

VIRGINIA AQUATIC RESOURCES TRUST FUND ANNUAL REPORT - 2022

April 2023

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 (1995-2022) and details specific activities conducted by the program in 2022 (January 1 – December 31, 2022).

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 1995-2022.

III. Summary of 2022 Credit Sales, Project Proposals, and Funding Authorizations – Provides a summary of the credit sales, proposed projects, and funds authorized during 2022.

IV. Project Identification Needs – Provides a summary of remaining liabilities, existing financial capacity and focus areas for the upcoming year.

V. Basin Summaries – Provides overview of basin status through projects, credits, and funding.

VI. Definitions – Provides program specific definitions used throughout the report.

VII. 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, 2019 by the Norfolk District of the United States Army Corps of Engineers (Corps) and the Virginia Department of Environmental Quality (DEQ). The 2019 Instrument replaces and supersedes the 2011 VARTF Program Instrument, which replaced 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, but is not obligated to, sell mitigation Credits. The Conservancy may elect, in its sole discretion, to reject specific Credit sales for impacts to sensitive or priority resources or based on the Conservancy's ability to mitigate for the impacts in the appropriate watershed. The sale of Credits by the Conservancy is subject to the Conservancy's policies regarding conflict of interest and corporate engagement and the Conservancy may decline to sell Credits to any applicant if doing so would violate Conservancy policies.

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 (CPF). Over the past several years, the Conservancy has been updating and revising the Fund's CPF. The final revisions were presented to the IRT, released on public notice, approved and incorporated into the Program Instrument in 2021. The updated CPF utilizes a tiered approach that relies upon TNC's science and GIS-based analysis of priority lands and waters as well as the Commonwealth of Virginia's priorities for land protection. This incorporates both TNC and partner focal areas for conservation and restoration. The revised Framework prioritizes resilient and connected lands and waters. 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 [D](#) and [E](#)).

D. PROGRAM AUDIT AND INSTRUMENT UPDATES

In 2016, the Program was audited, per a requirement of the 2011 Program Instrument. The full audit was completed in April 2016, and a complete summary can be found in the 2016 VARTF Annual Report. The next audit was conducted and completed in 2022. In consultation with the IRT, the Conservancy contracted with the Environmental Law Institute (ELI) to conduct a programmatic audit focused on Program compliance with Federal and State mitigation requirements and the VARTF Instrument. The IRT approved both the scope and the expenditure of Program funds to cover the associated expenses prior to initiation of the audit.

Audit Summary

Program activities conducted between January 1, 2016 – December 31, 2021, were included in ELI’s review. ELI completed its review and provided its report on May 31, 2022. The ELI report is available at www.nature.org/vartf.

ELI investigated compliance of many program elements with the requirements of the 2008 Mitigation Rule and 2019 Program Instrument. A summary of these items is provided below:

Element Reviewed	Compliance	Non-compliance
Maintenance of a system for accurately tracking the calculation of credits in relation to projects, the debit or sale of both advance and released credits, and financial transactions in relation to credits between the Conservancy and permittees	X	
<ul style="list-style-type: none"> • Accurate credit tracking using the system – Credit sale receipts 	X	
<ul style="list-style-type: none"> • Compared the data in the summary tables in the ledger with data recorded in the revenue and project tabs 	X	
<ul style="list-style-type: none"> • Compared data in the credit ledger to the tables of the 2020 VARTF Annual Report 	X	
Presence of determinations that a project meets the relevant geographic service area, including documentation	X	

supporting compliance with the Compensation Planning Framework		
Completion of project-specific land acquisition and initial physical and biological improvements by third full growing season after the first advance credit in the service area is sold or debited		X
<ul style="list-style-type: none"> Including determination of current deficits and identification of points of delay in any service areas where not satisfied 	X	
<ul style="list-style-type: none"> Identification of practices and plans that address timeline effectively 	X	
Credit cost calculation system that reflects full cost accounting	X	
<ul style="list-style-type: none"> Methodology for evaluating and updating credit fees 	X	
Procedures for Requests for Proposals to satisfy liabilities	X	
Presence of recorded land protection documents for land associated with mitigation sites	X	
Presence of long-term management and maintenance plan for each mitigation project	X	
Satisfaction of program reporting protocols	X	
Review of standard operating procedures	X	

Of the 15 elements that ELI reviewed, the Trust Fund was in compliance with all but one factor, implementation of improvements within three growing seasons of the first Advance Credit sale. ELI also offered several recommendations about the Program, IRT and tracking and auditing considerations.

The Conservancy presented the findings from the audit to the IRT in August 2022. Significant effort has been made by the Chairs to improve processing mitigation project elements. Many project elements were coordinated, reviewed and approved by the IRT in the last three months of 2022, reflecting the suggestions contained within the audit and the focused efforts of the agencies.

The Compensation Planning Framework is part of the Program Instrument. Throughout 2019 and 2020 Conservancy staff worked to update and revise the CPF to account for newly developed resiliency science, mapping and conservation partner priorities. The 2021 Revised Compensation Planning Framework was approved and incorporated as the new [Exhibit A](#) to the Program Instrument on September 23, 2021.

In 2021, the Corps and DEQ approved the increase in Advance Credits in five basins. These included non-tidal wetland credits in the Middle James River (10), New River (5), Roanoke River (5) and Shenandoah River (5) basins and stream credits in the Potomac River (40,000) and Roanoke River (5,000) basins. Additionally, the fee schedule for several basins was increased: Lower James non-tidal wetland credits increased to \$75,000/credit and stream credits increased to \$600/credit, Middle James River non-tidal wetland credits increased to \$75,000/credit, Roanoke River stream credits increased to \$600/credit and Tennessee River stream credits increased to \$500/credit. See [Exhibit C](#) for the advance credit fee schedule. The current Advance Credits and fee schedule are under evaluation and requests for increases in specific basins are anticipated early in 2023.

In 2021, VA State Code (Section 62.1-44.15:23) modified the definition and use of geographic service areas for mitigation sites. As a result, VARTF proposed modifications to a number of existing projects. Most of these requests were approved in 2021 and 2022. Additional modifications may be requested upon further review of eligible projects.

As noted in previous reports, projects addressed in this report include those approved and, in many cases, completed prior to the 2008 federal mitigation rule and the program's establishment of the 2011 Instrument. Early projects of the program were completed under the establishing 1995 MOU and the modifications from the 2003. It must be noted and clearly understood that projects approved under the previous MOUs 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 current Instrument which complies with the 2008 federal mitigation rule.

II. Program Summary 1995-2022

From 1995 through December 31, 2022, 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 over \$112 million in mitigation payments as summarized in Table 1. From these mitigation payments, the Corps and DEQ have authorized \$74,748,500 for the Conservancy to operate the Program and complete activities on 146 approved mitigation projects.

Table 1: The VARTF Account Summary (1995-2022)

	Mitigation Payments (\$)	Other Revenues (\$)¹	Allocated Funds (\$)²	Total Balance (\$)
Non-Tidal Wetlands	31,171,000	362,200	22,241,900	9,291,300
Tidal Wetlands	5,167,700	(14,500)	2,787,800	2,365,400
Stream USM	46,855,000	1,375,400	17,388,200	30,842,200
Stream pre-USM	22,433,500	464,700	22,930,200	(32,000)
General³	6,920,700	8,355,000	9,400,400	5,875,300
Damages Payments⁴	0	300,000	500	299,500
TOTALS	112,547,900	10,842,800	74,749,000	48,641,700

¹Resource-specific Revenues include proceeds from land sales and transfer of funds. General Revenues includes interest (including Stewardship Endowment Interest).

²Includes both spent funds and funds reserved for approved projects, as well as spent staff salaries and expenses. General Allocated Funds include corrective action funds, Statewide Development Fund, remaining budgeted staff salaries and expenses, and bank service charges. Allocated Damages Payments includes funds spent to reach settlement.

³Includes all financials not tracked by resource, including released credit sales.

⁴Includes settlement payment received in 2022.

