VIRGINIA AQUATIC RESOURCES TRUST FUND ANNUAL REPORT - 2018

February 5, 2019

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 the associated credits proposed, constructed/implemented, and released to mitigate those impacts. This report provides information on the history of the Fund (1995-2018) and details specific activities conducted by the program in 2018 (January 1 – December 31, 2018).

The information is divided into the following sections:

- **I. Introduction** Provides general purpose and goals of the program, Conservancy's role and focus, and highlights of the program's continued operation.
- **II. Program Summary** Provides summary information on payments into and credits generated by the program from 1995-2018.
- **III. Summary of 2018 Credit Sales, Project Proposals, and Funding Authorizations** Provides a summary of the credit sales, proposed projects, and funds authorized during 2018.
- 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, at meaningful scales, and in beneficial ecological contexts 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 seq.), 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; 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 at 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 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 sub-basin 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 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.

Under the 2011 Instrument, much of 2012 and 2013 were devoted to finalizing new protocols to ensure efficient and effective operation of the Fund and approval of new projects. Throughout 2014, the Conservancy, Corps and DEQ devoted considerable time and effort into development of a Site Development Plan (SDP) template which will be used to govern the operation and implementation of individual projects under the new Instrument. In 2015, management of the Fund projects was assigned to three additional Corps project managers, bringing the total to four Corps staff managing these projects. Considerable amount of time was spent discussing individual project needs and requirements to ensure consistency with mitigation banks – including credit releases, credit release schedules, and monitoring plans.

In 2016, the Program was audited, per a requirement of the 2011 Program Instrument. In consultation with the Interagency Review Team (IRT), the Conservancy determined that two separate audits were advisable: one covering the financial aspects of the Program, and one covering programmatic compliance. The full audit was completed in April 2016, and a complete summary can be found in the 2016 VARTF Annual Report.

In July 2016, DEQ reauthorized the Fund per State Water Control Law and the Virginia Water Protection Permit program requirements, Section 62.1-44.15:20-23 of the Code of Virginia and 9 VAC 25-210-116D. DEQ concluded that the Fund "demonstrates considerable compliance with state regulations for in-lieu fee program approval". DEQ provided recommendations for continued improvement of the Fund and reauthorized the Program for a period of three years, through July 14, 2019. The DEQ reauthorization letter is available at www.nature.org/vartf.

Throughout 2018, the Corps, DEQ and TNC continued to work closely to address improved efficiencies and efforts to offset existing liabilities. The Conservancy made considerable advances in new project identification and development, proposing multiple projects through the year, along with finalizing details for several Site Development Plans of existing projects, including final approval. Also conducted throughout 2018 were discussions and revisions to the VARTF Program Instrument, with suggested revisions provided to the IRT for public notice. The public notice and comment period was initiated on

November 11, 2018 with the public comment period closing on December 8, 2018. Twelve comment letters were provided, including two received after the closing date, representing individuals, agencies, mitigation banking, consulting firms, public universities, and builder's associations. The Conservancy also provided a year-two progress update regarding the DEQ reauthorization letter issued in 2016.

As noted in previous reports, 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 are subject to the terms outlined in the Instrument.

II. Program Summary 1995-2018.

From 1995 through December 31, 2018, 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 \$75,105,300 in mitigation payments as summarized in Table 1. From these mitigation payments, the Corps and DEQ have authorized \$60,464,900 for the Conservancy to operate the Program and complete activities on 134 approved mitigation projects.

Table 1: The VARTF Account Summary (1995-2018)

	Mitigation Payments (\$)	Other Revenues (\$)¹	Allocated Funds (to Projects) (\$) ²	Allocated Funds (Other) (\$) ³	Total Balance (\$)
Non-Tidal Wetlands	24,888,700	349,700	17,983,000	n/a	7,255,400
Tidal Wetlands	4,411,700	(700)	878,100	n/a	3,532,900
Stream USM	20,714,400	1,455,400	11,452,100	n/a	10,717,700
Stream pre-USM	22,433,500	442,100	22,909,300	n/a	(33,700)
General ⁴	2,657,000	6,926,200	n/a	7,242,100	2,341,100
TOTALS	75,105,300	9,172,700	53,222,500	7,252,100	23,813,400

¹Resource-specific Revenues include proceeds from land sales and transfer of funds. General Revenues includes interest.

Table 2 depicts the mitigation liability (in credits) for each resource for the Program through the end of 2018. 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 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.

²Includes both spent funds and funds reserved for approved projects, as well as spent staff salaries and expenses.

³Includes corrective actions funds, Statewide Development fund, remaining budgeted staff salaries and expenses, and bank service charges.

⁴Includes all financials not tracked by resource, including released credit sales.

Table 2: Liabilities and Credit Summary (1995-2018)

	Mitigation Liability (Credits) ¹	Proposed Credits ²	Completed/ Constructed Credits ³	Released Credits⁴	Total Credits⁵
Non-Tidal Wetlands	526.87	82.35	298.18	766.82	1,147.35
Tidal Wetlands	10.64	6.39	49.08	30.80	86.27
Stream USM	49,945	59,383	11,278	18,714	89,375

¹Includes all liability accepted by the Fund from 1995 through 2018. This figure does NOT equal the number of impacts into the Fund (either acres for wetlands or linear feet for streams).

Program-wide, VARTF is providing offsets that exceed liabilities. For non-tidal wetlands, the Fund has released 50% more credits over the required offsets. Once all projects are completed, the Fund expects to generate 2:1 leverage for non-tidal wetland impacts, with twice as much compensation provided than was required. Similarly, for tidal wetlands, the Fund has already released 3 times the amount of credits required to meet the liability of the Program. Once all projects are completed, the Fund will generate nearly 9 times the required compensation credits for the impacts using the Fund. For streams, the Fund has completed, constructed, or released credits to offset 60% of the required liabilities. Significant credits have been proposed and are in development and coordination with the IRT. Once complete, these projects will generate nearly twice the amount of required compensation for the Program.

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.

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 car 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.

Table 3: Pre-USM Summary (1995-2018)

Impact (linear feet) ¹	Constructed/ Protected Mitigation (linear feet) ²	Closed Mitigation (linear feet) ³
167,690	370,255	239,083

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

III. Summary of 2018 Credit Sales, Project Proposals, and Funding Authorizations (January 1, 2018 – December 31, 2018)

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 2018. 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 2018 Permits and Credit Sales

				lmp	act	Required I	Mitigation	
Permit Number	Sale Date ¹	Basin	HUC	Wetland (acres)	Streams (If)	Wetlands (credits)	Streams (credits)	Credit Type ²
WP4-17-0590	2/13/2018	SH	02070004	0.640		0.640		Adv
WP4-17-1352	3/6/2018	SH	02070004	0.050		0.070		Adv
NAO-2016- 02168/VMRC #17-1682	3/27/2018	RO	03010101	0.100		0.100		Adv
WP3-18-0728	6/20/2018	UJ	02080201	0.30		0.300		Adv
NAO-2014- 01600	9/6/2018	MJ	02080207	0.110		0.210		Adv
16-0633	9/27/2018	СВ	02080108	0.330		0.660		Adv
2013-00904	10/4/2018	СВ	02080102	0.11		0.11		Adv
NAO-2016- 00992/VMRC# 17-V1681	10/4/2018	UJ	02080201	0.930		1.030		Adv
WP4-14-1466	10/12/2018	СВ	02080108	0.010		0.010		Adv
WP4-17-2064 (NAO-2016- 00028)	11/6/2018	PO	02070010	1.42		2.54		Adv
17-0458	11/27/2018	СВ	02080108	9.397		9.397		Adv
VWP-17-1460	12/18/2018	MJ	02080205	1.310		2.29		Adv
NAO-2013- 1120	6/1/2018	LJ	02080208		268		298	Adv

²Includes all work that has been constructed and/or protected but have not received project closure status.

