

Exchange Compliance Plan 20**23** Annual Update



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Virginia Department of Environmental Quality
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Introduction



1.1 Purpose

This Chesapeake Bay Nutrient Credit Exchange Program Compliance Plan 2023 Annual Update (“Exchange Compliance Plan”) was prepared by the Virginia Nutrient Credit Exchange Association, Inc. (“The Exchange”) in collaboration with participating owners of regulated facilities (“Participants”). This Exchange Compliance Plan updates and supersedes the Exchange Compliance Plan 2022 Annual Update, which was submitted by The Exchange to the Virginia Department of Environmental Quality (“DEQ”) on February 1, 2022 and approved by DEQ on September 28, 2022. The original Exchange Compliance Plan was submitted by The Exchange to DEQ on July 31, 2007 and approved by DEQ by letter dated September 7, 2007. Similarly, the Annual Updates for each year from 2008 through and including 2022 were all submitted to DEQ in a timely manner and were subsequently approved by DEQ. All DEQ approval letters are attached at Appendix A.

This Exchange Compliance Plan continues a “realistically aggressive” program of work to meet the nitrogen and phosphorus waste load allocations of the Participants’ facilities. This Exchange Compliance Plan utilizes voluntary, market-based nutrient credit trading as a means of achieving compliance more cost-effectively and more expeditiously than would otherwise be possible. It is grounded in the 25-plus year history of policy development by the U.S. Environmental Protection Agency (“EPA”) and the Chesapeake Bay Program (“CBP”) regional partnership recognizing pollutant credit trading as a useful tool for advancing water quality protection programs. Supporting national and regional policy is set forth in:

- EPA Effluent Trading In Watersheds Policy (1996)
- Draft Framework for Watershed-Based Trading (1996)
- CBP Nutrient Trading Fundamental Principles and Guidelines (2001)
- EPA Water Quality Trading Policy (2003)
- EPA Permit Writers Toolkit for Trading (2007)
- EPA Chesapeake Bay Total Maximum Daily Load (2010)
- EPA Water Quality Trading Policy to Promote Market-Based Mechanisms for Improving Water Quality (2019)

Specific authorization and detailed requirements for the Virginia Nutrient Credit Exchange Program were first enacted during the 2005 Session of the General Assembly. The program has been expanded by legislation numerous times since 2005. Particularly notable expansion legislation was enacted in 2012 (expanding nutrient credit use by regulated entities to include municipal stormwater permittees, construction stormwater permittees, industrial stormwater permittees, and concentrated animal feeding operations); 2016 (expanding offset authorities and options for new or increased discharges, and expanding credit use by municipal stormwater permittees to include sediment credits); and, most recently, 2021 (adding the Enhanced Nutrient Removal Certainty Program for Chesapeake Bay TMDL Phase III Watershed Implementation Plan implementation). In addition, the State Water Control Board and DEQ have issued

implementation regulations and guidance on numerous occasions since 2005. Key statutory and regulatory references include:

- Chesapeake Bay Watershed Nutrient Credit Exchange Program, Va. Code § 62.1-44.19:12 et seq. (2005, as amended)
- Regulation for Nutrient Enriched Waters and Dischargers within the Chesapeake Bay Watershed, 9 VAC 25-40 (2005)
- General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia, 9 VAC 25-820-70 (2006, as amended or reissued from time to time) (“General Permit”)
- DEQ Guidance Memo No. 07-2008, Amendment No. 2: Permitting Considerations for Facilities in the Chesapeake Bay Watershed (2007)
- DEQ Addendum No. 1 to Guidance Memo No. 07-2008, Amendment No. 2: Permitting Considerations for Facilities in the Chesapeake Bay Watershed (2009)
- Virginia Chesapeake Bay TMDL Phase I Watershed Implementation Plan (2010)
- Virginia Chesapeake Bay TMDL Phase II Watershed Implementation Plan (2012)
- Virginia Chesapeake Bay TMDL Phase III Watershed Implementation Plan (2019)

The initial focus of the Exchange Compliance Plan was on the construction of a large number of nutrient removal technology upgrades at Participants’ facilities to achieve compliance with the new Chesapeake Bay nitrogen and phosphorus waste load allocations adopted by the State Water Control Board. Once initial compliance was achieved through this construction program (Compliance Year 2011), the focus shifted to maintaining compliance through an ongoing program of additional facility upgrades over time as is now occurring.

As provided for under the EPA Chesapeake Bay TMDL (Appendix X) and Virginia Phase I and II Watershed Implementation Plans, DEQ has been conducting a comprehensive study of existing James River site-specific numeric Chlorophyll-a criteria assessment method and the associated modelling framework. The outcome of this study resulted in revised criteria and the associated assessment method as adopted by the State Water Control Board on June 28, 2019 and approved by the Governor on August 26, 2019. EPA approved the criteria on January 6, 2020. The James River allocations remain stringently regulated pursuant to the 2005 Virginia allocations as modified by the 2010 EPA Chesapeake Bay TMDL Stage 1A and 1B additional reductions. DEQ presentations during Fall 2020 through and including the State Water Control Board’s December 2020 meeting, and the Board’s own December 2020 actions, confirms that the James River nitrogen allocations (with Stage 1A and 1B modifications) are consistent with applicable water quality standards. In 2022, DEQ and the State Water Control Board finalized adjustments to certain James River phosphorus allocations consistent with the new site-specific numeric Chlorophyll-a criteria. These adjustments are now reflected in the Water Quality Management Planning Regulation and in the General Permit Regulation and associated James River Registration List.

This document serves two primary purposes. First, certain information contained herein is submitted on behalf of the Participants in satisfaction of each Participant’s regulatory obligation under Part I.D. of the General Permit (9 VAC 25-820-70 Part I.D), which states:

Annual update of compliance plan. Every owner of a facility required to submit a registration statement shall either individually or through the Virginia Nutrient

Credit Exchange Association submit updated compliance plans to the department no later than February 1 of each year. The compliance plans shall contain sufficient information to document a plan to achieve and maintain compliance with applicable total nitrogen and total phosphorus individual wasteload allocations on the registration list and aggregate wasteload allocations in Part I C 3. Compliance plans for owners of facilities that were required to submit a registration statement with the department under Part I G 1 a may rely on the acquisition of point source credits in accordance with Part I J of this general permit, but not the acquisition of credits through payments into the Nutrient Offset Fund, to achieve compliance with the individual and combined wasteload allocations in each tributary. Compliance plans for expansions or new discharges for owners of facilities that are required to submit a registration statement with the department under Part I G 1 b and c may rely on the acquisition of allocation in accordance with Part II B of this general permit to achieve compliance with the individual and combined wasteload allocations in each tributary.

The second purpose of this Exchange Compliance Plan is to serve as a comprehensive document for planning and implementing nutrient credit trading at the basin level through The Exchange. The Exchange is a not-for-profit, voluntary association of owners of regulated facilities that serves as a facilitator of nutrient trading among its members as provided in Virginia Code section 62.1-44.19:17.

1.2 Definitions

The terms used in this Exchange Compliance Plan shall have the same definitions as set forth in The Exchange's Credit Exchange Policy for the Purchase and Sale of Chesapeake Bay Nutrient Credits, which is set forth in Section 8.