Table 2 depicts the mitigation liability (in credits) for each resource for the Program through the end of 2022. 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 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 (1995-2022)

	Mitigation Liability (Credits) ¹	Proposed Credits ²	Completed/Constructed Credits ³	Released Credits ⁴	Total Credits ⁵
Non-Tidal Wetlands	656.20	100.77	201.12	887.78	1,189.67
Tidal Wetlands	12.39	7.83	54.81	41.87	104.51
Stream USM	91,351	74,059	11,389	32,171	117,619

¹Includes all liability accepted by the Fund from 1995 through 2022. This figure does NOT equal the number of impacts into the Fund (either acres for wetlands or linear feet for streams).

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.

Program-wide, VARTF is providing offsets that exceed liabilities. For non-tidal wetlands, the Fund has released 35% more credits over the required offsets. Once all projects are completed, the Fund expects to generate nearly 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 over 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 approximately 50% of the required liabilities. Significant stream credits are in development and under review with the IRT. Once complete, these projects will exceed the amount of required stream compensation credits 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.

Table 3: Pre-USM Summary (1995-2022)

Impact (linear feet) ¹	Constructed/Protected Mitigation (linear feet) ²	Closed Mitigation (linear feet) ³
167,690	392,510	264,103

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

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.

III. Summary of 2022 Credit Sales, Project Proposals, and Funding Authorizations (January 1, 2022 – December 31, 2022)

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 2022. 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 2022 Permits and Credit Sales

Permit Number	Sale Date ¹	Basin	HUC	Impact		Required Mitigation		Credit Type ²
				Wetland (acres)	Streams (lf)	Wetlands (credits)	Streams (credits)	
NAO-2017-01867	1/5/2022	LJ	02080208		78		99	Adv
WP4-20-0448	2/16/2022	MJ	02080205	0.00		0.01		Adv
NAO-2021-01461	2/17/2022	MJ	02080207	0.15		0.30		Adv
NAO-2004-1310/VMRC#17-V0953	2/17/2022	MJ	02080207	1.10		2.20		Adv
WP4-19-1091	2/25/2022	SH	02070007	0.31		0.31		Adv
WP4-19-1091	2/25/2022	SH	02070007	0.23		0.12		Adv
WP4-19-1091	2/25/2022	SH	02070007		59		74	Adv
WP4-21-2227	3/3/2022	SH	02070004	0.14		0.14		Adv
WP4-21-2227	3/3/2022	SH	02070004	0.07		0.14		Adv
NAO-2016-0413	3/3/2022	LJ	02080206		1308		1549	Adv
NAO-2019-01892	3/16/2022	RP	02080104		245		331	Adv
WP4-16-0551	3/23/2022	LJ	02080208		90		52	Adv
JPA #21-2609	3/31/2022	RO	03010101	0.13		0.13		Adv
JPA #21-2609	3/31/2022	RO	03010101	0.020		0.03		Adv
JPA #21-2609	3/31/2022	RO	03010101	0.110		0.22		Adv
NAO-2013-01663	4/1/2022	PO	02070011		79		108	Adv
NAO-2013-01663	4/1/2022	PO	02070011		1043		1427	Adv
IP#19-1582	4/6/2022	RP	02080103		325		384	Adv
15-0620	4/14/2022	CB	02080108	0.999		3.00		Adv
15-0620	4/14/2022	CB	02080108	0.100		0.10		Adv
22-0353	4/14/2022	SH	02070004	0.420		0.42		Adv
22-0353	4/14/2022	SH	02070004	0.030		0.05		Adv
22-0353	4/14/2022	SH	02070004	0.500		1.00		Adv
22-0353	4/14/2022	SH	02070004	0.060		0.03		Adv
VWP IP-19-1748	4/27/2022	PO	02070011		21		20	Adv

Permit Number	Sale Date ¹	Basin	HUC	Impact		Required Mitigation		Credit Type ²
				Wetlands (acres)	Streams (lf)	Wetlands (credits)	Streams (credits)	
VWP IP-19-1748	4/27/2022	PO	02070011		10		5	Adv
NAO-2002-2280	5/5/2022	CB	02080108	0.10		0.10		Adv
NAO 2005-2187	5/5/2022	LJ	02080208		178		83	Adv
2021-2196	5/13/2022	TN	06010102	0.72		1.44		Adv
2021-2196	5/13/2022	TN	06010102	0.17		0.25		Adv
WP4-21-2200	5/13/2022	MJ	02080205		813		837	Adv
NAO-2004-1310/VMRC# 17-V0953	6/3/2022	MJ	02080207		75		75	Adv
NAO-2012-00486 / VMRC 2021-2616	6/3/2022	YK	02080106	0.01		0.01		Adv
NAO-2017-02128	6/7/2022	PO	02070011		44		26	Adv
WP2-21-2369	6/16/2022	RO	03010106	0.19		0.19		Adv
NAO-2021-3170	6/22/2022	MJ	02080204		61		66	Adv
NAO-2021-02929	6/22/2022	YK	02080107	0.09		0.09		Adv
11-0752	6/23/2022	PO	02070011		5078		5078	Adv
21-2206	6/30/2022	LJ	02080206		325		371	Adv
WP4-21-0623; NAO-2020-0434; VMRC #21-0623	7/6/2022	CB	02080108	0.17		0.17		Adv
WP4-21-0623; NAO-2020-0434; VMRC #21-0623	7/6/2022	CB	02080108	0.41		0.82		Adv
NAO-2002-2280	7/6/2022	CB	02080108	0.10		0.10		Adv
NAO-2020-0434/21-0623	7/6/2022	CB	02080108		113		146	Adv
NAO-2015-00459	7/6/2022	CB	02080108	0.02		0.01		Adv
WP4-20-1781/17-SPGP-01	7/13/2022	PO	02070010		217		265	Adv
NAO-2020-1574/WP4-21-0576	7/13/2022	CH	03010205		14		16	Adv
21-2052	7/22/2022	PO	02070010		410		369	Adv
21-2052	7/22/2022	PO	02070010		14		4	Adv
19-1743	8/2/2022	PO	02070011		1218		1623	Adv
19-1743	8/2/2022	PO	02070011		1014		1088	Adv

Table 4: Summary of 2022 Permits and Credit Sales (continued)

Permit Number	Sale Date ¹	Basin	HUC	Impact		Required Mitigation		Credit Type ²
				Wetland (acres)	Streams (lf)	Wetlands (credits)	Streams (credits)	
DEQ #19-1837	8/9/2022	PO	02070008		115		99	Adv
WPS-21-1490	8/17/2022	PO	02070008		93		106	Adv
#22-0751	8/17/2022	PO	02070010		145		71	Adv
NAO-2018-01637/V18-1447	8/30/2022	CB	02080108	0.02		0.02		Adv
NAO-2018-01637/V18-1447	8/30/2022	CB	02080108	0.05		0.10		Adv
WP4-22-1642	9/16/2022	CB	02080108	0.62		1.24		Adv
22-4084	9/26/2022	CB	02080111	0.05		0.05		Adv
19-4146	9/28/2022	RO	03010106		71		26	Adv
WP4-21-2620	10/3/2022	PO	02070011		407		537	Adv
22-0149	10/3/2022	PO	02070011		2263		2456	Adv
22-0149	10/3/2022	PO	02070011		430		275	Adv
WP4-22-0967	10/3/2022	LJ	02080208		62		92	Adv
22-1183	10/11/2022	AO	02040304	0.05		0.10		Adv
22-1183	10/11/2022	AO	02040304	3.64		1.82		Adv
NAO-2002-2280	10/11/2022	CB	02080108	0.10		0.10		Adv
WP4-21-0759	11/21/2022	MJ	02080207	0.09		0.14		Adv
WP4-21-0759	11/21/2022	MJ	02080207	0.36		0.36		Adv
WP4-21-0759	11/21/2022	MJ	02080207	1.37		2.74		Adv
#2022-0664	11/22/2022	PO	02070008		842		877	Adv
#2022-0664	11/22/2022	PO	02070008		28		38	Adv
#2022-0664	11/22/2022	PO	02070008		121		36	Adv
VWP 21-2578	12/6/2022	CH	03010205		2523		1619	Adv
JPA# 21-1988	12/14/2022	CB	02080108	0.01		0.01		Adv
JPA# 21-1988	12/14/2022	CB	02080108	0.57		0.57		Adv
JPA# 21-1988	12/14/2022	CB	02080108	0.23		0.35		Adv
Total Advance Credit Sales				13.50	19,932	18.97	20,328	