³Includes all work at sites that have received project closure status.

Grand Total				33.61	537	40.70	466	
Total Released	<u> </u>			15.06		19.97		
NAO-2016- 2053 /VMRC# 17-0010	5/9/2018	YK*	02080101	0.84		0.42		Rel
VWP IP NO. 18-0734	12/18/2018	LJ	02080206	1.392		1.392		Rel
17-0458	11/27/2018	СВ	02080108	5.700		5.700		Rel
WP4-17-2064 (NAO-2016- 00028)	11/6/2018	РО	02070010	0.28		0.17		Rel
15-0620	8/6/2018	СВ	02080108	0.890		1.68		Rel
17-1926	6/5/2018	PO	02070010	0.660		1.290		Rel
WP4-17-2138	5/22/2018	PO*	02070008	0.5400		1.0400		Rel
WP4-17-1716	5/14/2018	LJ	02080208	0.96		1.78		Rel
02-V2448- 41/02-2448	5/9/2018	РО	02070010	1.920		3.790		Rel
NAO-2017- 01743	4/25/2018	РО	02070008	0.13		0.190		Rel
WP3-16-1685	4/9/2018	РО	02070008	0.25		0.28		Rel
VWP IP 17- 0854	3/9/2018	РО	02070008	0.670		0.760		Rel
WP4-17-1835	3/9/2018	PO	02070010	0.520		0.900		Rel
WP4-17-1841	3/5/2018	PO	02070010	0.310		0.580		Rel
Total Advance				18.55	537	20.73	466	1.5.
01828/18- 1148 17-0458	10/18/2018	YK CB	02080107	0.92		1.20 0.92		Adv Adv
V0516 2017-	40/40/0040	VIZ	00000407	4.40		4.00		Adv
NAO-2016- 0623/ VMRC#16-	9/12/2018	СВ	02080108	0.39		0.17		
NAO-2013- 1120	6/1/2018	LJ	02080208	0.74		0.75		Adv
NAO-2016- 2053 /VMRC# 17-0010	5/9/2018	LJ*	02080101	0.66		0.33		Adv
NAO-2013- 1120	10/17/2018	LJ	02080208		19		31	Adv
NAO-2017- 01396	7/24/2018	RP	02080104		210		87	Adv
NAO-2010- 0275 VMRC-17- V1122	6/12/2018	LJ	02080208		40		50	Adv

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

²Adv = Advance credit. Rel = Released credit.

^{*}Associated with partial or full approved out-of-service area credit purchases.

During 2018, the Fund was used to mitigate for non-tidal wetland, tidal wetland, and stream impacts throughout Virginia. These impacts from the 29 permits detailed in Table 4 above generated \$5,311,800 in mitigation payments to the Fund as summarized in Table 5. In 2018, \$5,353,400 was allocated to support implementation of compensation projects. At the end of 2018, the unallocated balance within the Fund was \$23,813,100.

Table 5: 2018 Financial Summary

	Mitigation Payments (\$)	Other Revenues (\$) ¹	Allocated Funds (\$) ²	Allocated Funds (Other) (\$) ³	Total Balance for 1995-2018 (\$)
Non-Tidal Wetlands	1,719,000	(52,300)	42,000	n/a	7,255,400
Tidal Wetlands	1,510,800	0	0	n/a	3,532,900
Stream USM	233,000	(4,400)	5,311,400	n/a	10,717,700
Stream pre-USM	0	(17,100)	0	n/a	(33,700)
General ⁴	1,849,000	523,700	n/a	404,800	2,341,100
TOTALS	5,311,800	449,900	5,353,400	404,800	23,813,400

¹Includes proceeds from land sales and transfer of funds.

During 2018 seven projects were approved for funding. Three sites included funding for acquisition and initial project development expenses. The AO-6 Branscome site is proposed to generate non-tidal wetland credits on the Eastern Shore. The RP-15 Adduci project was proposed to generate considerable stream credits in the Rappahannock River basin. Project and funding approval included site acquisition in December 2018. The SH-6 Cedar Creek project has been in development, and funding was approved in 2018 to fully fund the acquisition and planning needs through Site Development Plan submission. Further details can be reviewed in the Project Summaries attachment. Two stream and wetland credit purchases were approved – one in the Big Sandy river basin (BS-2) and another in the Lower James River basin (LJ-16). Additionally, two projects had final budgets approved following completion, approval and signature of the project Site Development Plans (TN-10 and TN-11). Several projects were submitted to the agencies through the pre-application process, including sites in the Chowan River, Upper James River, Potomac River, Rappahannock River, and Roanoke River basins. Four projects were put out for public notice (UJ-4, RP-15, RO-9 and RO-10). The acquisition of one site (RP-15) was completed in 2018.

All projects are required to have an approved Site Development Plan (SDP) which documents the details of the mitigation project. The first SDP submitted under the 2011 Program Instrument was submitted in December 2013 and received approval and was signed in March 2015. Considerable effort continues to be made in development, review and approval of project SDPs. In 2018, two SDPs were finalized and signed (TN-10 and TN-11), three SDPs (SH-6, CB-17, and LJ-14) are in review, and two additional SDPs were submitted (AO-6 and NW-3). Also, in 2018, the Fund received approval on seven stream sites for the release of stream credits, six wetland sites for the release of non-tidal wetland credits, two wetland sites for the release of tidal wetland credits, and two SAV sites for the release of SAV credits based on meeting success criteria and project milestones as shown in Table 6.

²Includes both funds that have been spent and funds that the IRT has approved for allocation to approved mitigation project in 2018.

³Includes staff salaries and expenses and bank service charges.

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

Collectively, in 2018, the Conservancy submitted the following items to the Corps and DEQ for approval by the Corps, or coordination with the IRT. Corresponding number of approvals are noted in parenthesis. Where higher numbers are indicated in parenthesis, this indicates requests that were submitted in previous years and were approved in 2018.

- 18 mitigation monitoring reports (N/A)
- 9 project closure requests (12)
- 8 credit release requests (16)
- 5 pre-app requests
- 8 funding requests (7)

Table 6: 2018 Mitigation Liabilities and Credit Activities

	Mitigation Liabilities Received (Credits)	Proposed Credits ²	Completed/ Constructed Credits ³	Released Credits ⁴
Non-Tidal Wetlands	36.91	65.15	0.00	68.16
Tidal Wetlands	3.79	0.00	0.00	4.51
Stream USM ¹	466	21,703	7,740	4,454

¹Includes all liability accepted by the Fund in 2018. This does NOT equal impacts into the Fund.

Table 7 shows the credit releases approved by the IRT during 2018 by project site. These credit releases included credits for non-tidal wetland, tidal wetland and stream credits, and were approved at 16 sites in nine of the major river basins in which the Fund operates.