Any terms not defined in the Credit Exchange Policy shall have the same definition as provided in 9 VAC 25-820-10, unless a different meaning is intended by the usage herein.

The term "Declared Load", which appears on the river basin graphs, means the maximum delivered load that a facility can discharge and still meet its commitments to either supply or purchase Class A Credits. For a Class A Seller, Declared Load equals Delivered WLA minus Class A Credits supplied. For a Class A Buyer, Declared Load equals Delivered WLA plus Class A Credits purchased. For a Participant that is neither a Class A Seller nor a Class A Buyer (i.e., a Neutral Participant), Declared Load equals Delivered WLA.

1.3 Regulatory and Non-Regulatory Information

As mentioned above, the Exchange Compliance Plan serves a dual purpose. Certain information set forth herein is required by the General Permit. This regulatory information is provided (1) in the Compliance Statements for facilities subject to reduced waste load allocations in the James River basin and (2) in Section 7 of the Exchange Compliance Plan.

Additional information set forth herein is beyond that required by regulation and is not submitted for review and approval as such. This additional information, i.e., non-regulatory information, is presented for the efficiency of gaining multiple uses of a single, more

comprehensive document for effective planning by The Exchange and the Participants. Non-regulatory information includes but is not limited to: design flow; projections of actual flow, concentration, load and Credits; future capital projects; Preliminary Use of Credits; detailed trading ledgers for projections; The Exchange’s Credit Exchange Policy (including its Credit Price Schedule) (Section 8); and a summary and projection of needs for and availability of WQIF grant funding, which is an essential funding source for many of the planned facility upgrades discussed herein (Appendix C).

1.4 Exchange Compliance Plan Content Overview

The Exchange Compliance Plan contains a separate section for each tributary, or basin, as follows:

- Section 2 – Potomac-Shenandoah River Basin
- Section 3 – Rappahannock River Basin
- Section 4 – York River Basin
- Section 5 – James River Basin
- Section 6 – Eastern Shore Basin

The Trading Optimization Model, previously described in The Exchange’s written materials and presentations, was used to generate a plan illustrating nutrient removal projects and Credit exchanges in each basin. Schedules and results are based on owner-provided facility-specific data. The organization and description of the Exchange Compliance Plan components is summarized below.

The Exchange Compliance Plan for the James River basin distinguishes between the James “Upper” and James “Lower” basins. This manner of presentation is convenient in that it (1) simplifies the analysis of the James River exchanges and (2) clearly demonstrates that the partial, one-way restriction on James River trading is met (i.e., facilities in the areas previously identified as upper and middle portions of the basin are not proposing to acquire any Credits generated by facilities in the lower basin). Notwithstanding this two-part presentation, facilities in the lower portion may obtain Credits from upstream facilities. In the future, Class A Credit exchanges may be specified in a plan update. Similarly, Credits may be exchanged from the Upper James to the Lower James during any Reconciliation Year as needed. Therefore, despite the distinction between the Upper and Lower portions of the James River basin herein, the basin continues to be viewed and managed as a single unit consistent with applicable regulations.

Plan Summary

The Plan Summary is a visual synopsis of each basin. Separate summaries are presented for nitrogen and phosphorus.

For Class A Credit management purposes, the Plan Summary compares the “Declared Load” to the Delivered WLA for all Participants for an 8-year period (currently, through the year 2030). The Declared Load illustration represents the Class A Credit trading positions of Participant facilities. Because Declared Load is a Class A Credit concept, it excludes—by definition—forecasted Class B Credits and thereby tends to overstate the forecasted actual load, which is addressed by the “Expected Load” discussed below.

For overall compliance purposes and The Exchange’s broader management purposes, the Plan Summary also illustrates Expected Load, which is a forecast of the aggregate load of all Participant facilities. In contrast to the Declared Load line, the Expected Load line intentionally ignores the Class A Credit sales decisions of individual Participants and thereby takes into account all Credits projected to be generated by Participants prior to adjustments for Preliminary Use of Credits. In this respect, the Expected Load line is not representative of Class A Credit commitments that Participants in The Exchange’s voluntary, market-based program have decided to make. However, it does illustrate projected aggregate performance and more comprehensively reflects the favorable nutrient reduction trends of The Exchange as a whole.

Also, for The Exchange’s management purposes, green or brown bars at the bottom of the Plan Summary chart are plotted against the secondary Y-axis and represent Class A Credit supplies that exceed Class A Credit requests for a given Compliance Year.

Trading Ledger

Each basin’s nutrient section presents annual trading ledgers for 2023 through 2027. For each Participant, the Expected Load, Expected Credits, Expected Net Credits, Class A Credit sales, and Class A Credit purchases are presented. The ledger also accounts for projected Class B Credits. Where Class A Credit purchases are not projected to be satisfied using only Class A Credit sales, a portion of each Buyer’s demand is anticipated to be satisfied on a pro rata basis using Class B Credits. Aggregate basin information is shown in the blue bar at the top of the ledger.

Based on the number of Credits projected in each market, Class A Credit and Class B Credit sales prices are estimated in accordance with the Credit Exchange Policy. These prices, which include the Class A Buyer price, are displayed at the top of the trading ledger. Since The Exchange “clears the market” by purchasing all Credits generated by Participants as provided in the Credit Exchange Policy, the Class A Seller price reflects the difference between the volume of Credits supplied and the volume of credits purchased in the Class A market.

Where multiple facilities under common ownership or operation have been “bubbled” at the Participant’s election pursuant to 9 VAC 25-820-70 Part I.B.2, these facilities are listed in order and highlighted in light blue (and pale yellow, if more than one bubble exists in a consecutive alphabetical listing of Participants/Facilities).

Where a participating facility has provided advance notice of a Private Exchange pursuant to Section 4.9 of the Credit Exchange Policy, an estimate of the amount of Credits to be exchanged is noted as a Preliminary Use of Credits on the applicable Trading Ledger. As of this time, Participants have given notice of the following Private Exchanges factored into this Exchange Compliance Plan:

Potomac

Arlington County WWTP and Arlington County MS4 (Nitrogen/Phosphorus)
Arlington County WWTP and Arlington Co Public Schools MS4 (Nitrogen/Phosphorus)
Fairfax-Noman Cole WWTP and Fairfax Co Department of Vehicle Services (Nitrogen)
Fairfax-Noman Cole WWTP and City of Fairfax MS4 (Nitrogen/Phosphorus)
Frederick Winchester Service Authority and City of Winchester MS4 (Nitrogen)
HRRSA-North River and City of Harrisonburg MS4 (Nitrogen/Phosphorus)

HRRSA-North River and Rockingham Co. Public Schools Offset (Nitrogen/Phosphorus)
PWCSA-H.L. Mooney and Prince William County MS4 (Nitrogen/Phosphorus)
Town of Leesburg and Town of Hillsboro (Nitrogen/Phosphorus)
Town of Leesburg and Loudoun Milling (Nitrogen/Phosphorus)
Town of Luray WWTP and Town of Luray/Lake Arrowhead Complex (Phosphorus)
UOSA and UOSA Member Jurisdiction MS4s (Nitrogen/Phosphorus)