Table 4: Summary of 2022 Permits and Credit Sales (continued)

Permit Number	Sale Date ¹	Basin	HUC	Impact		Required Mitigation		Credit Type ²
				Wetland (acres)	Streams (lf)	Wetlands (credits)	Streams (credits)	
NAO-2021-01461	3/3/2022	MJ	02080207	0.25		1.50		Rel
NAO-2013-01663	4/1/2022	PO	02070011	0.55		0.55		Rel
NAO-2013-01663	4/1/2022	PO	02070011	0.50		0.25		Rel
NAO-2013-01663	4/1/2022	PO	02070011	1.02		2.04		Rel
NAO-2019-01843	4/1/2022	YK	02080107	0.24		0.48		Rel
21-4104	4/18/2022	LJ	02080206	0.03		0.03		Rel
NAO-2013-01120 DEQ VWP IP 2018-0425	5/13/2022	LJ	02080208	0.20		0.20		Rel
WP4-22-0271	6/3/2022	CH	03010204	0.31		0.93		Rel
NAO-2021-0156	6/3/2022	MJ	02080207	0.24		0.72		Rel
NAO-2021-0156	6/3/2022	MJ	02080207	0.50		3.00		Rel
11-0752	6/23/2022	PO	02070011	0.07		0.07		Rel
11-0752	6/23/2022	PO	02070011	0.65		1.30		Rel
VMRC # #2022-0910	7/8/2022	LJ	02080206	0.02		0.02		Rel
WP4-22-0270	7/13/2022	PO	02070010	0.25		0.50		Rel
#22-0751	8/17/2022	PO	02070010	0.16		0.32		Rel
#22-0751	8/17/2022	PO	02070010	0.05		0.03		Rel
VMRC/JPA No. 22-0806	9/1/2022	CH	03010204	0.49		2.94		Rel
VMRC/JPA No. 22-0806	9/1/2022	CH	03010204	0.83		2.49		Rel
WP4-22-1982	9/12/2022	LJ	02080206	0.93		1.86		Rel
WP4-22-1982	9/12/2022	LJ	02080206	0.04		0.04		Rel
WP4-21-2620	10/3/2022	PO	02070011	0.29		0.58		Rel
22-0149	10/3/2022	PO	02070011	0.63		1.26		Rel
21-4104 MOD	10/6/2022	LJ	02080206	0.01		0.01		Rel
Total Released Credit Sales				8.26		21.12		
Grand Total (Advance and Released Credit Sales)				21.75	19,932	40.09	20,328	

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

²Adv = Advance credit. Rel = Released credit.

During 2022, the Fund was used to mitigate for non-tidal wetland, tidal wetland, and stream impacts throughout Virginia. These impacts from the 74 permitted actions detailed in Table 4 above generated \$17,711,100 in mitigation payments to the Fund as summarized in Table 5. In 2022, \$4,217,700 was allocated to support implementation of compensation projects. At the end of 2022, the unallocated balance within the Fund was \$48,641,700.

Table 5: 2022 Financial Summary

	Mitigation Payments (\$)¹	Other Revenues (\$)²	Allocated Funds (\$)³	Total Balance for 1995-2022 (\$)
Non-Tidal Wetlands	1,642,500	34,400	958,300	9,305,800
Tidal Wetlands	480,400	0	1,036,000	2,365,400
Stream USM	13,475,000	0	1,347,100	30,842,200
Stream pre-USM	0	(365,000)	0	(32,000)
General ⁴	2,113,200	621,300	876,300	5,875,300
Damages Payments ⁵	0	300,000	500	299,500
TOTALS	17,711,100	590,700	4,218,200	48,641,700

¹General Mitigation Payments include released credit sales.

²Resource-specific Revenues include interbasin fund transfers. General Revenues include interest (including Stewardship Endowment Interest) and interbasin transfers.

³Includes both spent funds and funds reserved for 2022 approved projects, as well as spent staff salaries and expenses. General Allocated Funds includes administrative fee, spent staff salaries, remaining budgeted staff salaries and expenses, bank service charges, corrective action funds, Statewide Development Fund, project budgets funded by General Fund and 2022 approved General fund project budgets.

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

⁵Includes settlement payment received in 2022.

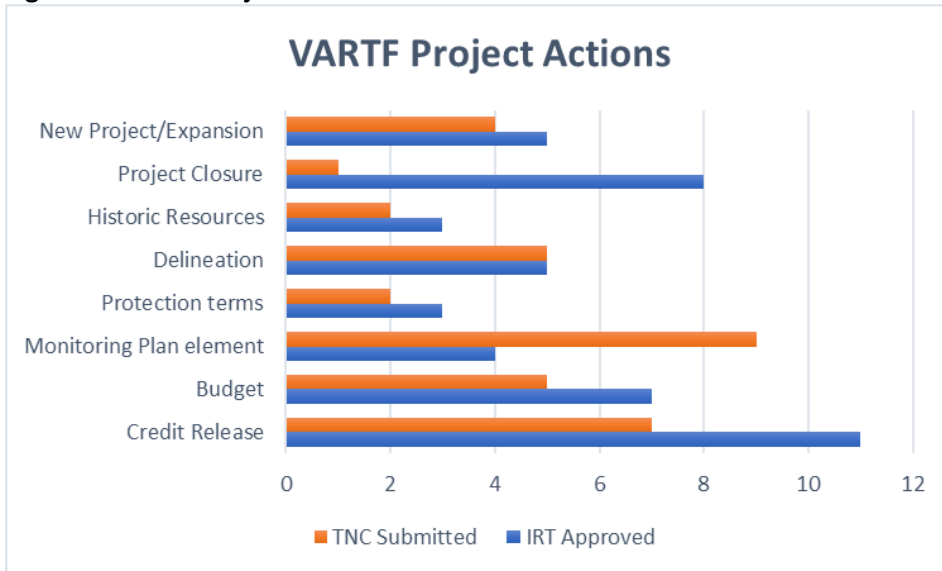
Below, Table 6 depicts the 2022 status and activity of the VARTF Endowment Fund for stewardship and long-term management activities. Also provided is the status and activity of Programmatic Funds (Contingency Fund and Statewide Development Fund), as described in the VARTF Instrument, that are within the Fund account to be used as needed, or when approved by the IRT for project needs throughout the state. In 2022, no funds were received into these accounts. Small funding amounts were transferred out or spent from Stewardship and Long-Term Management and the Statewide Development funds. Following approval of two Site Development Plans in 2022, transfers into the VARTF Endowment Fund are anticipated for these projects early in 2023. The Contingency Fund is at the maximum available balance and the Statewide Development Fund is close to the initial funded balance.

Table 6: 2022 Individual Fund Tracking			
	Funds Received	Funds Spent / Transferred Out	Current Balance
Stewardship and Long-Term Management (LTM) Fund	(\$8,300)	\$3,000	\$72,522
Contingency Fund	\$0	\$0	\$500,000
Statewide Development Fund	\$0	\$76	\$467,751

There was considerable project activity completed in 2022, both by VARTF staff and through

coordination, review and approval by the IRT/Chairs. The chart below shows the number of project elements submitted by TNC and the number approved by the agencies. Oftentimes, the review period crosses from the previous calendar year or into the next, and therefore the submittals and approvals are not expected to match.