Table 7: 2018 Credit Releases

Site	NTW	Tidal	Stream
MJ-12			516
LJ-11			295
LJ-11			45
RO-6			53
YK-1	1.35		
YK-6	3.53		
YK-2	55.69		
TN-10			1627
TN-11			1218
AO-1		2	
AO-3		2	
YK-5		0.14	
CB-16	0.12	0.37	
SH-4	6.4		

²Credits expected from Fund projects that have been proposed or 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.

TOTALS	68.16	4.51	4,454
LJ-16			700
UJ-1	1.07		

In 2018, the IRT authorized funds for the Conservancy to complete activities on seven different sites. Three sites included funding for acquisition and initial project development expenses (AO-6, RP-15, and SH-6). Two stream and wetland credit purchases were approved (BS-2 and LJ-16). Additionally, two projects had final budgets approved following completion, approval and signature of the project Site Development Plans (TN-10 and TN-11). Details are provided in Table 8.

Table 8: Projects Approved and Funding Authorized in 2018

Project ID	Project Name	Resource Type	New Proposed USM Stream Crediting (credits)	New Proposed Wetland Crediting	Aı	Funds uthorized
AO-6	Branscome	Non-Tidal Wetland	n/a	n/a	\$	34,000
SH-6*	Shenandoah River (Cedar Creek)	Stream	n/a	n/a	\$	476,000
RP-15	Hazel River (Adduci Family Trust)	Stream	n/a	n/a	\$	799,000
LJ-16	Lower James Mitigation Bank (credit purchase)	Stream	9,605	n/a	\$	3,697,925
BS-2	Dry Fork Mitigation Bank (credit purchase)	Stream + Non- Tidal Wetland	1,293	0.153	\$	450,000
TN-10	The Cedars (Bowen)	Stream	n/a	n/a	\$	295,580
TN-11	Pinnacle (Underwood)	Stream	n/a	na	\$	76,940
Totals:			10,898	0.15	\$	5,829,445

^{*}Funding approval not included in 2018 total, as funds for this project were previously allocated with receipt of Initial Evaluation Letter. This funding approval provides documentation and confirmation of approval of this portion of the project budget.

The following section, Section IV, details the credits sales, project proposal and associated credits generated, and funding authorizations per basin. The section begins with a programmatic summary of remaining liabilities. Remaining liabilities are defined here as existing liabilities that will not be offset by an existing proposed, initiated or approved project. Further details about basin specific standings are provided after the programmatic summary.

The Fund has accepted liability for 537.51 wetland credits and 49,945 stream credits, and has proposed, initiated, constructed or released credits to offset 1,236.55 wetland and 89,375 stream credits (see Table

2). Programmatically the credits generated by the Fund will far exceed the impacts and credit liability taken on by the program. Even so, there are several basins where liability offsets are still needed. These basins and associated liabilities are shown below. These represent basins where a potential site has not been identified, or a proposed site has yet to be issued an Initial Evaluation Letter from the IRT. The total amount of existing project needs represents 6.5% of the cumulative wetland liability and 5% of the cumulative stream liability of the Program. Table 9 depicts the basins and resources with project needs based on the age of the impacts (initial Advance Credit sales), with 2 years as a practical demarcation based on Program operations. The needs shown in yellow (greater than 2 years) have the most immediate need for offset. Approximately 1/3 of the remaining liability shown below occurred within the past two years.

Table 9. Remaining Liability

		Liability	
Basin	Resource	(credits)	
Atlantic Ocean	Tidal Wetland	1.08	Liability > 2 years
Chesapeake Bay	Stream	312	ij
Chowan	Stream	1532	v
Chowan	Non-tidal wetlands	5	2 ye
Upper James	Non-tidal wetlands	7.17	ars
Roanoke	Non-tidal wetlands	5.2	
Shenandoah	Non-tidal wetlands	1.1	
Tennessee	Non-tidal wetlands	5.73	
Atlantic Ocean	Tidal Wetland	0.04	Liability < 2 years
Potomac	Tidal Wetland	1.7	ĕ
Chesapeake Bay	Stream	810	^
Lower James	Stream	29	2 y
			n
Middle James	Non-tidal wetlands	2.21	ars
Upper James	Non-tidal wetlands Non-tidal wetlands	2.21 1.33	ars
			ars
Upper James	Non-tidal wetlands	1.33	ars
Upper James Potomac	Non-tidal wetlands Non-tidal wetlands	1.33 2.5	ears

The Conservancy has been working diligently to meet and exceed the mitigation needs of the Fund. A large portion of the remaining needs are subject to a Request for Proposals that was issued in 2018 soliciting projects to offset 5 of the basins with proposals due in early 2019 (PO-TW, CB-stream, CH-stream, RO-NTW, and TN-NTW). Two of projects that would address needs are under consideration in the pre-app stage with the IRT. One of these has completed a pre-app site visit and is undergoing a feasibility study in early 2019 (PO-NTW). One of the large remaining liabilities will be addressed through a project proposed in 2018 (UJ-4), pending IEL and IRT approval. Another liability (SH-NTW) will likely be offset by a wetland restoration project on an existing compensation site (SH-6) and will be proposed to the IRT in 2019.

Table 10. Potent	tial Project Status			
Basin	Resource	Total Liability (credits)	Project Status	Summary
				Several projects are being evaluated as
Atlantic Ocean	Tidal Wetland	1.12	Project evaluation	compensation sites
Potomac	Tidal Wetland	1.7	RFP issued	RFP deadline for bids is mid-February
Chesapeake Bay	Stream	1122	RFP issued	RFP deadline for bids is mid-February
Chowan	Stream	1532	RFP issued	RFP deadline for bids is mid-February
Lower James	Stream	29	n/a	n/a
Chowan	Non-tidal wetlands	5	Project at pre-app	Site visit schedule with IRT in February
Middle James	Non-tidal wetlands	2.21	n/a	n/a
Upper James	Non-tidal wetlands	8.5	Project proposed (UJ-4)	IEL expected to pursue project in early 2019
Potomac	Non-tidal wetlands	2.5	Project at pre-app	Feasibility study underway
Roanoke	Non-tidal wetlands	5.4	RFP issued	RFP deadline for bids is mid-February
Shenandoah	Non-tidal wetlands	2.8	Existing project feasibility (SH-6)	Site likley to accommodate wetland needs
Tennessee	Non-tidal wetlands	6	RFP issued	RFP deadline for bids is mid-February

Available funding to address all remaining liabilities is available, as shown in Table 11 below based on the basin and the resource and monies paid into the Program.

Table 11. Available Funding

		Total Liability		
Basin	Resource	(credits)	Func	ling
Atlantic Ocean	Tidal Wetland	1.12	\$	250,000.00
Potomac	Tidal Wetland	1.7	\$	1,090,000.00
Chesapeake Bay	Stream	1122	\$	380,000.00
Chowan	Stream	1532	\$	340,000.00
Lower James	Stream	29	\$	440,000.00
Chowan*	Non-tidal wetlands	5	\$	140,000.00
Middle James	Non-tidal wetlands	2.21	\$	1,120,000.00
Upper James	Non-tidal wetlands	8.5	\$	360,000.00
Potomac	Non-tidal wetlands	2.5	\$	230,000.00
Roanoke	Non-tidal wetlands	5.4	\$	510,000.00
Shenandoah	Non-tidal wetlands	2.8	\$	450,000.00
Tennessee	Non-tidal wetlands	6	\$	70,000.00

^{*}Based on Advance Credits sales of 5 credits, \$140,000 is expected to be used from General Funds to support a project in the Chowan Basin.