Rappahannock

Stafford County and City of Fredericksburg MS4 (Nitrogen/Phosphorus)

York

Hanover County and Hanover County MS4 (Nitrogen)
HRSD and Member Jurisdiction MS4s (Nitrogen/Phosphorus)
HRSD and Department of Energy-Jefferson Lab (Nitrogen/Phosphorus)

James

Chesterfield County and South Central Wastewater Authority (Nitrogen/Phosphorus)
Chesterfield County and Dominion-Chesterfield (Nitrogen/Phosphorus)
HRSD and Member Jurisdiction MS4s (Nitrogen/Phosphorus)
HRSD and Fort Monroe Authority MS4 (Nitrogen/Phosphorus)
HRSD and Department of Energy-Jefferson Lab (Nitrogen/Phosphorus)
City of Lynchburg WWTP and City of Lynchburg MS4 (Nitrogen)
City of Richmond WWTP and City of Richmond MS4 (Nitrogen/Phosphorus)

Eastern Shore

Tangier Island and Tyson Foods (Nitrogen/Phosphorus)

In certain instances, a listed Private Exchange may include terms that are not readily capable of representation within The Exchange's uniform basis and facility-level formats used herein; notwithstanding that formatting limitation, it is the intent of The Exchange to fully accommodate the terms of such Private Exchanges for which Participants have given proper notice.

Facility Summaries and Compliance Statements

For each basin, facility-specific information is included immediately following the Trading Ledger. This includes Facility Summaries for Nitrogen and for Phosphorus for each facility. For facilities with reduced waste load allocations pursuant to the Chesapeake Bay TMDL, a Compliance Statement is provided with additional information with respect to the timing and manner of achieving compliance.

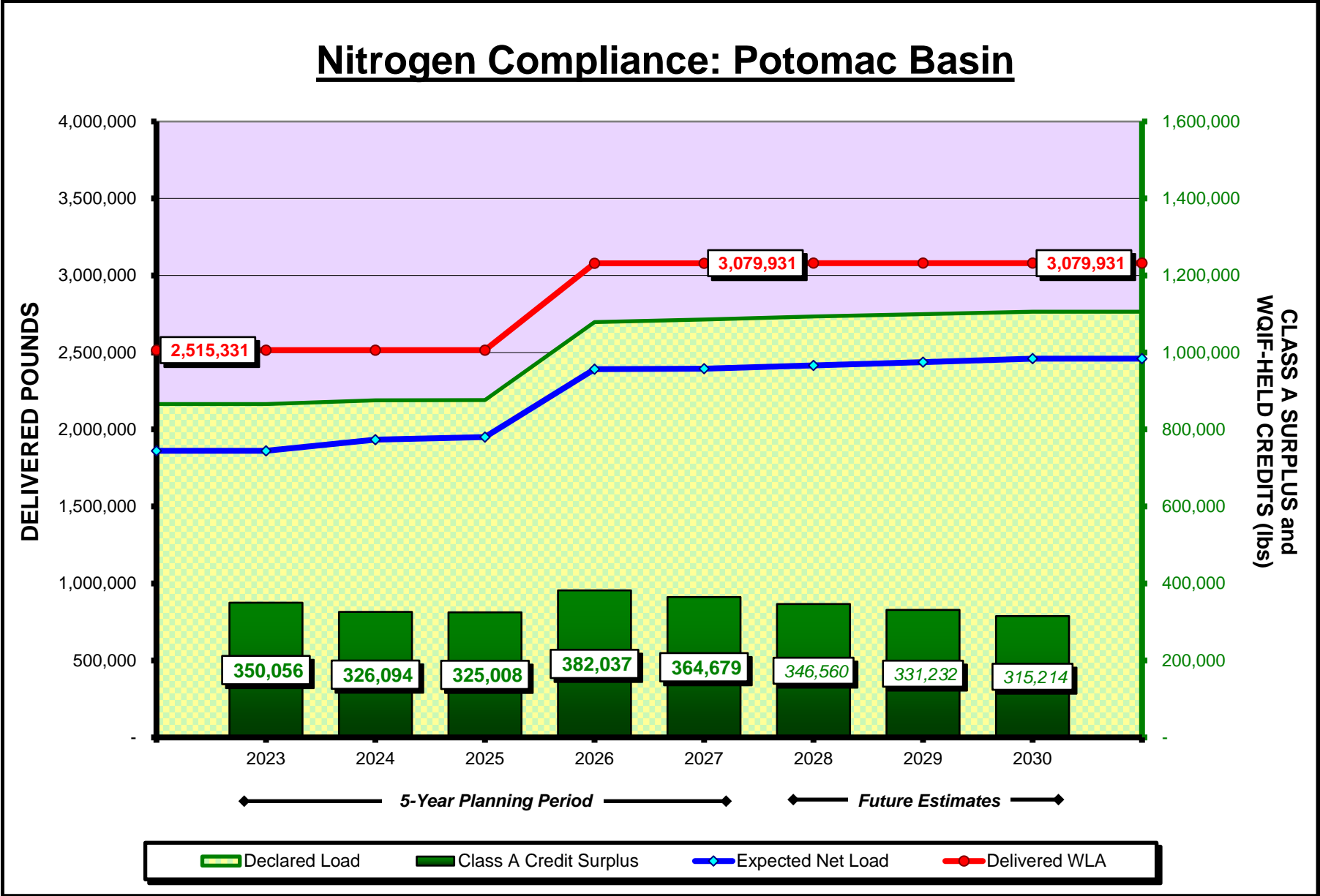
Development of each Annual Update of the Exchange Compliance Plan requires data collection from Participants on a schedule that provides The Exchange and its advisors adequate time to collect and compile data covering over 100 facilities. The timeline for such data collection is governed by the Nutrient Credit Services Agreement between The Exchange and each Participant. A copy of the agreement is provided as Appendix B hereto. Consequently, the data contained in the Facility Summaries and Compliance Statements was collected approximately five months in advance of submittal of the Annual Update to DEQ and generally would not

reflect changed circumstances at the facility level, if any, subsequent to data collection. Data changes subsequent to data collection, if any, would be reflected in the next Annual Update.