Figure 1: VARTF Project Actions in 2022



The milestone project elements of Site Development Plan (SDP) approval and construction are the culmination of project development and final approval. The SDP often takes several years to complete full review and reach signatory stage. In 2022, two final SDPs were approved and signed (AO-7 and CB-22), and two projects were under construction. NW-3 began construction in 2021 and was completed and planted and the as-built submitted to the IRT in 2022. Construction began at AO-7 in fall 2022 with a completion date expected in early 2023. At least six other VARTF sites have SDPs pending review by the IRT or final revisions by TNC. Several other SDPs are still in development by TNC and will be submitted in 2023.

Also, in 2022, the Fund received approval on three non-tidal wetlands sites for the release of 75.78 wetland credits based on meeting success criteria and project milestones as shown in Table 7. Credits proposed or completed in 2022 on projects in development are also shown in Table 7.

Table 7: 2022 Mitigation Liabilities and Credit Activities

	Mitigation Liabilities Received (Credits) ¹	Proposed Credits ²	Completed/Constructed Credits ³	Released Credits ⁴
Non-Tidal Wetlands	38.95	11.50	29.29	19.26
Tidal Wetlands	1.14	7.83	0.00	0.33
Stream USM	20,328	21,894	355	1,386

¹Includes all liability accepted by the Fund in 2022. This does NOT equal impacts into the Fund.

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.

Table 8 shows the credit releases approved by the IRT during 2022 by project site. These credit releases included credits for non-tidal wetlands across six sites in four of the major river basins in which the Fund operates, adjustments on two non-tidal wetland sites, tidal wetland credit release at one project and stream credit releases at four sites in four major river basins.

Site	NTW	Tidal	Stream
CB-19	0.57		
CB-21	1.98		
MJ-5	10.44		
CH-9	-0.3		
LJ-4	-0.3		
RO-3	2.21		
CH-15	3.35		
CB-22	1.31	0.33	
RO-6			567
NW-1			66
LJ-11			80
CH-1			673
TOTALS	19.26	0.33	1,386

In 2022 the IRT authorized funds for the Conservancy to complete activities on eight sites in five basins for all resource types. This included funding for acquisition and full project development expenses as well as final budget approvals for several projects. Details are provided in Table 9.

Project ID	Project Name	Resource Type	Proposed USM Stream Crediting (credits)	Proposed Wetland Crediting	Funds Authorized
AO-4	Oyster West (Cubberly)	Non-Tidal Wetland	n/a	3.57	\$ 48,000
AO-7	Willis Wharf (Custis)	Non-Tidal Wetland	n/a	18.85	\$ 643,500
AO-8	Machipongo River (Willowdale)	Tidal Wetland	n/a	5.5	\$ 1,036,000
MJ-13	James River (VADOC) aka State Farm	Non-Tidal Wetland	n/a	18.36	\$ 242,000
SH-6	Shenandoah River (Cedar Creek)	Stream	6,823	n/a	\$ 97,534
SH-7	South Fork Shenandoah River (Barlow/Mack-Boll)	Stream, Non-Tidal Wetland	6,042	7.2	\$ 315,500
CB-22	Church Neck Road (Oliver)	Tidal Wetland, Non-Tidal Wetland	n/a	1.64	\$ 14,500
RO-9	Bluestone Creek (Tate)	Stream, Non-Tidal Wetland	8,358	8.8	\$ 1,139,114
Totals:			21,223	63.92	\$ 3,536,148

IV. Project Identification Needs

The section provides 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 in Section V.

Since its inception, the Fund has accepted liability for 668.59 wetland credits and 91,351 stream credits, and has proposed, initiated, constructed or released credits to offset 1,294 wetland and 117,619 stream credits (see Table 2). Programmatically and statewide 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 remains and offsets are needed. The remaining liabilities are shown below in Table 10 and are either relatively small cumulative impacts or are the result of very recent credit sales or recent changes in potential project development. Two-thirds of these resources are cumulatively small impacts that are lower priority for VARTF and IRT action. In two basins, VARTF had identified and was pursuing sites to address non-tidal wetland impacts, but for various reasons those projects could not move forward and VARTF has had to re-start the search for suitable projects. Increased development pressure and a lack of bank credits to cover the increasing needs has resulted in significant demand for VARTF credits in the Potomac and James River basins. In some areas, potential sites to address these liabilities have not yet been identified, however VARTF is actively developing projects to address several of the areas represented below, with highest priority in areas with impacts greater than 2 years old or large cumulative impacts. Table 10 depicts the basins and resources with project needs based on the age of the impacts (initial Advance Credit sale), with 2 years as a practical demarcation based on Program operations. It can be noted that VARTF has 25% less areas identified at the end of 2022 for remaining needs than were identified the previous year. The resources shown in orange (greater than 2 years) have the most immediate need for offset.

Basin	Resource	Liability (credits)	
Chowan River	Stream	1207	<2 years
Middle James River	Stream	1,323	<2 years
Upper James River	Stream	229	<2 years
Roanoke River	Non-tidal Wetland	0.6	<2 years
Shenandoah River	Non-tidal Wetland	1.7	<2 years
Tennessee River	Non-tidal Wetland	1.3	<2 years
Chesapeake Bay	Stream	1,831	>2 years
Chowan River	Non-tidal Wetland	5	>2 years
Lower James River	Stream	4,235	>2 years
Upper James River	Non-tidal Wetland	0.7	>2 years
Potomac River	Stream	12,888	>2 years
York River	Stream	354	>2 years

Adequate funding is available to fulfill project needs and offset all remaining liabilities in each basin as shown in Table 11 below. Although three of these areas indicate limited funding for the resource needs (Chowan non-tidal wetland, Roanoke non-tidal wetland, and Upper James non-tidal wetland), these balances are the result of approved project expenses and can be supplemented with Release Credit

proceeds, pending project closures that will release and unallocate funds, and the available General Fund balance.

Table 11: Available Funding

Basin	Resource Type	Impacts	Available Funding
Chowan River	Stream	1207	\$750,000
Middle James River	Stream	1,323	\$600,000
Upper James River	Stream	229	\$80,000
Roanoke River	Non-tidal Wetland	0.6	\$0
Shenandoah River	Non-tidal Wetland	1.7	\$900,000
Tennessee River	Non-tidal Wetland	1.3	\$100,000
Chesapeake Bay	Stream	1,831	\$625,000
Chowan River	Non-tidal Wetland	5	\$0
Lower James River	Stream	4,235	\$2,250,000
Upper James River	Non-tidal Wetland	0.7	\$0
Potomac River	Stream	12,888	\$12,000,000
York River	Stream	354	\$130,000

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 funding per 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 nearly all of the Advance Credit prices of the Program, and well above the expected costs for Conservancy-managed compensation sites. For streams, the available funds average a cost/credit above the Advance Credit fee price for most basins, and well within the anticipated range to address the remaining stream liabilities.

Table 12: Funding Calculations

Resource Type	Credit Need	Available Funding	Cost/Credit
Non-tidal Wetland	9.3	\$1,000,000	\$107,527
Stream	22,067	\$16,435,000	\$745
Tidal Wetland	-	-	-

It is important to recognize that the Fund includes unallocated General funds totaling over \$3M 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.

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

This section details the credits sales, project proposal and associated credits generated, 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 2022, including liabilities from Advance Credit sales.
<i>Total No Net Loss (NNL) Liability (including advance credit liability)</i>	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/varf; see Project Credit Balances per Basin).

Atlantic Ocean

Within the Atlantic Ocean basin, the Fund has eight 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. Two projects pursued between 2015-2019 were determined not to be feasible and did not complete any compensation activities (AO-5 and AO-6). Additional sites were considered for feasibility and evaluated in late 2019 with a new project (AO-7) being developed and proposed to the IRT in early 2020. The Initial Evaluation Letter was provided for AO-7 in 2020. The Site Development Plan for AO-4 was submitted in 2019 while the Site Development Plan for AO-7 was submitted in 2020. The SDP for AO-4 is pending IRT approval, with signature expected in early 2023. The SDP for AO-7 was approved and signed in 2022 and construction began in the fall of 2022. These two projects (AO-4 and AO-7) are expected to fully offset the existing liabilities for non-tidal wetlands in the Atlantic Ocean basin. A tidal site was identified and proposed in 2022 (AO-8) which can address all remaining liabilities for tidal wetlands within the basin.