Table 12 shows the total remaining credits of each resource type for which the Fund is liable, along with a cumulative total of the funding available for each of these resources from only those basins listed in Table 11. The cost/credit calculation represents the average funding available for new projects of each specific resource type. The expected cost for the Conservancy to implement projects to provide the necessary offsets is generally lower than the available cost/credit. For non-tidal wetlands, the available funds average a cost/credit above most of the Advance Credit prices of the Program, and well above the expected costs for Conservancy-managed compensation sites. For tidal wetlands, the available funds average a cost/credit near of almost \$500,000/credit; again, above the expected costs for the Conservancy to offset the liabilities. For streams, the available funds average a cost/credit above the

Advance Credit fee price for two of the three basins, and well within the anticipated range to address the remaining stream liabilities.

Table 12. Funding Calculations

Program Liability	Credits	Funding Available	Cost/credit available
Nontidal wetland*	32.41	\$2,740,000	\$84,541.81
Tidal wetland	2.82	\$1,340,000	\$475,177.30
Stream	2683	\$1,160,000	\$432.35
Totals		\$5,240,000	

^{*}Nontidal wetland funding total does include \$140,000 noted on Table 11 that is expected to be used from General Funds to support a project in the Chowan Basin.

It is important to recognize that the Fund includes unallocated General funds totaling over \$2M that can be used to help offset these existing liabilities if the above funding is not enough, or if the Conservancy chooses to do a larger project rather than the relatively small project needs identified above.

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.

The tables include the amount of impacts received by the Fund between 1995 and 2011. They also identify the amount of stream length (linear footage) from approved projects that have not been completed to date (either constructed or protected), along with the stream length (linear footage) from those projects that have been constructed or protected. The final column in the table identifies the amount of linear footage from projects that have completed all aspects of the project and are closed.

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 2017, 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 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. In 2016, the Conservancy proposed a wetland mitigation site to the IRT. A feasibility study was completed and the project went to public notice in 2017. An Initial Evaluation Letter for AO-6 was issued in 2018. A funding request was submitted and approved for this project, and a complete Site Development Plan was submitted to the IRT in 2018. Credit releases were approved for both AO-1 and AO-3, releasing 4 total credits associated with SAV restoration. Existing projects AO-4 and AO-6 are in development with an SDP submitted for AO-6 and one to be submitted for AO-4 in early 2019. These two projects can fully offset the existing liabilities for non-tidal wetlands in the Atlantic Ocean basin. A very small liability (1.12 credits) remains for tidal wetlands. Several projects are currently being evaluated for their ability to address this remaining liability.

Table 13: Atlantic Ocean Basin Financial Summary (1995-2018)

	Mitigation Payments	Other Revenues	Allocated Funds	Total Balance
	•	Other Revenues	(to Projects)	
Non-Tidal Wetlands	\$459,200	\$0	\$150,700	\$308,500
Tidal Wetlands	\$495,400	\$0	\$236,600	\$258,800
Stream USM	\$0	\$0	\$0	\$0
Pre-USM Stream	\$0	\$0	\$0	\$0
TOTALS	\$954,600	\$0	\$387,300	\$567,300

Table 14: Atlantic Ocean Basin Liabilities and Credit Balance Summary (1995-2018)

	NON-TIDAL WETLANDS	TIDAL WETLANDS*	STREAM - USM	
Total Credit Liability (including advance credit liability)	7.18	1.70	0	ties
Total No Net Loss (NNL) Liability (including advance credit liability)	4.99	1.70	0	Liabilities
Released Credits addressing NNL	0.00	0.00	0	
Released Credits not addressing NNL	0.00	0.60	0	its atus
Released Credits (Other) ¹	0.00	4.00	0	Released Credits and Liability Status
Total Released Credits	0.00	4.60	0	leasec Liabil
Basin NNL Liability Met?	No	No	N/A	Re
Basin Total Liability Met?	No	No	N/A	
Release Credits Applied to Total Liability ²	0.00	0.58	0	S
Released Credits Sold	0.00	0.00	0	Available Credits
Released Credits Available	0.00	0.00	0	∆vailabl
Advance Credits Available	0.00	1.38	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	11.73	0.00	0	Cr
Current Liabilities	7.18	1.12	0	

¹Released Credits Available from AO-1 and AO-3 are Submerged Aquatic Vegetation (SAV) credits.

²In 2017 approximately 0.58 tidal wetland credits were offset by 0.60 tidal wetland credits from AO-2.

^{*}No Net Loss (NNL) Liability in this basin is not necessarily equivalent to the acres impacted.

Big Sandy River

The Fund no longer accepts impacts from the Big Sandy but has remaining liabilities will be addressed through one project, BS-2. 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 summaries for those projects are included on Table 44. In 2016, the Conservancy proposed conducting a dam removal in the Big Sandy to offset existing liabilities and utilize available funding. The IRT requested instead that the Conservancy release another RFP for stream projects in this basin. This was completed with two potential projects submitted for consideration. The Conservancy, with the IRT support, will purchase credits from one of these projects once the project has been approved as a mitigation bank site. The Conservancy requested funding and approval to purchase wetland and stream credits from the Dry Fork Mitigation Bank, once approved and available. This request was approved in 2018. Bank approval and availability of credits is expected in early 2019. This will satisfy the remaining liabilities for VARTF in the Big Sandy and close out the basin, for both funding and liabilities.

Table 15: Big Sandy River Basin Financial Summary (1995-2018)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$8,000	\$0	\$8,000	\$0
Tidal Wetlands	\$0	\$0	\$0	\$0
Stream USM	\$460,300	\$0	\$442,000	\$18,300
Pre-USM Stream	\$251,600	\$60,600	\$312,200	\$0
TOTALS	\$719,900	\$60,600	\$762,200	\$18,300

Table 16: Big Sandy River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2018)

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

Table 17: Big Sandy River Basin Liabilities and Credit Balance Summary (1995-2018)

Table 17: Big Sandy River Basin Liabilities and C	NON-TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	0.15	1,293	ies
Total No Net Loss (NNL) Liability (including advance credit liability)	0.11	647	Liabilities
Released Credits addressing NNL	0.00	0	v
Released Credits not addressing NNL	0.00	0	Released Credits and Liability Status
Total Released Credits	0.00	0	ased C ability
Basin NNL Liability Met?	No	N/A	Relea
Basin Total Liability Met?	No	N/A	
Release Credits Applied to Total Liability	0.00	0	Ŋ
Released Credits Sold	0.00	0	a Credit
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	0.15	1,293	Ď
Current Liabilities	0.15	1,293	

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, several others are newly constructed and in the first years of mitigation monitoring, and yet another is expected to be constructed immediately following approval of a Site Development Plan. The first USM stream impacts within this basin were received in 2014. The Fund had release of non-tidal and tidal wetland credits from one site in 2018. Throughout 2018, the Fund and the IRT continued to work through review and approval of the SDP for CB-17. Final approval is expected in early 2019.