SECTION 2

Potomac-Shenandoah River Basin Exchange Compliance Plan





POTOMAC Basin: Nitrogen Credit Ledger

Compliance Year:	2023	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)				
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits	PRICE:	Class A Sales	Class A* Purchases	Class B Sales**
The Exchange (group)	2,515,331	1,834,000	681,331	-	(7,942)	(19,492)	653,897	\$ 0.07	\$ 4.04	\$ 0.01	357,814 (7,758) 303,841
ACSA-Fishersville	2,924	1,177	1,747	(1,747)	-	-	-	-	-	-	-
ACSA-Greenville	854	351	503	-	-	-	503	503	-	-	-
ACSA-Harriston	626	104	522	-	-	-	522	522	-	-	-
ACSA-Middle River	4,970	2,478	2,492	-	-	-	2,492	2,492	-	-	-
ACSA-Mt. Sidney	513	716	(203)	203	-	-	-	-	-	-	-
ACSA-Stuarts Draft	1,462	370	1,092	(811)	-	-	281	281	-	-	-
ACSA-Vesper View	626	434	192	-	-	-	192	192	-	-	-
ACSA-Weyers Cave	914	3,269	(2,355)	2,355	-	-	-	-	-	-	-
Alexandria Renew Ent.	493,381	375,061	118,320	-	-	-	118,320	-	-	-	118,320
Arlington Co.	365,284	242,122	123,162	-	(3,326)	-	119,836	119,836	-	-	-
Berryville	4,435	2,914	1,521	-	-	-	1,521	1,450	-	-	71
Broadway Regional	3,538	3,134	404	-	-	-	404	-	-	-	404
Fairfax Co-Noman Cole	612,158	402,653	209,505	-	(3,176)	-	206,329	117,257	-	-	89,072
FCWSA-Vint Hill	579	292	287	-	-	-	287	-	-	-	287
Front Royal	24,365	20,832	3,533	-	-	-	3,533	3,200	-	-	333
FWSA-Opequon	25,589	12,791	12,798	-	(59)	-	12,739	-	-	-	12,739
FWSA-Parkins Mill	12,791	4,989	7,802	-	-	-	7,802	-	-	-	7,802
HRRSA-North River	36,432	25,276	11,156	-	(1,381)	-	9,775	4,500	-	-	5,275
KGCSA-Dahlgren S.D.	9,137	4,568	4,569	(1,797)	-	-	2,772	2,200	-	-	572
KGCSA-Fairview Beach	1,827	1,462	365	-	-	-	365	-	-	-	365
KGCSA-Purkins Corner	1,096	2,893	(1,797)	1,797	-	-	-	-	-	-	-
Leesburg	76,620	21,226	55,394	-	-	(19,492)	35,902	-	-	-	35,902
Loudoun Water- Broad Run	109,884	60,224	49,660	-	-	-	49,660	49,660	-	-	-
Luray	6,432	1,990	4,442	-	-	-	4,442	4,442	-	-	-
Massanutten PSC	4,020	2,037	1,983	-	-	-	1,983	-	-	-	1,983
Merck	3,216	9,648	(6,432)	-	-	-	(6,432)	-	(6,432)	-	-
Molson Coors Shenandoah	12,060	12,060	-	-	-	-	-	-	-	-	-
Mt. Jackson	2,132	1,706	426	-	-	-	426	-	-	-	426
Purcellville	8,406	6,837	1,569	-	-	-	1,569	785	-	-	784
PWCSA-HL Mooney	219,280	183,190	36,090	-	-	-	36,090	24,363	-	-	11,727
Stafford Co-Aquia	73,093	68,160	4,933	-	-	-	4,933	4,933	-	-	-
Stoney Creek	2,065	1,865	200	-	-	-	200	-	-	-	200
Strasburg	4,059	5,385	(1,326)	-	-	-	(1,326)	-	(1,326)	-	-
UOSA	302,607	300,622	1,985	-	-	-	1,985	-	-	-	1,985
VA Am. Water PW Sec. 1	42,029	24,364	17,665	-	-	-	17,665	10,599	-	-	7,066
VA Am. Water PW Sec. 8	42,029	24,364	17,665	-	-	-	17,665	10,599	-	-	7,066
Waynesboro	3,898	2,436	1,462	-	-	-	1,462	-	-	-	1,462
Purchase by Eastern Shore	-	-	-	-	-	-	-	-	-	-	-

*** For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.**

*** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.*

POTOMAC Basin: Nitrogen Credit Ledger

Compliance Year:	2024	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)				
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits	PRICE:	Class A Sales	Class A* Purchases	Class B Sales**
The Exchange (group)	2,515,331	1,901,490	613,841	-	(12,942)	(19,492)	581,407	\$ 0.08	\$ 4.13	\$ 0.01	
									333,903	(7,809)	255,313
ACSA-Fishersville	2,924	1,243	1,681	(1,681)	-	-	-		-	-	-
ACSA-Greenville	854	383	471	-	-	-	471		471	-	-
ACSA-Harriston	626	156	470	-	-	-	470		470	-	-
ACSA-Middle River	4,970	2,615	2,355	-	-	-	2,355		2,355	-	-
ACSA-Mt. Sidney	513	677	(164)	164	-	-	-		-	-	-
ACSA-Stuarts Draft	1,462	378	1,084	(384)	-	-	700		700	-	-
ACSA-Vesper View	626	469	157	-	-	-	157		157	-	-
ACSA-Weyers Cave	914	2,815	(1,901)	1,901	-	-	-		-	-	-
Alexandria Renew Ent.	493,381	392,877	100,504	-	-	-	100,504		-	-	100,504
Arlington Co.	365,284	244,406	120,878	-	(8,326)	-	112,552		112,552	-	-
Berryville	4,435	2,914	1,521	-	-	-	1,521		1,450	-	71
Broadway Regional	3,538	3,172	366	-	-	-	366		-	-	366
Fairfax Co-Noman Cole	612,158	438,561	173,597	-	(3,176)	-	170,421		114,699	-	55,722
FCWSA-Vint Hill	579	305	274	-	-	-	274		-	-	274
Front Royal	24,365	20,877	3,488	-	-	-	3,488		3,200	-	288
FWSA-Opequon	25,589	13,111	12,478	-	(59)	-	12,419		-	-	12,419
FWSA-Parkins Mill	12,791	5,180	7,611	-	-	-	7,611		-	-	7,611
HRRSA-North River	36,432	25,873	10,559	-	(1,381)	-	9,178		-	-	9,178
KGCSA-Dahlgren S.D.	9,137	2,741	6,396	(439)	-	-	5,957		5,000	-	957
KGCSA-Fairview Beach	1,827	914	913	-	-	-	913		913	-	-
KGCSA-Purkins Corner	1,096	1,535	(439)	439	-	-	-		-	-	-
Leesburg	76,620	22,727	53,893	-	-	(19,492)	34,401		-	-	34,401
Loudoun Water- Broad Run	109,884	63,196	46,688	-	-	-	46,688		46,688	-	-
Luray	6,432	1,990	4,442	-	-	-	4,442		4,442	-	-
Massanutten PSC	4,020	2,037	1,983	-	-	-	1,983		-	-	1,983
Merck	3,216	9,648	(6,432)	-	-	-	(6,432)		-	(6,432)	-
Molson Coors Shenandoah	12,060	12,060	-	-	-	-	-		-	-	-
Mt. Jackson	2,132	1,706	426	-	-	-	426		-	-	426
Purcellville	8,406	7,173	1,233	-	-	-	1,233		617	-	616
PWCSA-HL Mooney	219,280	184,104	35,176	-	-	-	35,176		23,743	-	11,433
Stafford Co-Aquia	73,093	60,302	12,791	-	-	-	12,791		3,837	-	8,954
Stoney Creek	2,065	1,865	200	-	-	-	200		-	-	200
Strasburg	4,059	5,436	(1,377)	-	-	-	(1,377)		-	(1,377)	-
UOSA	302,607	302,565	42	-	-	-	42		-	-	42
VA Am. Water PW Sec. 1	42,029	31,065	10,964	-	-	-	10,964		6,578	-	4,386
VA Am. Water PW Sec. 8	42,029	31,978	10,051	-	-	-	10,051		6,031	-	4,020
Waynesboro	3,898	2,436	1,462	-	-	-	1,462		-	-	1,462
Purchase by Eastern Shore	-	-	-	-	-	-	-		-	-	-

