Credits addressing NNL	3.22	0.00	0	Released Credits and Liability Status
Released Credits not addressing NNL	1.40	0.00	0	
Total Released Credits	4.62	0.00	0	
Basin NNL Liability Met?	No	N/A	No	
Basin Total Liability Met?	No	N/A	No	
Released Credits Applied to Total Liability	4.62	0.00	0	Available Credits
Released Credits Sold	0.00	0.00	0	
Released Credits Available	0.00	0.00	0	
Advance Credits Available	9.95	2.00	5,000	
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	0.00	0.00	0	Credit Potential
Potential Credits	32.69	2.96	0	Credit

V. DEFINITIONS

- 1. ADMINSTRATIVE FEE Monies provided to the Conservancy, amounting to 8% of deposited funds, which are deemed to represent and reimburse reasonable overhead and related administrative cost of administering the Fund. Prior to approval of the 2011 Program Instrument the fee was 3%.
- 2. ADVANCE CREDITS Credits that are not associated with a compensatory mitigation project and are available for sale prior to initiation of a mitigation project in accordance with the approved Instrument.
- 3. ALLOCATED FUNDS Monies from the Program Account that have been authorized, by the IRT, for use on specific projects or needs of the Program. These funds are no longer available for use towards other projects or purposes.
- AVAILABLE CREDITS Credits that have been approved for use by the Corps and DEQ and have not been attributed to permits. Available Credits may be Advance Credits or Released Credits.
- 5. CORRECTIVE ACTION FUNDS As used in Table 1, this identifies a portion of the Program funds that are reserved and available to fund site management or corrective action activities on existing projects. These funds are expected to accommodate sites that were approved prior to the requirement for formalized budgets for long-term management and to cover catastrophic events. This budget item was approved and reported in the 2011 VARTF Annual Report.
- 6. CLOSED PROJECTS –These project finances are no longer being tracked on an annual basis. All credits that will be derived from these projects have been released, but "closed" does NOT mean that all credits have been sold, as released credits from the project may still be available for sale by the Program.
- 7. COMPENSATION Actions taken which have the effect of mitigating for, or substituting some form of, aquatic resource lost or significantly disturbed due to a permitted activity; generally aquatic resource preservation, restoration, enhancement or creation.
- 8. COMPLETED or CONSTRUCTED CREDITS –Represents an ESTIMATE of credits that have been protected (preservation activities) or constructed (restoration or enhancement activities) through site development activities. These estimates represent activity and progress of the Fund's mitigation projects, but are distinct and different from credits that have been formally released by the IRT.
- 9. CREDIT A unit of measure representing the accrual or attainment of aquatic resource function, condition or other performance measure at a Mitigation Site. It is also used to represent the mitigation liability of the Program.
- 10. DEBIT A unit of measure representing the reduction of available Credits corresponding to the loss of aquatic resource functions at an impact or project site.
- 11. EQUIPMENT FUND This portion of the Program funds were identified and approved for use to acquire and maintain GPS units.
- 12. FUNCTIONS The physical, chemical and biological ecosystem processes of an aquatic resource without regard to its importance to society.
- 13. HYDROLOGIC UNIT CODE Divisions of the watersheds of the United States. For the purposes of this Agreement, Hydrologic Unit Code ("HUC") shall refer to those divisions as defined by the United States Geological Survey ("USGS").
- 14. IN-LIEU FEE PROGRAM ACCOUNT (THE "ACCOUNT") An account at a financial institution which contains any and all monies, including any interest associated with the sale or transfer of Credits in accordance with this Agreement. Funds in this account can only be used to provide compensatory mitigation (including selection, acquisition, design, implementation, administration and management of Mitigation Projects).