One large non-tidal wetland impact came into the Fund in 2018 in the Chesapeake Bay basin. The Fund has existing projects in the ground and in monitoring that will offset these impacts. The Fund also has a project near final approval, CB-17 that will offset all of the tidal wetland liabilities. Stream liabilities remain, and an RFP was released in 2018 to solicit projects to offset these liabilities.

Table 18: Chesapeake Bay Basin Financial Summary (1995-2018)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$7,547,600	\$182,300	\$4,470,300	\$3,259,600
Tidal Wetlands	\$1,190,000	\$0	\$252,500	\$937,500
Stream USM	\$448,800	\$34,400	\$94,000	\$389,200
Pre-USM Stream	\$272,600	\$50,600	\$323,200	\$0
TOTALS	\$9,459,000	\$267,300	\$5,140,000	\$4,586,300

Table 19: Chesapeake Bay Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2018)

	Constructed/ Protected Mitigation	
Impact (linear feet) ¹	(linear feet) ³	Closed Mitigation (linear feet)⁴
1,399	3,164	10,368

Table 20: Chesapeake Bay Basin Liabilities and Credit Balance Summary (1995-2018)

	NON-TIDAL WETLANDS	TIDAL WETLANDS*	STREAM - USM	
Total Credit Liability (including advance credit liability)	108.73	2.93	1,122	es
Total No Net Loss (NNL) Liability (including advance credit liability)	64.82	2.93	561	Liabilities
Released Credits addressing NNL	49.88	0.17	0	
Released Credits not addressing NNL	46.80	0.87	0	lits atus
Released Credits (Other)	0.71	0.00	0	Released Credits and Liability Status
Total Released Credits	97.39	1.04	0	elease d Liabi
Basin NNL Liability Met?	Yes	No	N/A	R
Basin Total Liability Met?	Yes	No	N/A	
Release Credits Applied to Total Liability ¹	89.54	0.87	0	S
Released Credits Sold	7.85	0.00	0	Credit
Released Credits Available	0.00	0.00	0	AvailableCredits
Advance Credits Available	8.66	0.06	3,878	A
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	0.00	10.00	0	Credit Potential
Potential Credits	96.66	13.39	0	Cred
Other Credits ²	0.00	0.19	0	
Current Liabilities	11.34	2.06	1,122	

¹In 2017, 0.70 tidal wetland NNL credits were offset by 0.70 tidal wetland Preservation credits from CB-5.

²Conservation Easement credits.

^{*}No Net Loss (NNL) Liability in this basin is not necessarily equivalent to the acres impacted.

Chowan River

The Fund has pursued many non-tidal wetland restoration projects within this basin. Thus, there are many wetland credits released and 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. The Conservancy submitted a draft site development plan to the IRT for review and approval for the CH-17 stream restoration project in 2015, however after IRT review, and consideration of the site as only a wetland project, the project will no longer move forward, and the project was closed in 2018. The Conservancy submitted a pre-application request for a wetland restoration site within this basin, with a site visit scheduled for early 2019.

While the Fund has considerable Released Credits available in the eastern portion of the Chowan River basin, non-tidal wetland liabilities remain in the western HUCs. A potential site has been identified and proposed to the IRT in 2018 which can satisfy all the existing liabilities. With the determination that CH-17 will not move forward, stream liabilities remain as well. An RFP was released in 2018 to solicit suitable projects to offset these remaining liabilities. Bids are due in early 2019.

Table 21: Chowan River Basin Financial Summary (1995-2018)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance		
Non-Tidal Wetlands	\$1,784,300	\$116,300	\$1,909,600	(\$9,000)		
Tidal Wetlands	\$37,900	\$0	\$10,200	\$27,700		
Stream USM	\$561,400	\$17,500	\$238,300	\$340,600		
Pre-USM Stream	\$94,700	(\$17,500)	\$77,300	(\$100)		
TOTALS	\$2,478,300	\$116,300	\$2,235,400	\$359,200		

Table 22: Chowan River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2018)

	Constructed/ Protected Mitigation	
Impact (linear feet) ¹	(linear feet) ³	Closed Mitigation (linear feet)4
911	3,694	-

Table 23: Chowan River Basin Liabilities and Credit Balance Summary (1995-2018)

	NON-TIDAL WETLANDS	TIDAL WETLANDS*	STREAM - USM	
Total Credit Liability (including advance credit liability)	89.66	0.08	1,532	ies
Total No Net Loss (NNL) Liability (including advance credit liability)	52.40	0.08	766	Liabilities
Released Credits addressing NNL	124.30	0.00	0	s
Released Credits not addressing NNL	90.05	0.14	0	Released Credits and Liability Status
Total Released Credits	214.35	0.14	0	ased C ability
Basin NNL Liability Met?	Yes	No	No	Relea and Li
Basin Total Liability Met?	Yes	No	No	
Release Credits Applied to Total Liability ¹	76.46	0.14	0	S
Released Credits Sold	8.20	0.00	0	e Credit
Released Credits Available	129.69	0.00	0	Available Credits
Advance Credits Available	0.00	1.92	4,775	A
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	0.00	1.65	0.00	Credit Potential
Potential Credits	137.59	0.00	4,823	Cr
Current Liabilities	5.00	0.01	1,532	

¹In 2017, 0.07 tidal wetland NNL credits were offset by 0.14 tidal wetland Preservation credits from CH-12.

^{*}No Net Loss (NNL) Liability in this basin is not necessarily equivalent to the acres impacted.

Lower James River

The Fund has pursued several wetland restoration sites within the Lower James basin, and has received approval of credit releases from several projects. With completion of a large restoration site and credit releases in 2013, the Fund now has released non-tidal wetland credits available for sale in the Lower James River basin. The first site development plan for the Fund was approved in February 2015 for the LJ-11 site and construction on the associated stream restoration began in 2016 and was completed in 2017. Two stream credit releases were approved for this site in 2018. The Conservancy released a Request for Proposals for stream projects or credits in the Lower James in 2017 and proposed purchase of stream credits from an existing mitigation bank in 2018. The request and funding to complete the purchase was approved in 2018.

The Fund has zero liability for non-tidal wetlands in this basin. There is an existing liability for tidal wetlands which is expected to be fully offset in 2018 with a credit release from LJ-10. The existing liability for streams will be offset by the bank credit purchases completed through LJ-16. The initial credit purchase was complete in December 2018, and an additional 7,000 credits will be purchased in early 2019. The final credit purchases will be completed in 2019 and 2020 as credits are approved and released.