*** For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.**

*** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.*

POTOMAC Basin: Nitrogen Credit Ledger

Compliance Year:	2025	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)				
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits	PRICE:	Class A Sales	Class A* Purchases	Class B Sales**
The Exchange (group)	2,515,331	1,917,633	597,698	-	(12,733)	(19,492)	565,473	\$ 0.08	\$ 4.21	\$ 0.01	
ACSA-Fishersville	2,924	1,243	1,681	(1,400)	-	-	281		281	-	-
ACSA-Greenville	854	418	436	(151)	-	-	285		285	-	-
ACSA-Harriston	626	156	470	(80)	-	-	390		390	-	-
ACSA-Middle River	4,970	2,593	2,377	-	-	-	2,377		2,377	-	-
ACSA-Mt. Sidney	513	751	(238)	238	-	-	-		-	-	-
ACSA-Stuarts Draft	1,462	367	1,095	(507)	-	-	588		588	-	-
ACSA-Vesper View	626	506	120	(50)	-	-	70		70	-	-
ACSA-Weyers Cave	914	2,864	(1,950)	1,950	-	-	-		-	-	-
Alexandria Renew Ent.	493,381	392,877	100,504	-	-	-	100,504		-	-	100,504
Arlington Co.	365,284	237,554	127,730	-	(8,117)	-	119,613		119,613	-	-
Berryville	4,435	2,977	1,458	-	-	-	1,458		1,400	-	58
Broadway Regional	3,538	3,302	236	-	-	-	236		-	-	236
Fairfax Co-Noman Cole	612,158	447,697	164,461	-	(3,176)	-	161,285		114,699	-	46,586
FCWSA-Vint Hill	579	317	262	-	-	-	262		-	-	262
Front Royal	24,365	20,877	3,488	-	-	-	3,488		3,300	-	188
FWSA-Opequon	25,589	13,431	12,158	-	(59)	-	12,099		1,215	-	10,884
FWSA-Parkins Mill	12,791	5,372	7,419	-	-	-	7,419		742	-	6,677
HRRSA-North River	36,432	25,873	10,559	-	(1,381)	-	9,178		-	-	9,178
KGCSA-Dahlgren S.D.	9,137	2,235	6,902	(213)	-	-	6,689		6,689	-	-
KGCSA-Fairview Beach	1,827	369	1,458	-	-	-	1,458		1,458	-	-
KGCSA-Purkins Corner	1,096	1,309	(213)	213	-	-	-		-	-	-
Leesburg	76,620	24,228	52,392	-	-	(19,492)	32,900		-	-	32,900
Loudoun Water- Broad Run	109,884	75,083	34,801	-	-	-	34,801		34,801	-	-
Luray	6,432	1,990	4,442	-	-	-	4,442		4,442	-	-
Massanutten PSC	4,020	2,037	1,983	-	-	-	1,983		-	-	1,983
Merck	3,216	9,648	(6,432)	-	-	-	(6,432)		-	(6,432)	-
Molson Coors Shenandoah	12,060	12,060	-	-	-	-	-		-	-	-
Mt. Jackson	2,132	1,706	426	-	-	-	426		-	-	426
Purcellville	8,406	5,604	2,802	-	-	-	2,802		1,401	-	1,401
PWCSA-HL Mooney	219,280	185,018	34,262	-	-	-	34,262		23,124	-	11,138
Stafford Co-Aquia	73,093	61,855	11,238	-	-	-	11,238		3,385	-	7,853
Stoney Creek	2,065	1,865	200	-	-	-	200		-	-	200
Strasburg	4,059	5,488	(1,429)	-	-	-	(1,429)		-	(1,429)	-
UOSA	302,607	302,484	123	-	-	-	123		-	-	123
VA Am. Water PW Sec. 1	42,029	31,065	10,964	-	-	-	10,964		6,578	-	4,386
VA Am. Water PW Sec. 8	42,029	31,978	10,051	-	-	-	10,051		6,031	-	4,020
Waynesboro	3,898	2,436	1,462	-	-	-	1,462		-	-	1,462
Purchase by Eastern Shore	-	-	-	-	-	-	-		-	-	-

*** For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.**

*** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.*

POTOMAC Basin: Nitrogen Credit Ledger

Compliance Year:	2026	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)						
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits	PRICE:	Class A Sales	Class A* Purchases	Class B Sales**		
The Exchange (group)	3,079,017	2,356,649	722,368	-	(11,618)	(23,146)	687,604	\$ 0.21	\$ 4.26	\$ 0.03	404,951	(22,914)	305,567
ACSA-Fishersville	18,517	8,703	9,814	(5,000)	-	-	4,814		4,814	-	-		-
ACSA-Greenville	3,987	1,950	2,037	(600)	-	-	1,437		1,437	-	-		-
ACSA-Harriston	3,759	941	2,818	(600)	-	-	2,218		2,218	-	-		-
ACSA-Middle River	33,964	18,281	15,683	-	-	-	15,683		15,683	-	-		-
ACSA-Mt. Sidney	3,844	5,700	(1,856)	1,856	-	-	-		-	-	-		-
ACSA-Stuarts Draft	16,568	4,908	11,660	(5,272)	-	-	6,388		6,388	-	-		-
ACSA-Vesper View	3,759	3,038	721	(300)	-	-	421		421	-	-		-
ACSA-Weyers Cave	4,446	14,362	(9,916)	9,916	-	-	-		-	-	-		-
Alexandria Renew Ent.	493,381	392,877	100,504	-	-	-	100,504		-	-	-		100,504
Arlington Co.	365,284	239,838	125,446	-	(8,117)	-	117,329		117,329	-	-		-
Berryville	7,846	5,380	2,466	-	-	-	2,466		2,100	-	-		366
Broadway Regional	25,648	24,228	1,420	-	-	-	1,420		-	-	-		1,420
Fairfax Co-Noman Cole	612,158	452,266	159,892	-	(3,176)	-	156,716		154,169	-	-		2,547
FCWSA-Vint Hill	3,356	1,908	1,448	-	-	-	1,448		-	-	-		1,448
Front Royal	44,831	38,498	6,333	-	-	-	6,333		6,000	-	-		333
FWSA-Opequon	84,077	45,181	38,896	-	(59)	-	38,837		3,886	-	-		34,951
FWSA-Parkins Mill	43,856	19,077	24,779	-	-	-	24,779		2,478	-	-		22,301
HRRSA-North River	192,567	140,091	52,476	-	(266)	-	52,210		-	-	-		52,210
KGCSA-Dahlgren S.D.	9,137	2,732	6,405	-	-	-	6,405		6,405	-	-		-
KGCSA-Fairview Beach	1,827	341	1,486	(170)	-	-	1,316		1,316	-	-		-
KGCSA-Purkins Corner	1,096	1,266	(170)	170	-	-	-		-	-	-		-
Leesburg	91,239	30,553	60,686	-	-	(23,146)	37,540		-	-	-		37,540
Loudoun Water- Broad Run	95,144	62,513	32,631	-	-	-	32,631		32,631	-	-		-
Luray	15,009	4,643	10,366	-	-	-	10,366		10,366	-	-		-
Massanutten PSC	10,964	5,555	5,409	-	-	-	5,409		-	-	-		5,409
Merck	10,964	32,892	(21,928)	-	-	-	(21,928)		-	(21,928)	-		-
Molson Coors Shenandoah	42,760	42,760	-	-	-	-	-		-	-	-		-
Mt. Jackson	8,443	6,754	1,689	-	-	-	1,689		-	-	-		1,689
Purcellville	12,060	6,030	6,030	-	-	-	6,030		3,015	-	-		3,015
PWCSA-HL Mooney	219,280	185,931	33,349	-	-	-	33,349		22,509	-	-		10,840
Stafford Co-Aquia	73,093	62,769	10,324	-	-	-	10,324		-	-	-		10,324
Stoney Creek	5,946	5,372	574	-	-	-	574		-	-	-		574
Strasburg	10,745	11,731	(986)	-	-	-	(986)		-	(986)	-		-
UOSA	394,705	393,499	1,206	-	-	-	1,206		-	-	-		1,206
VA Am. Water PW Sec. 1	42,029	31,522	10,507	-	-	-	10,507		6,304	-	-		4,203
VA Am. Water PW Sec. 8	42,029	32,892	9,137	-	-	-	9,137		5,482	-	-		3,655
Waynesboro	30,699	19,667	11,032	-	-	-	11,032		-	-	-		11,032
Purchase by Eastern Shore	-	-	-	-	-	-	-		-	-	-		-