Table 13: Atlantic Ocean Basin Financial Summary (1995-2022)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$654,900	\$0	\$462,000	\$192,900
Tidal Wetlands	\$494,600	\$0	\$496,700	(\$2,100)
Stream USM	\$0	\$0	\$0	\$0
Pre-USM Stream	\$0	\$0	\$0	\$0
TOTALS	\$1,149,500	\$0	\$958,700	\$190,800

Table 14: Atlantic Ocean Basin Liabilities and Credit Balance Summary (1995-2022)

	NON-TIDAL WETLANDS	TIDAL WETLANDS*	STREAM - USM	
Total Credit Liability (including advance credit liability)	9.10	1.71	0	Liabilities + Liability Status
<i>Total No Net Loss (NNL) Liability (including advance credit liability)</i>	<i>8.68</i>	<i>1.70</i>	<i>0</i>	
Basin NNL Liability Met?	No	No	N/A	
Basin Total Liability Met?	No	No	N/A	
Current Liabilities	9.10	0.35	0	Released Credits
Released Credits addressing NNL	0.00	0.00	0	
Released Credits not addressing NNL	0.00	0.60	0	
Released Submerged Aquatic Vegetation (SAV) Credits ¹	0.00	4.00	0	
Total Released Credits	0.00	4.60	0	
Release Credits Applied to Total Liability ^{2,3}	0.00	2.14	0	
Released Credits Sold	0.00	0.00	0	
Released Credits Available	0.00	1.54	0	AvailableCredits
Advance Credits Available	3.39	1.92	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	22.42	7.83	0	
¹ Released Credits Available from AO-1 and AO-3 are Submerged Aquatic Vegetation (SAV) credits.				
² In 2017 approximately 0.58 tidal wetland NNL credits were offset by 0.60 tidal wetland Preservation credits from AO-2.				
³ In 2022, 0.7722 tidal wetland NNL credits were offset by 1.5443 SAV credits from AO-1.				
*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 had remaining liabilities that were 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 in the tables below. The Conservancy also requested funding and approval to purchase wetland and stream credits from the Dry Fork Mitigation Bank (BS-2) to address the remaining liabilities. This request was approved in 2018, and the credit purchase was completed in 2019. All liabilities for VARTF in the Big Sandy are offset and all activities have been completed for this basin, for both funding and liabilities.

Table 15: Big Sandy River Basin Financial Summary (1995-2022)

	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	\$315,100	(\$2,900)
TOTALS	\$719,900	\$60,600	\$765,100	\$15,400

Table 16: Big Sandy River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2022)

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

Table 17: Big Sandy River Basin Liabilities and Credit Balance Summary (1995-2022)

	NON-TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	0.15	1,293	Liabilities + Liability Status
<i>Total No Net Loss (NNL) Liability (including advance credit liability)</i>	<i>0.11</i>	<i>647</i>	
<i>Basin NNL Liability Met?</i>	Yes	Yes	
<i>Basin Total Liability Met?</i>	Yes	Yes	
Current Liabilities	0.00	0	
Released Credits addressing NNL	0.15	0	Released Credits
Released Credits not addressing NNL	0.00	0	
Total Released Credits	0.15	0	
Release Credits Applied to Total Liability	0.15	1,293	
Released Credits Sold	0.00	0	
Released Credits Available	0.00	0	AvailableCredits
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	

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 the Site Development Plan. The first USM stream impacts within this basin were received in 2014. From 2019 through 2022, the Fund and the IRT continued to work through review and approval of the SDP for CB-17. Final approval and construction are expected in 2023. The SDP for CB-22 was submitted in 2019 and was approved and signed in 2022.

The Fund has existing projects in the ground, in development and in monitoring that will offset all non-tidal and tidal wetland impacts. Stream liabilities remain, and an RFP has been released to solicit projects to offset these liabilities. The Conservancy is actively looking for a suitable stream project.

Table 18: Chesapeake Bay Basin Financial Summary (1995-2022)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$8,729,300	\$182,400	\$6,054,900	\$2,856,800
Tidal Wetlands	\$1,835,700	\$0	\$955,100	\$880,600
Stream USM	\$732,400	\$34,400	\$143,100	\$623,700
Pre-USM Stream	\$272,600	\$50,500	\$323,100	\$0
TOTALS	\$11,570,000	\$267,300	\$7,461,700	\$4,361,100

Table 19: Chesapeake Bay Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2022)

Impact (linear feet)	Constructed/ Protected Mitigation (linear feet)	Closed Mitigation (linear feet)
1,399	14,308	12,257

Table 20: Chesapeake Bay Basin Liabilities and Credit Balance Summary (1995-2022)

	NON-TIDAL WETLANDS	TIDAL WETLANDS*	STREAM - USM	
Total Credit Liability (including advance credit liability)	119.26	4.36	1,831	Liabilities + Liability Status
<i>Total No Net Loss (NNL) Liability (including advance credit liability)</i>	70.61	2.49	916	
<i>Basin NNL Liability Met?</i>	No	No	N/A	
<i>Basin Total Liability Met?</i>	No	No	N/A	
Current Liabilities	11.51	3.49	1,831	
Released Credits addressing NNL	58.46	0.17	0	Released Credits
Released Credits not addressing NNL	48.70	0.87	0	
Released Conservation Easement Credits	0.59	0.00	0	
Total Released Credits	107.75	1.04	0	
Release Credits Applied to Total Liability ¹	99.94	0.87	0	
Released Credits Sold	7.81	0.00	0	
Released Credits Available	0.00	0.00	0	AvailableCredits
Advance Credits Available	8.49	1.68	3,169	
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	0.00	11.39	0	Credit Potential
Potential Credits	79.50	9.68	0	
Other Credits ²	0.00	0.19	0	

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

²Conservation Easement credits at CB-16 and non-NNL credits available at CB-1.

*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. Between 2015 and 2018, the Conservancy pursued stream restoration at CH-17, however following submission of the SDP, the project was considered no longer viable and was terminated in 2018. With the determination that CH-17 would not move forward, stream liabilities remained. A proposal was submitted in 2019 to purchase bank credits to offset the majority of stream liabilities within this basin. The proposal was approved, and the credit purchase was completed in 2019, with only a small stream liability remaining in the eastern portion of the basin. These stream liabilities were addressed through credit conversion from CH-1 which was approved in 2022.

The Conservancy proposed a site to address the existing non-tidal wetland liabilities in the western portion of this basin in 2019. The project has not moved forward, and the Conservancy released an RFP seeking projects to offset this need in 2022.

Table 21: Chowan River Basin Financial Summary (1995-2022)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$1,784,500	\$126,300	\$2,007,500	(\$96,700)
Tidal Wetlands	\$37,900	\$0	\$10,200	\$27,700
Stream USM	\$1,234,200	\$17,500	\$473,900	\$777,800
Pre-USM Stream	\$94,700	(\$17,500)	\$77,300	(\$100)
TOTALS	\$3,151,300	\$126,300	\$2,568,900	\$708,700

Table 22: Chowan River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2022)

Impact (linear feet)	Constructed/ Protected Mitigation (linear feet)	Closed Mitigation (linear feet)
911	4,932	-

Table 23: Chowan River Basin Liabilities and Credit Balance Summary (1995-2022)

	NON-TIDAL WETLANDS	TIDAL WETLANDS*	STREAM - USM	
Total Credit Liability (including advance credit liability)	96.03	0.08	3,214	Liabilities + Liability Status
<i>Total No Net Loss (NNL) Liability (including advance credit liability)</i>	<i>54.04</i>	<i>0.08</i>	<i>1,607</i>	
<i>Basin NNL Liability Met?</i>	<i>Yes</i>	<i>No</i>	<i>No</i>	
<i>Basin Total Liability Met?</i>	<i>Yes</i>	<i>No</i>	<i>No</i>	
Current Liabilities	5.00	0.00	1,206	
Released Credits addressing NNL	146.70	0.00	1,335	Released Credits
Released Credits not addressing NNL	115.40	0.15	673	
Total Released Credits	262.10	0.15	2,008	
Release Credits Applied to Total Liability ^{1,2}	76.47	0.15	2,008	
Released Credits Sold	14.56	0.00	0	
Released Credits Available	171.07	0.00	0	AvailableCredits
Advance Credits Available	0.00	1.93	3,793	
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	82.74	0.00	0	

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

²In 2022, 0.005 tidal wetland NNL credits were offset by 0.005 non-tidal wetland restoration credits from CH-6 and 0.005 tidal preservation credits from CH-1.