Table 24: Lower James River Basin Financial Summary (1995-2018)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$4,594,100	(\$52,300)	\$3,971,000	\$570,800
Tidal Wetlands	\$927,600	\$0	\$204,000	\$723,600
Stream USM	\$4,861,800	\$0	\$4,416,200	\$445,600
Pre-USM Stream	\$2,405,700	(\$21,400)	\$2,384,300	\$0
TOTALS	\$12,789,200	(\$73,700)	\$10,975,500	\$1,740,000

Table 25: Lower James River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2018)

	Constructed/ Protected Mitigation	
Impact (linear feet) ¹	(linear feet) ³	Closed Mitigation (linear feet)4
20,361	21,430	1114

Table 26: Lower James River Basin Liabilities and Credit Balance Summary (1995-2018)

	NON-TIDAL WETLANDS	TIDAL WETLANDS*	STREAM - USM	
Total Credit Liability (including advance credit liability)	135.86	2.10	10,449	es
Total No Net Loss (NNL) Liability (including advance credit liability)	72.69	2.09	5,225	Liabilities
Released Credits addressing NNL	91.62	0.00	863	
Released Credits not addressing NNL	84.67	0.00	177	lits atus
Released Credits (Other)	0.00	0.00	0	Released Credits and Liability Status
Total Released Credits	176.29	0.00	1,040	elease d Liabi
Basin NNL Liability Met?	Yes	No	No	anc
Basin Total Liability Met?	Yes	No	No	
Release Credits Applied to Total Liability	132.69	0.00	1,040	ې. د
Released Credits Sold	3.20	0.00	0	credit
Released Credits Available	40.40	0.00	0	AvailableCredits
Advance Credits Available	20.00	0.32	5,620	V
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	0.00	1.42	0	Credit Potential
Potential Credits	94.05	15.00	13,205	Credi
Other Credits ¹	0.00	0.00	8,905	
Current Liabilities	0.00	2.10	9,409	

¹Additional credits to be purchased from Lower James mitigation bank in 2019/2020 from LJ-16.

^{*}No Net Loss (NNL) Liability in this basin is not necessarily equivalent to the acres impacted.

Middle James River

In 2012, the Fund completed construction on its largest stream restoration project to date at Meadow Creek. Monitoring of stream and wetland sites continued through 2018. The purchase of stream credits was completed in 2018.

All stream liabilities have been offset within this basin. Existing non-tidal wetland liabilities will be offset by final credit release at LJ-1. A small liability will remain due to very recent impacts into the Fund.

Table 27: Middle James River Basin Financial Summary (1995-2018)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$1,869,200	\$74,900	\$819,800	\$1,124,300
Tidal Wetlands	\$0	\$0	\$0	\$0
Stream USM	\$429,700	\$0	\$357,400	\$72,300
Pre-USM Stream	\$5,030,300	\$143,000	\$5,189,100	(\$15,800)
		_		
TOTALS	\$7,329,200	\$217,900	\$6,366,300	\$1,180,800

Table 28: Middle James River Pre-USM Impacts and Mitigation Activity Summary (1995-2018)

	Constructed/ Protected Mitigation	
Impact (linear feet) ¹	(linear feet) ³	Closed Mitigation (linear feet) ⁴
32,679	20,557	42,187

Table 29: Middle James River Basin Liabilities and Credit Balance Summary (1995-2018)

	NON-TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	39.87	516	ies
Total No Net Loss (NNL) Liability (including advance credit liability)	21.85	258	Liabilities
Released Credits addressing NNL	25.19	516	S
Released Credits not addressing NNL	10.06	0	Released Credits and Liability Status
Total Released Credits	35.25	516	ased (iabilit ₎
Basin NNL Liability Met?	Yes	Yes	Rele and L
Basin Total Liability Met?	No	Yes	
Release Credits Applied to Total Liability	35.25	516	S1
Released Credits Sold	0.00	0	eCredi
Released Credits Available	0.00	0	Available Credits
Advance Credits Available	7.50	5,000	4
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	2.45	0	Cr
Current Liabilities	4.64	0	

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.

The existing liability for non-tidal wetlands will be offset in part by the final credit release from UJ-1 which will be submitted in 2019. In 2018, the Conservancy submitted a pre-app and then full proposal for a new wetland project, UJ-4. This project went out to Public Notice in 2018, and the Conservancy anticipates moving forward with this large project in 2019 to fully offset the existing liabilities.

Table 30: Upper James River Basin Financial Summary (1995-2018)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$676,600	\$0	\$310,100	\$366,500
Tidal Wetlands	\$0	\$0	\$0	\$0
Stream USM	\$0	\$0	\$0	\$0
Pre-USM Stream	\$0	\$0	\$0	\$0
	·			
TOTALS	\$676,600	\$0	\$310,100	\$366,500

Table 31: Upper James River Pre-USM Impacts and Mitigation Activity Summary (1995-2018)

	Constructed/ Protected Mitigation	
Impact (linear feet) ¹	(linear feet) ³	Closed Mitigation (linear feet)⁴
-	-	7,609

Table 32: Upper James River Basin Liabilities and Credit Balance Summary (1995-2018)

	NON-TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	12.60	0	ies
Total No Net Loss (NNL) Liability (including advance credit liability)	8.09	0	Liabilities
Released Credits addressing NNL	0.30	0	S
Released Credits not addressing NNL	0.51	0	Released Credits and Liability Status
Total Released Credits	0.81	0	ased C ability
Basin NNL Liability Met?	No	N/A	Relez and Li
Basin Total Liability Met?	No	N/A	
Release Credits Applied to Total Liability	0.81	0	Ş
Released Credits Sold	0.00	0	Credit
Released Credits Available	0.00	0	Available Credits
Advance Credits Available	2.69	5,000	∢
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	0.26	0	it Potential
Potential Credits	22.49	0	Credit
Other Credits ¹	0.00	0	
Current Liabilities	11.79	0	

¹Conservation Easement credits.

New River

The New River basin has seen a relatively small amount of wetland impacts and has two approved stream projects to address the existing liabilities in the basin. One stream project was constructed in 2013, and a credit release was approved in 2017. The NW-3 project is in development to address wetland and stream liabilities, as well as restore bog turtle habitat. The full design plan was presented and coordinated with the IRT, after which the Site Development Plan for this site was submitted to the agencies in late 2018.

The existing projects NW-1 and NW-3 are expected to fully satisfy the existing liabilities in the New River basin.

Table 33: New River Basin Financial Summary (1995-2018)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$416,700	\$0	\$59,800	\$356,900
Tidal Wetlands	\$0	\$0	\$0	\$0
Stream USM	\$2,040,000	\$0	\$848,500	\$1,191,500
Pre-USM Stream	\$290,300	(\$1,400)	\$292,800	(\$3,900)
				_
TOTALS	\$2,747,000	(\$1,400)	\$1,201,100	\$1,544,500

Table 34: New River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2018)

	Constructed/ Protected Mitigation	
Impact (linear feet) ¹	(linear feet) ³	Closed Mitigation (linear feet)4
3,078	5,048	-

Table 35: New River Basin Liabilities and Credit Balance Summary (1995-2018)

	NON-TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	6.92	5,440	sə
Total No Net Loss (NNL) Liability (including advance credit liability)	5.04	2,720	Liabilities
Released Credits addressing NNL	0.00	1,195	
Released Credits not addressing NNL	0.00	568	dits
Released Credits (Other)	0.00	0	Released Credits and Liability Status
Total Released Credits	0.00	1,763	elease d Liab
Basin NNL Liability Met?	No	No	an R
Basin Total Liability Met?	No	No	
Release Credits Applied to Total Liability	0.00	1,763	y;
Released Credits Sold	0.00	0	eCredit
Released Credits Available	0.00	0	Available Credits
Advance Credits Available	0.00	1,208	*
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	8.21	8,168	Cred
Other Credits ¹	0.00	0	•
Current Liabilities	6.92	3,677	
¹ Conservation Easement and Adjustment Factor of	redits.		

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. One additional wetland credit release was approved in 2017. 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. The second phase of a large stream restoration project is currently in development with pre-app, full concept plan development, land protection, and historical survey completed. The complete Site Development Plan is expected to be submitted in early 2019 for this site.