*** For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.**

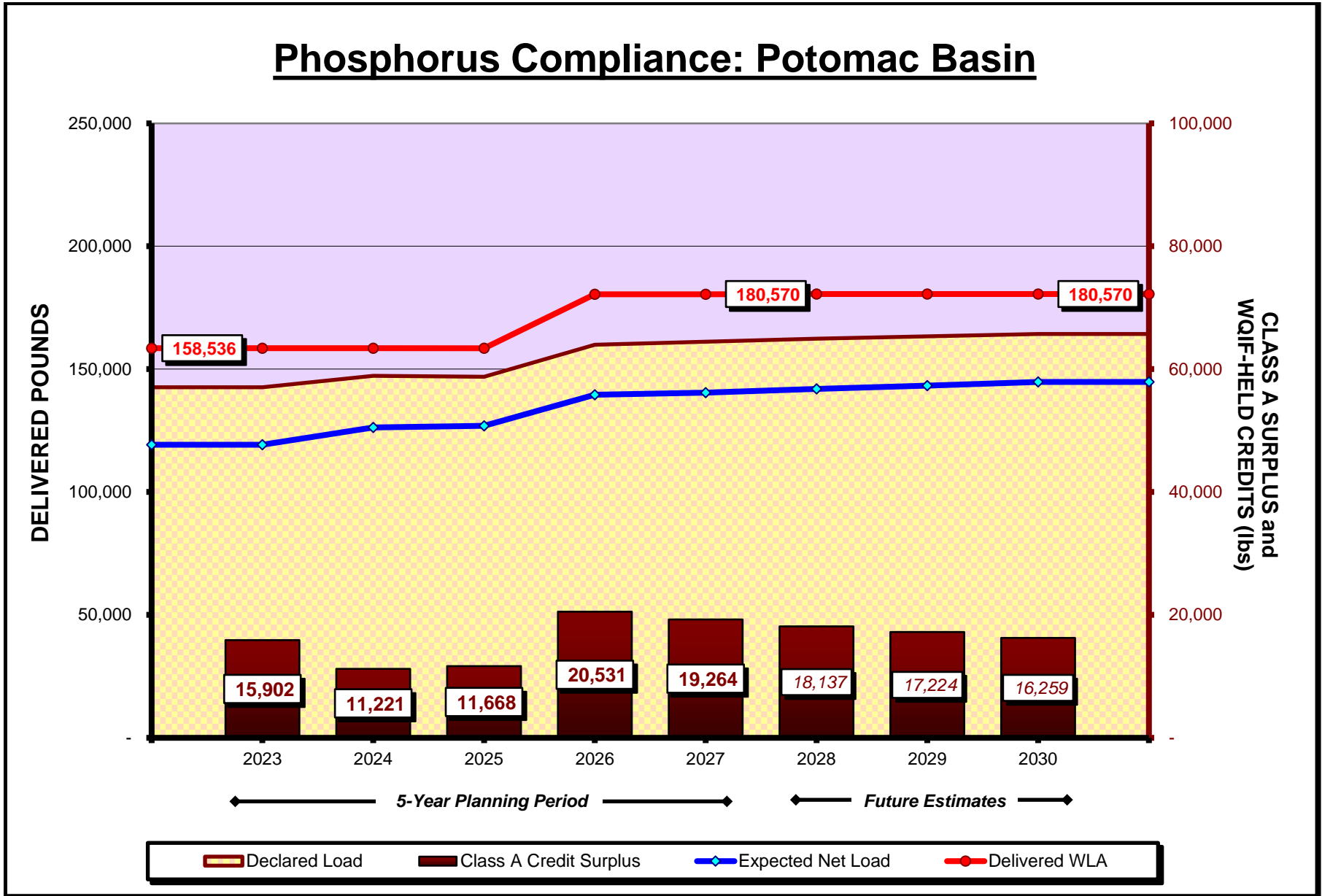
*** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.*