*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 these projects. With completion of a large restoration site and credit releases beginning in 2013, the Fund 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. A second SDP was approved in 2019 for LJ-14.

The Fund has zero liability for non-tidal wetlands and tidal wetlands in this basin. The older liability for streams will be offset by existing projects in monitoring and in development, but an additional project is needed to offset recent sales.

Table 24: Lower James River Basin Financial Summary (1995-2022)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$4,756,300	(\$64,800)	\$4,003,900	\$687,600
Tidal Wetlands	\$932,600	\$0	\$225,900	\$706,700
Stream USM	\$7,116,800	\$0	\$4,849,200	\$2,267,600
Pre-USM Stream	\$2,405,800	(\$21,400)	\$2,384,300	\$100
TOTALS	\$15,211,500	(\$86,200)	\$11,463,300	\$3,662,000

Table 25: Lower James River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2022)

Impact (linear feet)	Constructed/ Protected Mitigation (linear feet)	Closed Mitigation (linear feet)
20,361	26,182	1,114

Table 26: Lower James River Basin Liabilities and Credit Balance Summary (1995-2022)

	NON-TIDAL WETLANDS	TIDAL WETLANDS*	STREAM - USM	
Total Credit Liability (including advance credit liability)	183.18	2.20	14,439	Liabilities + Liability Status
<i>Total No Net Loss (NNL) Liability (including advance credit liability)</i>	<i>98.45</i>	<i>2.07</i>	<i>7,220</i>	
<i>Basin NNL Liability Met?</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	
<i>Basin Total Liability Met?</i>	<i>Yes</i>	<i>Yes</i>	<i>No</i>	
Current Liabilities	0.00	0.00	4,235	Released Credits
Released Credits addressing NNL	103.82	10.74	10,026	
Released Credits not addressing NNL	101.17	1.42	178	
Total Released Credits	204.99	12.16	10,204	
Released Credits Applied to Total Liability ¹	136.07	2.11	10,204	
Released Credits Sold ²	52.34	0.08	0	
Available Credits				
Released Credits Available	9.52	9.96	0	AvailableCredits
Advance Credits Available	20.00	2.00	5,765	
Credit Potential				
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	32.65	42.31	507	

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

¹In 2021, 7.07 released credits from LJ-11 and LJ-12 were applied to MJ liabilities in Primary Service Area HUCs.

²In 2022, 5.22 credits from LJ-4 were sold as Secondary Service Area credits for impacts in HUC 02080207.

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 2021 with funding for significant repairs approved. All monitoring was completed in 2022.

All stream and wetland liabilities had been offset within this basin until new impacts began to accrue in 2020. The Conservancy is developing MJ-13 to address both stream and wetland liabilities with the SDP expected to be submitted in 2023.

Table 27: Middle James River Basin Financial Summary (1995-2022)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$3,558,200	\$109,300	\$1,205,600	\$2,461,900
Tidal Wetlands	\$0	\$0	\$0	\$0
Stream USM	\$1,091,300	(\$72,300)	\$411,800	\$607,200
Pre-USM Stream	\$5,030,300	\$558,900	\$5,594,400	(\$5,200)
TOTALS	\$9,679,800	\$595,900	\$7,211,800	\$3,063,900

Table 28: Middle James River Pre-USM Impacts and Mitigation Activity Summary (1995-2022)

Impact (linear feet)	Constructed/ Protected Mitigation (linear feet)	Closed Mitigation (linear feet)
32,679	20,047	42,187

Table 29: Middle James River Basin Liabilities and Credit Balance Summary (1995-2022)

	NON-TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	70.96	1,839	Liabilities + Liability Status
<i>Total No Net Loss (NNL) Liability (including advance credit liability)</i>	<i>38.41</i>	<i>919</i>	
<i>Basin NNL Liability Met?</i>	<i>No</i>	<i>No</i>	
<i>Basin Total Liability Met?</i>	<i>No</i>	<i>No</i>	
Current Liabilities	13.31	1,323	
Released Credits addressing NNL	34.32	516	Released Credits
Released Credits not addressing NNL	11.00	0	
Released Conservation Easement and Buffer Restoration Credits	2.81	0	
Total Released Credits	48.13	516	
Released Credits Applied to Total Liability*	57.65	516	
Released Credits Sold	0.00	0	
Released Credits Available	2.77	0	AvailableCredits
Advance Credits Available	2.51	4,987	
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	18.36	0	

*In 2021, 7.07 released credits from LJ-11 and LJ-12 were applied to MJ liabilities in Primary Service Area HUCs. In 2022, 5.22 credits from LJ-4 were sold as Secondary Service Area credits for impacts in HUC 02080207.

Upper James River

Work in the Upper James to date has been limited to non-tidal wetlands, with just a few acres of impacts in the basin. The first credits for stream impacts within the Upper James for the Fund were sold in 2021.

Most of the existing liability for non-tidal wetlands will be offset by UJ-4, currently in development following the 2019 issuance of the IEL. This project is expected to offset the majority of existing liabilities, as well as the recent stream liabilities.

Table 30: Upper James River Basin Financial Summary (1995-2022)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$677,600	\$0	\$379,600	\$298,000
Tidal Wetlands	\$0	\$0	\$0	\$0
Stream USM	\$90,700	\$0	\$7,300	\$83,400
Pre-USM Stream	\$0	\$0	\$0	\$0
TOTALS	\$768,300	\$0	\$386,900	\$381,400

Table 31: Upper James River Pre-USM Impacts and Mitigation Activity Summary (1995-2022)

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

Table 32: Upper James River Basin Liabilities and Credit Balance Summary (1995-2022)

	NON-TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	12.61	229	Liabilities + Liability Status
<i>Total No Net Loss (NNL) Liability (including advance credit liability)</i>	<i>8.09</i>	<i>115</i>	
<i>Basin NNL Liability Met?</i>	<i>No</i>	<i>N/A</i>	
<i>Basin Total Liability Met?</i>	<i>No</i>	<i>N/A</i>	
Current Liabilities	11.23	229	
Released Credits addressing NNL	2.34	0	Released Credits
Released Credits not addressing NNL	0.50	0	
Released Wetland Enhancement, Upland Buffer Restoration, and Conservation Easement Bonus Credits	0.84	0	
Total Released Credits	3.68	0	
Release Credits Applied to Total Liability	1.38	0	
Released Credits Sold	0.00	0	
Released Credits Available	2.30	0	AvailableCredits
Advance Credits Available	2.68	4,771	
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	8.25	0	

New River

The New River basin has seen a relatively small amount of wetland impacts and has two approved projects to address the existing liabilities in the basin. One stream project (NW-1) was constructed in 2013 with monitoring and credit releases following. The NW-3 project was constructed in 2021 to address wetland and stream liabilities, as well as restore bog turtle habitat. Review and coordination with the IRT took place in 2019, and the SDP was finalized and signed in 2020.

The existing projects NW-1 and NW-3 are expected to fully satisfy the existing liabilities in the New River basin, though a small amount of restoration acreage (less than 1 acre) is needed to accomplish no-net loss in this basin.