Very recent use of the Fund has generated new non-tidal wetland liabilities. The Conservancy is evaluating a potential project to address these impacts, having completed a pre-app submission and site visit with the IRT. Feasibility of this project will be determined in 2019. Tidal wetland liabilities are also existing. The Conservancy released an RFP in 2018 to solicit suitable projects to offset these liabilities. The existing stream liabilities will all be offset by the implementation of existing project PO-8.

Table 36: Potomac River Basin Financial Summary (1995-2018)

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	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance	
Non-Tidal Wetlands	\$1,762,500	\$0	\$1,528,800	\$233,700	
Tidal Wetlands	\$1,237,600	\$0	\$146,100	\$1,091,500	
Stream USM	\$2,654,900	\$1,406,600	\$206,600	\$3,854,900	
Pre-USM Stream	\$9,010,700	(\$1,406,600)	\$7,604,100	\$0	
TOTALS	\$14,665,700	\$0	\$9,485,600	\$5,180,100	

Table 37: Potomac River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2018)

	Constructed/ Protected Mitigation	, , ,
Impact (linear feet)1	(linear feet) ³	Closed Mitigation (linear feet)4
73,142	10,551	110,242

Table 38: Potomac River Basin Liabilities and Credit Balance Summary (1995-2018)

	NON-TIDAL WETLANDS	TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	29.12	2.11	7,403	es
Total No Net Loss (NNL) Liability (including advance credit liability)	19.01	2.11	3,702	Liabilities
Released Credits addressing NNL	49.14	0.00	0	
Released Credits not addressing NNL	49.14	0.71	0	its ıtus
Released Credits (Other)	2.51	0.00	0	Released Credits and Liability Status
Total Released Credits	100.79	0.71	0	leasec Liabil
Basin NNL Liability Met?	Yes	No	No	Re
Basin Total Liability Met?	Yes	No	No	
Release Credits Applied to Total Liability ¹	13.64	0.71	0	
Released Credits Sold	12.94	0.00	0	dits
Released Credits Available	74.21	0.00	0	Available Credits
Advance Credits Available	2.46	0.30	10,000	Availa
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	3.89	9.00	0	Credit Potential
Potential Credits	0.26	0.00	33,025	Credi
Current Liabilities	2.54	1.70	7,403	

¹In 2017, 0.41 tidal wetland NNL credits were offset by 0.71 tidal wetland Preservation credits from PO-6.

Rappahannock River

The Fund has pursued several wetland projects within the Rappahannock River basin, which have generated credits in excess of the existing liability and has Released Credits available for sale. The Conservancy released a Request for Proposals for stream projects or credits in the Rappahannock Basin in 2017. In 2018, the Conservancy proposed a project to fully offset the full mitigation liability of streams within this basin. A pre-app site visit, full proposal, public notice, and funding request were all proposed and approved in 2018. The Conservancy acquired the property in December and is advancing the project through Site Development Plan in 2019.

With implementation of approved projects, all liabilities within the Rappahannock Basin will be fully offset.

Table 39: Rappahannock River Basin Financial Summary (1995-2018)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$1,471,600	\$0	\$1,471,600	\$0
Tidal Wetlands	\$17,900	\$0	\$4,100	\$13,800
Stream USM	\$3,057,000	\$0	\$1,382,800	\$1,674,200
Pre-USM Stream	\$2,029,300	\$7,000	\$2,036,300	\$0
TOTALS	\$6,575,800	\$7,000	\$4,894,800	\$1,688,000

Table 40: Rappahannock River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2018)

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

Table 41: Rappahannock River Basin Liabilities and Credit Balance Summary (1995-2018)

	NON-TIDAL WETLANDS	TIDAL WETLANDS*	STREAM - USM	
Total Credit Liability (including advance credit liability)	19.28	0.04	6,479	ies
Total No Net Loss (NNL) Liability (including advance credit liability)	10.21	0.04	3,240	Liabilities
Released Credits addressing NNL	19.68	0.00	0	s
Released Credits not addressing NNL	5.61	0.07	0	Released Credits and Liability Status
Total Released Credits	25.29	0.07	0	ased C iability
Basin NNL Liability Met?	Yes	Yes	No	Relex and Li
Basin Total Liability Met?	Yes	Yes	No	
Release Credits Applied to Total Liability ¹	19.28	0.07	0	S.
Released Credits Sold	0.00	0.00	0	Credi
Released Credits Available	6.01	0.00	0	Available Credits
Advance Credits Available	5.00	1.96	6,394	ď
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	0.00	1.53	6,450	Credit Potential
Potential Credits	2.14	0.00	8,517	Cre
Current Liabilities	0.00	0.00	6,479	

¹In 2017, 0.036 tidal wetland NNL credits were offset by 0.072 tidal wetland Preservation credits from RP-1.

^{*}No Net Loss (NNL) Liability in this basin is not necessarily equivalent to the acres impacted.

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. In early 2013, the Conservancy was approved to purchase stream credits from an existing bank to address some of the existing liabilities. The Conservancy released an RFP seeking wetland projects in the Roanoke River basin in 2016, with bids due in early 2017. The Conservancy also proposed a large stream restoration project in 2016, that was approved through issuance of an IEL late in 2016. Funding was approved for this site in 2017, but the project was subsequently terminated based on the location of the project in relation to the location of the previous impacts. Two pre-application requests were submitted in 2017, one for a wetland project and the second for a stream site. Throughout 2018 a pre-app and proposal were submitted for both projects. The wetland project was withdrawn in the fall due to landowner constraints. The stream project, which also has a wetland component was public noticed in 2018 and an IEL was provided. Another RFP was issued in 2018 to solicit projects to offset the wetland liabilities.

All remaining stream liabilities can be fully offset by implementation of the existing RO-9 project. A wetland project is needed to offset the remaining wetland liabilities.

Table 42: Roanoke River Basin Financial Summary (1995-2018)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$869,100	\$0	\$355,300	\$513,800
Tidal Wetlands	\$0	\$0	\$0	\$0
Stream USM	\$3,044,100	(\$600)	\$1,355,800	\$1,687,700
Pre-USM Stream	\$564,000	\$191,500	\$755,500	\$0
TOTALS	\$4,477,200	\$190,900	\$2,466,600	\$2,201,500

Table 43: Roanoke Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2018)

	Constructed/ Protected Mitigation	
Impact (linear feet) ¹	(linear feet) ³	Closed Mitigation (linear feet)4
4,635	3,586	19,030

Table 44: Roanoke River Basin Liabilities and Credit Balance Summary (1995-2018)

	NON-TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	15.10	7,944	ies
Total No Net Loss (NNL) Liability (including advance credit liability)	9.26	3,972	Liabilities
Released Credits addressing NNL	1.61	2,973	
Released Credits not addressing NNL	0.65	1,023	dits atus
Released Credits (Other) ¹	0.00	304	Released Credits and Liability Status
Total Released Credits	2.26	4,300	elease d Liab
Basin NNL Liability Met?	No	Yes	R an
Basin Total Liability Met?	No	No	
Release Credits Applied to Total Liability	2.26	4,300	S
Released Credits Sold	0.00	0	eCredit
Released Credits Available	0.00	0	Available Credits
Advance Credits Available	0.00	1,590	,
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	7.40	4,932	Cre
Current Liabilities	12.84	3,644	
¹ Adjustment Factor credits.			