POTOMAC Basin: Nitrogen Credit Ledger

Compliance Year:	2027	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)				
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits		Class A Sales	Class A* Purchases	Class B Sales**
								PRICE:	\$ 0.25	\$ 4.62	\$ 0.03
The Exchange (group)	3,079,017	2,363,247	715,770	-	(8,250)	(23,146)	684,374		388,335	(23,656)	319,695
ACSA-Fishersville	18,517	8,981	9,536	(5,200)	-	-	4,336		4,336	-	-
ACSA-Greenville	3,987	2,601	1,386	(930)	-	-	456		456	-	-
ACSA-Harriston	3,759	1,097	2,662	(930)	-	-	1,732		1,732	-	-
ACSA-Middle River	33,964	18,805	15,159	-	-	-	15,159		15,159	-	-
ACSA-Mt. Sidney	3,844	5,700	(1,856)	1,856	-	-	-		-	-	-
ACSA-Stuarts Draft	16,568	5,064	11,504	(5,135)	-	-	6,369		6,369	-	-
ACSA-Vesper View	3,759	3,038	721	-	-	-	721		721	-	-
ACSA-Weyers Cave	4,446	14,785	(10,339)	10,339	-	-	-		-	-	-
Alexandria Renew Ent.	493,381	392,877	100,504	-	-	-	100,504		-	-	100,504
Arlington Co.	365,284	239,838	125,446	-	(6,400)	-	119,046		119,046	-	-
Berryville	7,846	5,380	2,466	-	-	-	2,466		2,100	-	366
Broadway Regional	25,648	24,514	1,134	-	-	-	1,134		-	-	1,134
Fairfax Co-Noman Cole	612,158	456,834	155,324	-	(1,525)	-	153,799		138,419	-	15,380
FCWSA-Vint Hill	3,356	1,978	1,378	-	-	-	1,378		-	-	1,378
Front Royal	44,831	38,498	6,333	-	-	-	6,333		-	-	6,333
FWSA-Opequon	84,077	46,232	37,845	-	(59)	-	37,786		3,783	-	34,003
FWSA-Parkins Mill	43,856	19,735	24,121	-	-	-	24,121		2,412	-	21,709
HRRSA-North River	192,567	140,091	52,476	-	(266)	-	52,210		-	-	52,210
KGCSA-Dahlgren S.D.	9,137	2,732	6,405	-	-	-	6,405		6,405	-	-
KGCSA-Fairview Beach	1,827	409	1,418	-	-	-	1,418		1,418	-	-
KGCSA-Purkins Corner	1,096	398	698	-	-	-	698		695	-	3
Leesburg	91,239	33,511	57,728	-	-	(23,146)	34,582		-	-	34,582
Loudoun Water- Broad Run	95,144	56,502	38,642	-	-	-	38,642		38,642	-	-
Luray	15,009	4,643	10,366	-	-	-	10,366		10,366	-	-
Massanutten PSC	10,964	5,555	5,409	-	-	-	5,409		-	-	5,409
Merck	10,964	32,892	(21,928)	-	-	-	(21,928)		-	(21,928)	-
Molson Coors Shenandoah	42,760	42,760	-	-	-	-	-		-	-	-
Mt. Jackson	8,443	6,754	1,689	-	-	-	1,689		-	-	1,689
Purcellville	12,060	3,216	8,844	-	-	-	8,844		3,000	-	5,844
PWCSA-HL Mooney	219,280	186,845	32,435	-	-	-	32,435		21,763	-	10,672
Stafford Co-Aquia	73,093	63,774	9,319	-	-	-	9,319		-	-	9,319
Stoney Creek	5,946	6,578	(632)	-	-	-	(632)		-	(632)	-
Strasburg	10,745	11,841	(1,096)	-	-	-	(1,096)		-	(1,096)	-
UOSA	394,705	394,252	453	-	-	-	453		-	-	453
VA Am. Water PW Sec. 1	42,029	31,978	10,051	-	-	-	10,051		6,031	-	4,020
VA Am. Water PW Sec. 8	42,029	32,892	9,137	-	-	-	9,137		5,482	-	3,655
Waynesboro	30,699	19,667	11,032	-	-	-	11,032		-	-	11,032
Purchase by Eastern Shore	-	-	-	-	-	-	-		-	-	-

*** For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.**

**** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.**



POTOMAC Basin: Phosphorus Credit Ledger

Compliance Year:	2023	Credit Forecasts		Preliminary Use of Credits				Credit Exchange (Pounds)			
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits		Class A Sales	Class A* Purchases	Class B Sales**
The Exchange (group)	158,536	117,786	40,750	-	(390)	(1,074)	39,286	PRICE:	\$ 1.63	\$ 6.08	\$ 0.17
ACSA-Fishersville	1,718	576	1,142	(1,142)	-	-	-		-	-	-
ACSA-Greenville	894	412	482	-	-	-	482		482	-	-
ACSA-Harriston	358	254	104	-	-	-	104		104	-	-
ACSA-Middle River	2,920	1,617	1,303	-	-	-	1,303		1,303	-	-
ACSA-Mt. Sidney	537	617	(80)	80	-	-	-		-	-	-
ACSA-Stuarts Draft	1,718	483	1,235	(153)	-	-	1,082		1,082	-	-
ACSA-Vesper View	358	358	-	-	-	-	-		-	-	-
ACSA-Weyers Cave	215	1,430	(1,215)	1,215	-	-	-		-	-	-
Alexandria Renew Ent.	29,603	22,504	7,099	-	-	-	7,099		-	-	7,099
Arlington Co.	21,925	14,527	7,398	-	(242)	-	7,156		7,156	-	-
Berryville	301	198	103	-	-	-	103		85	-	18
Broadway Regional	1,039	912	127	-	-	-	127		-	-	127
Fairfax Co-Noman Cole	36,729	24,159	12,570	-	(6)	-	12,564		7,104	-	5,460
FCWSA-Vint Hill	148	75	73	-	-	-	73		-	-	73
Front Royal	1,718	1,958	(240)	-	-	-	(240)		-	(240)	-
FWSA-Opequon	5,411	2,863	2,548	-	-	-	2,548		-	-	2,548
FWSA-Parkins Mill	2,147	1,117	1,030	-	-	-	1,030		-	-	1,030
HRRSA-North River	9,200	6,252	2,948	-	(141)	-	2,807		1,000	-	1,807
KGCSA-Dahlgren S.D.	914	457	457	(200)	-	-	257		200	-	57
KGCSA-Fairview Beach	183	219	(36)	36	-	-	-		-	-	-
KGCSA-Purkins Corner	110	274	(164)	164	-	-	-		-	-	-
Leesburg	3,954	1,559	2,395	-	-	(1,074)	1,321		-	-	1,321
Loudoun Water- Broad Run	1,575	986	589	-	-	-	589		589	-	-
Luray	687	296	391	-	(1)	-	390		390	-	-
Massanutten PSC	644	326	318	-	-	-	318		-	-	318
Merck	515	6,596	(6,081)	-	-	-	(6,081)		-	(6,081)	-
Molson Coors Shenandoah	1,933	1,932	1	-	-	-	1		-	-	1
Mt. Jackson	301	240	61	-	-	-	61		-	-	61
Purcellville	644	524	120	-	-	-	120		60	-	60
PWCSA-HL Mooney	13,157	10,991	2,166	-	-	-	2,166		1,561	-	605
Stafford Co-Aquia	4,386	4,090	296	-	-	-	296		296	-	-
Stoney Creek	313	451	(138)	-	-	-	(138)		-	(138)	-
Strasburg	421	744	(323)	-	-	-	(323)		-	(323)	-
UOSA	5,098	3,434	1,664	-	-	-	1,664		-	-	1,664
VA Am. Water PW Sec. 1	2,522	1,462	1,060	-	-	-	1,060		636	-	424
VA Am. Water PW Sec. 8	2,522	1,462	1,060	-	-	-	1,060		636	-	424
Waynesboro	1,718	1,431	287	-	-	-	287		-	-	287
Purchase by Eastern Shore	-	-	-	-	-	-	-		-	-	-