Table 33: New River Basin Financial Summary (1995-2022)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$416,700	\$0	\$182,200	\$234,500
Tidal Wetlands	\$0	\$0	\$0	\$0
Stream USM	\$2,040,000	\$0	\$2,037,600	\$2,400
Pre-USM Stream	\$290,300	(\$1,400)	\$320,100	(\$31,200)
TOTALS	\$2,747,000	(\$1,400)	\$2,539,900	\$205,700

Table 34: New River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2022)

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

Table 35: New River Basin Liabilities and Credit Balance Summary (1995-2022)

	NON-TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	6.92	5,440	Liabilities + Liability Status
<i>Total No Net Loss (NNL) Liability (including advance credit liability)</i>	<i>5.04</i>	<i>2,720</i>	
<i>Basin NNL Liability Met?</i>	<i>No</i>	<i>No</i>	
<i>Basin Total Liability Met?</i>	<i>No</i>	<i>No</i>	
Current Liabilities	6.92	3,611	
Released Credits addressing NNL	0.00	1,261	Released Credits
Released Credits not addressing NNL	0.00	568	
Total Released Credits	0.00	1,829	
Release Credits Applied to Total Liability	0.00	1,829	
Released Credits Sold	0.00	0	
Released Credits Available	0.00	0	Available Credits
Advance Credits Available	5.00	1,389	
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	8.22	8,418	

*The potential credits expected from projects within the New River basin will completely offset NTW liabilities, but will not satisfy the entire no-net loss within the basin.

Potomac River

There has been considerable mitigation activity in the Potomac River basin, especially with stream impacts and more recently non-tidal wetlands. 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 was concluded for these sites in 2019 and 2020, although these sites do not generate stream credits. The second phase of a large stream restoration project is currently in development with complete Site Development Plan submitted in 2019.

Very recent use of the Fund has generated new non-tidal wetland liabilities and large stream liabilities. The Conservancy is developing a new project (PO-9) to address the non-tidal wetland impacts. An IEL was issued for this site in 2020 and SDP submission is expected in 2023. Older stream liabilities will be offset by the implementation of existing project PO-8, pending SDP approval. However, new liabilities arose in 2020-2022 and projects are being sought to offset these impacts in the eastern portion of the basin. One new project was proposed in 2022 to address a large number of these newer stream impacts, PO-10.

Table 36: Potomac River Basin Financial Summary (1995-2022)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$3,649,600	(\$12,900)	\$2,327,600	\$1,309,100
Tidal Wetlands	\$1,291,600	\$0	\$951,000	\$340,600
Stream USM	\$20,494,600	\$1,406,600	\$1,769,800	\$20,131,400
Pre-USM Stream	\$9,010,700	(\$1,803,100)	\$7,207,600	\$0
TOTALS	\$34,446,500	(\$409,400)	\$12,256,000	\$21,781,100

Table 37: Potomac River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2022)

Impact (linear feet)	Constructed/ Protected Mitigation (linear feet)	Closed Mitigation (linear feet)
73,142	1,608	119,168

Table 38: Potomac River Basin Liabilities and Credit Balance Summary (1995-2022)

	NON-TIDAL WETLANDS	TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	47.43	2.20	32,888	Liabilities + Liability Status
<i>Total No Net Loss (NNL) Liability (including advance credit liability)</i>	<i>30.48</i>	<i>2.20</i>	<i>16,444</i>	
<i>Basin NNL Liability Met?</i>	<i>No</i>	<i>No</i>	<i>No</i>	
<i>Basin Total Liability Met?</i>	<i>No</i>	<i>No</i>	<i>No</i>	
Current Liabilities	9.34	0.00	32,888	
Released Credits addressing NNL	51.44	0.00	0	Released Credits
Released Credits not addressing NNL	51.44	2.50	0	
Released Wetland Enhancement and Upland Buffer Restoration Credits	2.51	0.00	0	
Total Released Credits	105.39	2.50	0	
Release Credits Applied to Total Liability ^{1,2}	19.79	2.50	0	
Released Credits Sold	20.09	0.00	0	
Released Credits Available	65.51	0.00	0	AvailableCredits
Advance Credits Available	35.66	2.00	24,614	
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	2.69	9.00	0	Credit Potential
Potential Credits	9.41	0.00	45,729	

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

²In 2022, 1.79 tidal wetland NNL credits were offset by 1.79 non-tidal wetland restoration credits from PO-1 and 1.79 tidal preservation credits from PO-6. In 2022, a 0.32 credit liability in the Secondary Service Area of PO-1 was offset with 0.96 released credits from PO-1.

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 Released Credits are available for sale. In 2018, the Conservancy proposed a project to fully offset the mitigation liability of streams within this basin (RP-15). The Conservancy acquired the property in 2020 and is advancing the project through Site Development Plan which was submitted in 2021.

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

Table 39: Rappahannock River Basin Financial Summary (1995-2022)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$1,471,600	\$0	\$1,471,600	\$0
Tidal Wetlands	\$20,800	(\$13,800)	\$4,300	\$2,700
Stream USM	\$5,095,000	\$0	\$1,792,800	\$3,302,200
Pre-USM Stream	\$2,029,300	\$7,000	\$2,036,300	\$0
TOTALS	\$8,616,700	(\$6,800)	\$5,305,000	\$3,304,900

Table 40: Rappahannock River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2022)

Impact (linear feet)	Constructed/ Protected Mitigation (linear feet)	Closed Mitigation (linear feet)
10,771	309,621	7,742

Table 41: Rappahannock River Basin Liabilities and Credit Balance Summary (1995-2022)

	NON-TIDAL WETLANDS	TIDAL WETLANDS*	STREAM - USM	
Total Credit Liability (including advance credit liability)	19.50	0.04	10,555	Liabilities + Liability Status
<i>Total No Net Loss (NNL) Liability (including advance credit liability)</i>	<i>10.32</i>	<i>0.04</i>	<i>5,278</i>	
<i>Basin NNL Liability Met?</i>	<i>Yes</i>	<i>No</i>	<i>No</i>	
<i>Basin Total Liability Met?</i>	<i>Yes</i>	<i>No</i>	<i>No</i>	
Current Liabilities	0.00	0.00	10,555	Released Credits
Released Credits addressing NNL	21.40	0.00	0	
Released Credits not addressing NNL	5.94	0.08	0	
Released Wetland Enhancement, Upland Buffer Restoration and Preservation, and Stream Buffer Preservation Credits	0.09	0.00	0	
Total Released Credits	27.43	0.08	0	
Release Credits Applied to Total Liability ^{1,2}	19.29	0.08	0	
Released Credits Sold	0.22	0.00	0	
Released Credits Available	7.92	0.00	0	AvailableCredits
Advance Credits Available	5.00	2.00	2,231	
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	5.52	0.00	8,174	

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

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

²In 2022, 0.006 tidal wetland NNL credits were offset by 0.006 non-tidal wetland restoration credits from RP-11 and 0.006 tidal preservation credits from RP-1.

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 2018 a pre-app and proposal were submitted for a stream and wetland project. The project, RO-9, is in development as full delivery with the SDP submitted in 2020. RO-9 is expected to offset all stream impacts within the basin, as well as most of the remaining non-tidal wetland liabilities. In 2019, the Conservancy requested and received approval to purchase wetland credits (RO-11). Credit purchase was completed in 2020.