Shenandoah River

The Fund implemented a wetland restoration project in 2012 to address most of the wetland impacts within this basin. Several stream projects have been developed and are in the monitoring phase. A stream project (SH-6) was approved in 2014 to address the remaining stream liability in the Shenandoah basin. Land protection on SH-6 was completed in 2015, and a site development plan was submitted to the IRT in 2016, currently in review. Wetland credits were released from one project in 2018, SH-4.

The existing wetland liabilities will be offset by the existing SH-4 project. Additionally, SH-6 is being evaluated to include wetland compensation and may also provide mitigation for these remaining liabilities. All existing stream liabilities can be fully met by implementation of stream compensation activities at existing projects SH-2 and SH-6.

Table 45: Shenandoah River Basin Financial Summary (1995-2018)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$1,106,200	\$0	\$647,200	\$459,000
Tidal Wetlands	\$0	\$0	\$0	\$0
Stream USM	\$1,691,200	(\$2,500)	\$1,284,200	\$404,500
Pre-USM Stream	\$1,614,200	\$1,467,000	\$3,095,100	(\$13,900)
TOTALS	\$4,411,600	\$1,464,500	\$5,026,500	\$849,600

Table 46: Shenandoah River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2018)

	Constructed/ Protected Mitigation	
Impact (linear feet) ¹	(linear feet) ³	Closed Mitigation (linear feet)4
12,128	5,718	32,223

Table 47: Shenandoah River Basin Liabilities and Credit Balance Summary (1995-2018)

	NON-TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	15.48	4,423	se
Total No Net Loss (NNL) Liability (including advance credit liability)	12.61	2,212	Liabilities
Released Credits addressing NNL	7.82	1,200	v
Released Credits not addressing NNL	2.26	591	Released Credits and Liability Status
Total Released Credits	10.08	1,791	ased C ability
Basin NNL Liability Met?	No	No	Rele; and Li
Basin Total Liability Met?	No	No	
Release Credits Applied to Total Liability	10.08	1,791	S
Released Credits Sold	0.00	0	credit
Released Credits Available	0.00	0	Available Credits
Advance Credits Available	1.13	7,964	∢
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	2.61	4,761	Credi
Other Credits ¹	0.00	0	
Current Liabilities	5.40	2,632	

¹Conservation Easement credits.

Tennessee River

The Fund implemented construction on a sizable wetland restoration site in 2012. Site development plans have been submitted for two stream projects, TN-10 and TN-11. Biological improvements were made on TN-11 in 2016, and for TN-10 in 2017. Final approval for both funding and the SDPs for TN-10 and TN-11 were provided in 2018. Stream credits were also released from both of these sites in 2018. An RFP has been released to solicit suitable projects for wetlands mitigation in this basin. Bids are expected in early 2019.

All existing stream liabilities will be offset by approved projects TN-10 and TN-11. Wetland liabilities remain, with an RFP issued in 2018 to address this need.

Table 48: Tennessee River Basin Financial Summary (1995-2018)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$1,155,000	\$0	\$1,083,700	\$71,300
Tidal Wetlands	\$0	\$0	\$0	\$0
Stream USM	\$1,459,800	\$0	\$820,900	\$638,900
Pre-USM Stream	\$706,900	(\$63,400)	\$643,500	\$0
TOTALS	\$3,321,700	(\$63,400)	\$2,548,100	\$710,200

Table 49: Tennessee River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2018)

	Constructed/ Protected Mitigation	
Impact (linear feet) ¹	(linear feet) ³	Closed Mitigation (linear feet) ⁴
5,332	13,928	7,590

Table 50: Tennessee River Basin Liabilities and Credit Balance Summary (1995-2018)

	NON-TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	29.63	3,335	ies
Total No Net Loss (NNL) Liability (including advance credit liability)	21.22	1,668	Liabilities
Released Credits addressing NNL	11.65	308	S
Released Credits not addressing NNL	2.77	1,668	redits
Total Released Credits	14.42	1,976	Released Credits and Liability Status
Basin NNL Liability Met?	No	No	Relea
Basin Total Liability Met?	No	No	
Release Credits Applied to Total Liability	14.42	1,976	v
Released Credits Sold	0.00	0	Credit
Released Credits Available	0.00	0	Available Credits
Advance Credits Available	1.89	1,684	⋖
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	0.00	572	Credit Potential
Potential Credits	9.19	587	Crec
Other Credits ¹	0.00	297	
Current Liabilities	15.21	1,359	

^{&#}x27;Adjustment Factor credits.

York River

Several wetland projects have been implemented to address the wetland liability within the York River basin. There is one tidal restoration project in the ground to address the tidal impacts within this basin. Released Credits for the York River basin are available for sale. There have been relatively few stream impacts in this basin and in 2017, the Conservancy purchased 9 bank credits to satisfy the existing liability in this basin. Credit releases were approved for both non-tidal and tidal wetlands in 2018.

There are no existing liabilities for either non-tidal wetlands or streams in the York River basin. The remaining liabilities for tidal wetland will be offset through release of credits from the existing YK-5 project.

Table 51: York River Basin Financial Summary (1995-2018)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$1,168,600	\$28,500	\$1,197,100	\$0
Tidal Wetlands	\$505,300	(\$700)	\$24,600	\$480,000
Stream USM	\$5,400	\$0	\$5,400	\$0
Pre-USM Stream	\$163,200	\$32,700	\$195,900	\$0
TOTALS	\$1,842,500	\$60,500	\$1,423,000	\$480,000

Table 52: York River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2018)

		, , ,
	Constructed/ Protected Mitigation	
Impact (linear feet) ¹	(linear feet) ³	Closed Mitigation (linear feet)⁴
1,282	13,817	978

Table 53: York River Basin Liabilities and Credit Balance Summary (1995-2018)

	NON-TIDAL WETLANDS	TIDAL WETLANDS*	STREAM - USM	
Total Credit Liability (including advance credit liability)	17.29	1.68	9	es
Total No Net Loss (NNL) Liability (including advance credit liability)	9.12	1.61	5	Liabilities
Released Credits addressing NNL	72.22	0.62	9	
Released Credits not addressing NNL	10.88	0.00	0	lits atus
Released Credits (Other) ¹	2.64	0.00	0	Released Credits and Liability Status
Total Released Credits	85.74	0.62	9	elease d Liabi
Basin NNL Liability Met?	Yes	Yes	Yes	anc anc
Basin Total Liability Met?	Yes	Yes	Yes	
Release Credits Applied to Total Liability	17.29	0.06	9	S
Released Credits Sold	0.00	0.56	0	Credit
Released Credits Available	68.45	0.00	0	Available Credits
Advance Credits Available	10.00	0.94	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	0.00	0	Credit Potential
Potential Credits	20.02	2.96	0	້ວ
Current Liabilities	0.00	1.06	0	

¹Enhancement and buffer restoration credits.

^{*}No Net Loss (NNL) Liability in this basin is not necessarily equivalent to the acres impacted.

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%.
- 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.
- 4. 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

<u>Trust Fund Annual Reports and Supporting Documentation</u>

- 2016 Main Report
- 2015 Main Report
- 2014 Main Report
- 2013 Main Report
- 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