- 15. IN-LIEU FEE MITIGATION PROGRAM ("PROGRAM" OR "FUND") The Virginia Aquatic Resources Trust Fund as proposed in this Agreement is referred to herein as the "Program."
- 16. INTERAGENCY REVIEW TEAM (or "IRT") An interagency group of federal, state, tribal, and/or local regulatory and resource agency representatives that participates in the development of a Site Development Plan and oversees the establishment, use and operation of a Mitigation Site with the Corps and DEQ serving as Chair(s).
- 17. LEDGER An accounting of mitigation credits and debits.
- 18. MITIGATION The process of sequentially avoiding impacts, minimizing impacts and compensating for impacts to aquatic resources that could not be avoided or minimized. "Mitigation" is often used as shorthand for compensatory mitigation.
- 19. MITIGATION LIABILITY The full liability assigned to the Program or basin which incorporates assessment methodologies (stream USM) and standard ratios (wetland wetland type ratios). This liability does not usually equal the amount of impacts into the Program or basin, but is modified based on the assessment methods utilized and required by the regulatory agencies.
- 20. MITIGATION PLAN A detailed portion of the Site Development Plan that identifies specifically how aquatic resources and associated upland buffers will be restored, created, enhanced, preserved, managed and maintained on the Mitigation Site.
- 21. MITIGATION PERFORMANCE The outcome of applying success criteria to a Mitigation Site in terms of identified goals and objectives.
- 22. MITIGATION PROJECT The entire compensatory mitigation project, including all activities described in the Mitigation Plan and undertaken on the Mitigation Site to generate Credits.
- 23. MITIGATION SITE ("SITE") A site or sites where aquatic resources are restored, created, enhanced or preserved expressly for the purpose of providing compensatory Mitigation for authorized impacts to similar resources.
- 24. No Net Loss Liability (NNL) The restoration or enhancement liability associated with wetland and stream impacts. For wetlands, the no-net loss liability is equal to the acreage of wetland impacts. For streams, the no-net loss liability is equal to ½ the total compensation requirement.
- 25. POTENTIAL CREDITS As used in the Basin Liabilities and Credit Balance Summary Tables, Potential Credits equal the total expected credits from all approved mitigation projects based on the Site Development Plan or similar specifics approved by the IRT, less any Released Credits from those approved mitigation projects. The difference between Potential and Proposed Credits is that Potential Credits include Constructed/Completed Credits, whereas Proposed Credits do not.
- 26. PROPOSED CREDITS— As used on Tables 2 and 6, Proposed Credits equal the total expected credits from all approved mitigation projects based on the Site Development Plan or similar specifics approved by the IRT, less any Constructed/Completed Credits and/or Released credits from those approved mitigation projects.
- 27. PROGRAM INSTRUMENT ("AGREEMENT") The legal document between the Conservancy, the Corps, and DEQ governing the establishment, operation and use of the Virginia Aquatic Resources Trust Fund; the In-Lieu Fee program instrument described under Corps regulations at 33 CFR §332.8(a)(1).
- 28. RELEASED CREDITS Credits associated with Mitigation Sites that have met their success criteria, as determined by the IRT.
- 29. RELEASED CREDITS ADDRESSING NNL Those credits that are derived from restoration or creation activities (wetlands) or through restoration or enhancement activities (streams) that can be used to offset the wetland acreage and stream function that is lost through impacts to these resources.
- 30. RELEASED CREDITS NOT ADDRESSING NNL Those credits derived from enhancement or preservation activities (wetlands) or through preservation activities (streams) that can be

- used to offset mitigation liability, but do not address the lost wetland acreage or stream function.
- 31. SERVICE AREAS The geographic area for which the Program or mitigation site can be used to compensate for impacts. Programmatically, these are given at the larger scale of major river watersheds. Individual mitigation sites may have more restricted areas that generally service the same or adjacent fourth order subbasin within the same major river watershed. All Service Areas are approved by the IRT.
- 32. SITE DEVELOPMENT PLAN ("SDP") The overall plan governing establishment, restoration, creation, enhancement and/or preservation of aquatic resources and associated upland buffers on the Mitigation Site.
- 33. STAFF SALARIES AND EXPENSES This portion of the Program's funds are established on a three-year cycle to support the Conservancy positions that manage and implement Fund projects. These budget items are allocated to the General Account, but are debited from the resources for the staff time spent on specific project types (basins and resource).
- 34. STATEWIDE DEVELOPMENT FUND This portion of the Program's funds were established to fund initial activities and development of projects, prior to the formal proposal and approval of individual sites. This budget item was approved and previously discussed in the 2011 VARTF Annual Report.
- 35. SUCCESS CRITERIA The minimum standards required to meet the objectives for which the Site was established.

VI. Reference Documents – www.nature.org/vartf

Trust Fund Instrument

- VARTF Program Instrument
- Exhibit A Compensation Planning Framework
- Exhibit B Advance Credits
- Exhibit C Standard Ratios
- Exhibit D Fee Schedule

Trust Fund Annual Reports and Supporting Documentation

- 2012 Main Report
- 2011 Main Report
- Supporting Documentation
 - Map of Virginia Aquatic Resources Trust Fund Project Sites
 - Summaries of Virginia Aquatic Resources Trust Fund Approved Projects by Major River Basins
 - Project Credit Balances and Service Areas within Major River Basins
 - Map of Chowan Conservation Corridor
 - Map of Dragon Run Conservation Corridor