Table 42: Roanoke River Basin Financial Summary (1995-2022)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$1,377,100	\$0	\$967,000	\$410,100
Tidal Wetlands	\$0	\$0	\$0	\$0
Stream USM	\$3,768,700	(\$600)	\$2,854,200	\$913,900
Pre-USM Stream	\$564,000	\$191,500	\$755,500	\$0
TOTALS	\$5,709,800	\$190,900	\$4,576,700	\$1,324,000

Table 43: Roanoke Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2022)

Impact (linear feet)	Constructed/ Protected Mitigation (linear feet)	Closed Mitigation (linear feet)
4,635	3,481	19,030

Table 44: Roanoke River Basin Liabilities and Credit Balance Summary (1995-2022)

	NON-TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	20.18	9,388	Liabilities + Liability Status
<i>Total No Net Loss (NNL) Liability (including advance credit liability)</i>	<i>12.09</i>	<i>4,694</i>	
<i>Basin NNL Liability Met?</i>	<i>No</i>	<i>Yes</i>	
<i>Basin Total Liability Met?</i>	<i>No</i>	<i>No</i>	
Current Liabilities	10.16	4,854	Released Credits
Released Credits addressing NNL	9.48	3,540	
Released Credits not addressing NNL	0.99	1,023	
Released Adjustment Factor Credits	0.00	304	
Total Released Credits	10.47	4,867	
Release Credits Applied to Total Liability	10.02	4,534	
Released Credits Sold	0.00	0	
			AvailableCredits
Released Credits Available	0.45	333	
Advance Credits Available	4.62	5,146	
			Credit Potential
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	0.00	0	
Potential Credits	9.50	9,504	

Shenandoah River

The Fund implemented a wetland restoration project in 2012 (SH-4) 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. Wetland restoration was considered at this site as well, but that scope was withdrawn in 2021. A new wetland project has been proposed and is being developed to address existing impacts (SH-7). Still an additional wetland project is needed and an RFP has been issued seeking suitable sites in 2022.

Table 45: Shenandoah River Basin Financial Summary (1995-2022)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$1,640,100	\$0	\$728,100	\$912,000
Tidal Wetlands	\$0	\$0	\$0	\$0
Stream USM	\$3,224,600	(\$10,200)	\$1,623,900	\$1,590,500
Pre-USM Stream	\$1,614,100	\$1,474,700	\$3,088,800	\$0
TOTALS	\$6,478,800	\$1,464,500	\$5,440,800	\$2,502,500

Table 46: Shenandoah River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2022)

Impact (linear feet)	Constructed/ Protected Mitigation (linear feet)	Closed Mitigation (linear feet)
12,128	-	37,941

Table 47: Shenandoah River Basin Liabilities and Credit Balance Summary (1995-2022)

	NON-TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	21.62	6,537	Liabilities + Liability Status
<i>Total No Net Loss (NNL) Liability (including advance credit liability)</i>	<i>17.30</i>	<i>3,269</i>	
<i>Basin NNL Liability Met?</i>	<i>No</i>	<i>No</i>	
<i>Basin Total Liability Met?</i>	<i>No</i>	<i>No</i>	
Current Liabilities	11.54	4,723	
Released Credits addressing NNL	7.82	1,040	Released Credits
Released Credits not addressing NNL	2.26	711	
Released Conservation Easement Credits	0.00	63	
Total Released Credits	10.08	1,814	
Release Credits Applied to Total Liability	10.08	1,814	
Released Credits Sold	0.00	0	
Released Credits Available	0.00	0	AvailableCredits
Advance Credits Available	0.00	5,850	
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	9.81	12,865	

Tennessee River

The Fund implemented construction on a sizable wetland restoration site in 2012 (TN-8). Site development plans have been approved and signed and mitigation activities have been completed for two stream projects, TN-10 and TN-11. Stream credits were released from both of these sites beginning in 2018 and 2019. An RFP was issued to solicit suitable projects for wetland mitigation in this basin in 2018. As a result, the Conservancy requested to purchase credits from a bank site in development (TN-13), which was approved and completed in 2020.

All existing stream liabilities will be offset by approved projects TN-10 and TN-11. Wetland liabilities will be offset by the credit purchase and existing projects currently in monitoring.

Table 48: Tennessee River Basin Financial Summary (1995-2022)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$1,278,500	\$0	\$1,161,500	\$117,000
Tidal Wetlands	\$0	\$0	\$0	\$0
Stream USM	\$1,359,400	\$0	\$965,900	\$393,500
Pre-USM Stream	\$706,900	(\$63,400)	\$643,500	\$0
TOTALS	\$3,344,800	(\$63,400)	\$2,770,900	\$510,500

Table 49: Tennessee River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2022)

Impact (linear feet)	Constructed/ Protected Mitigation (linear feet)	Closed Mitigation (linear feet)
5,332	10,727	10,791

Table 50: Tennessee River Basin Liabilities and Credit Balance Summary (1995-2022)

	NON-TIDAL WETLANDS	STREAM - USM	
Total Credit Liability (including advance credit liability)	31.44	3,335	Liabilities + Liability Status
<i>Total No Net Loss (NNL) Liability (including advance credit liability)</i>	22.23	1,668	
<i>Basin NNL Liability Met?</i>	No	No	
<i>Basin Total Liability Met?</i>	No	No	
Current Liabilities	12.26	393	
Released Credits addressing NNL	16.29	1,471	Released Credits
Released Credits not addressing NNL	2.77	1,193	
Released Buffer Restoration Credits	0.12	0	
Released Adjustment Factor Credits	0.00	278	
Total Released Credits	19.18	2,942	
Release Credits Applied to Total Liability	19.18	2,942	
Released Credits Sold	0.00	0.00	
Released Credits Available	0.00	0	AvailableCredits
Advance Credits Available	0.07	4,006	
Credits available for release when they can be paired 1:1 with wetland creation/restoration credits OR stream restoration/enhancement credits	0.00	239	Credit Potential
Potential Credits	10.93	251	

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 non-tidal wetlands in the York River basin are available for sale. There have been relatively few stream impacts in this basin, with a small amount of new liabilities beginning in 2020.

There are no existing liabilities for non-tidal wetlands 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 (1995-2022)

	Mitigation Payments	Other Revenues	Allocated Funds (to Projects)	Total Balance
Non-Tidal Wetlands	\$1,168,600	\$21,900	\$1,282,400	(\$91,900)
Tidal Wetlands	\$554,500	(\$700)	\$144,600	\$409,200
Stream USM	\$147,000	\$0	\$16,700	\$130,300
Pre-USM Stream	\$163,200	\$28,300	\$184,200	\$7,300
TOTALS	\$2,033,300	\$49,500	\$1,627,900	\$454,900

Table 52: York River Basin Pre-USM Impacts and Mitigation Activity Summary (1995-2022)

Impact (linear feet)	Constructed/ Protected Mitigation (linear feet)	Closed Mitigation (linear feet)
1,282	5,330	9,465

Table 53: York River Basin Liabilities and Credit Balance Summary (1995-2022)

	NON-TIDAL WETLANDS	TIDAL WETLANDS*	STREAM - USM	
Total Credit Liability (including advance credit liability)	17.77	1.80	363	Liabilities + Liability Status
<i>Total No Net Loss (NNL) Liability (including advance credit liability)</i>	<i>9.12</i>	<i>1.73</i>	<i>182</i>	
<i>Basin NNL Liability Met?</i>	<i>Yes</i>	<i>No</i>	<i>No</i>	
<i>Basin Total Liability Met?</i>	<i>Yes</i>	<i>No</i>	<i>No</i>	
Current Liabilities	0.00	1.18	354	
Released Credits addressing NNL	72.22	0.62	9	Released Credits
Released Credits not addressing NNL	10.88	0.00	0	
Released Wetland Enhancement and Buffer Restoration Credits	2.64	0.00	0	
Total Released Credits	85.74	0.62	9	
Release Credits Applied to Total Liability	17.29	0.06	9	
Released Credits Sold	0.48	0.56	0	
Released Credits Available	67.97	0.00	0	AvailableCredits
Advance Credits Available	10.00	0.82	4,646	
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	4.58	2.82	0	

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

VI. DEFINITIONS

1. **ADMINISTRATIVE 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.
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
- VARTF Reauthorization Letter
- Exhibit A – Compensation Planning Framework
- Exhibit B – Advance Credits
- Exhibit C – Fee Schedule
- Exhibit D – Site Development Plan Template and Exhibits
- Exhibit E – Credit Availability and Sale

2019 DEQ Reauthorization letter

Trust Fund Annual Reports and Supporting Documentation

- 2021 Main Report
- 2020 Main Report
- 2019 Main Report
- 2018 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