*** For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.**

*** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.*

POTOMAC Basin: Phosphorus Credit Ledger

Compliance Year:	2024	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)				
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits		Class A Sales	Class A* Purchases	Class B Sales**
								PRICE:	\$ 2.43	\$ 6.22	\$ 0.25
The Exchange (group)	158,536	124,105	34,431	-	(1,090)	(1,074)	32,267		19,886	(8,665)	21,046
ACSA-Fishersville	1,718	608	1,110	(1,110)	-	-	-		-	-	-
ACSA-Greenville	894	461	433	-	-	-	433		433	-	-
ACSA-Harriston	358	425	(67)	67	-	-	-		-	-	-
ACSA-Middle River	2,920	1,707	1,213	-	-	-	1,213		1,213	-	-
ACSA-Mt. Sidney	537	603	(66)	66	-	-	-		-	-	-
ACSA-Stuarts Draft	1,718	494	1,224	(184)	-	-	1,040		1,040	-	-
ACSA-Vesper View	358	374	(16)	16	-	-	-		-	-	-
ACSA-Weyers Cave	215	1,360	(1,145)	1,145	-	-	-		-	-	-
Alexandria Renew Ent.	29,603	23,573	6,030	-	-	-	6,030		-	-	6,030
Arlington Co.	21,925	14,664	7,261	-	(942)	-	6,319		6,319	-	-
Berryville	301	198	103	-	-	-	103		85	-	18
Broadway Regional	1,039	923	116	-	-	-	116		-	-	116
Fairfax Co-Noman Cole	36,729	26,314	10,415	-	(6)	-	10,409		6,951	-	3,458
FCWSA-Vint Hill	148	78	70	-	-	-	70		-	-	70
Front Royal	1,718	1,962	(244)	-	-	-	(244)		-	(244)	-
FWSA-Opequon	5,411	2,934	2,477	-	-	-	2,477		-	-	2,477
FWSA-Parkins Mill	2,147	1,159	988	-	-	-	988		-	-	988
HRRSA-North River	9,200	6,573	2,627	-	(141)	-	2,486		-	-	2,486
KGCSA-Dahlgren S.D.	914	274	640	-	-	-	640		500	-	140
KGCSA-Fairview Beach	183	183	-	-	-	-	-		-	-	-
KGCSA-Purkins Corner	110	96	14	-	-	-	14		14	-	-
Leesburg	3,954	1,669	2,285	-	-	(1,074)	1,211		-	-	1,211
Loudoun Water- Broad Run	1,575	1,035	540	-	-	-	540		540	-	-
Luray	687	296	391	-	(1)	-	390		390	-	-
Massanutten PSC	644	326	318	-	-	-	318		-	-	318
Merck	515	8,468	(7,953)	-	-	-	(7,953)		-	(7,953)	-
Molson Coors Shenandoah	1,933	1,932	1	-	-	-	1		-	-	1
Mt. Jackson	301	240	61	-	-	-	61		-	-	61
Purcellville	644	550	94	-	-	-	94		47	-	47
PWCSA-HL Mooney	13,157	11,046	2,111	-	-	-	2,111		1,520	-	591
Stafford Co-Aquia	4,386	3,618	768	-	-	-	768		77	-	691
Stoney Creek	313	451	(138)	-	-	-	(138)		-	(138)	-
Strasburg	421	751	(330)	-	-	-	(330)		-	(330)	-
UOSA	5,098	3,546	1,552	-	-	-	1,552		-	-	1,552
VA Am. Water PW Sec. 1	2,522	1,864	658	-	-	-	658		395	-	263
VA Am. Water PW Sec. 8	2,522	1,919	603	-	-	-	603		362	-	241
Waynesboro	1,718	1,431	287	-	-	-	287		-	-	287
Purchase by Eastern Shore	-	-	-	-	-	-	-		-	-	-

*** For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.**

*** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.*

POTOMAC Basin: Phosphorus Credit Ledger

Compliance Year:	2025	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)				
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits		Class A Sales	Class A* Purchases	Class B Sales**
								PRICE:	\$ 2.43	\$ 6.34	\$ 0.27
The Exchange (group)	158,536	124,781	33,755	-	(1,064)	(1,074)	31,617	20,341	(8,673)	19,949	
ACSA-Fishersville	1,718	608	1,110	(500)	-	-	610	610	-	-	
ACSA-Greenville	894	518	376	(376)	-	-	-	-	-	-	
ACSA-Harriston	358	399	(41)	41	-	-	-	-	-	-	
ACSA-Middle River	2,920	1,693	1,227	-	-	-	1,227	1,227	-	-	
ACSA-Mt. Sidney	537	699	(162)	162	-	-	-	-	-	-	
ACSA-Stuarts Draft	1,718	480	1,238	(655)	-	-	583	583	-	-	
ACSA-Vesper View	358	389	(31)	31	-	-	-	-	-	-	
ACSA-Weyers Cave	215	1,512	(1,297)	1,297	-	-	-	-	-	-	
Alexandria Renew Ent.	29,603	23,573	6,030	-	-	-	6,030	-	-	6,030	
Arlington Co.	21,925	14,253	7,672	-	(916)	-	6,756	6,756	-	-	
Berryville	301	202	99	-	-	-	99	80	-	19	
Broadway Regional	1,039	970	69	-	-	-	69	-	-	69	
Fairfax Co-Noman Cole	36,729	26,862	9,867	-	(6)	-	9,861	6,951	-	2,910	
FCWSA-Vint Hill	148	81	67	-	-	-	67	-	-	67	
Front Royal	1,718	1,962	(244)	-	-	-	(244)	-	(244)	-	
FWSA-Opequon	5,411	3,006	2,405	-	-	-	2,405	120	-	2,285	
FWSA-Parkins Mill	2,147	1,202	945	-	-	-	945	47	-	898	
HRRSA-North River	9,200	6,573	2,627	-	(141)	-	2,486	-	-	2,486	
KGCSA-Dahlgren S.D.	914	235	679	-	-	-	679	679	-	-	
KGCSA-Fairview Beach	183	20	163	-	-	-	163	163	-	-	
KGCSA-Purkins Corner	110	63	47	-	-	-	47	47	-	-	
Leesburg	3,954	1,779	2,175	-	-	(1,074)	1,101	-	-	1,101	
Loudoun Water- Broad Run	1,575	1,230	345	-	-	-	345	345	-	-	
Luray	687	296	391	-	(1)	-	390	390	-	-	
Massanutten PSC	644	326	318	-	-	-	318	-	-	318	
Merck	515	8,468	(7,953)	-	-	-	(7,953)	-	(7,953)	-	
Molson Coors Shenandoah	1,933	1,932	1	-	-	-	1	-	-	1	
Mt. Jackson	301	240	61	-	-	-	61	-	-	61	
Purcellville	644	429	215	-	-	-	215	107	-	108	
PWCSA-HL Mooney	13,157	11,101	2,056	-	-	-	2,056	1,479	-	577	
Stafford Co-Aquia	4,386	3,711	675	-	-	-	675	-	-	675	
Stoney Creek	313	451	(138)	-	-	-	(138)	-	(138)	-	
Strasburg	421	759	(338)	-	-	-	(338)	-	(338)	-	
UOSA	5,098	3,545	1,553	-	-	-	1,553	-	-	1,553	
VA Am. Water PW Sec. 1	2,522	1,864	658	-	-	-	658	395	-	263	
VA Am. Water PW Sec. 8	2,522	1,919	603	-	-	-	603	362	-	241	
Waynesboro	1,718	1,431	287	-	-	-	287	-	-	287	
Purchase by Eastern Shore	-	-	-	-	-	-	-	-	-	-	

*** For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.**

*** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.*

POTOMAC Basin: Phosphorus Credit Ledger

Compliance Year:	2026	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)				
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits	PRICE:	Class A Sales	Class A* Purchases	Class B Sales**
The Exchange (group)	180,447	137,104	43,343	-	(991)	(1,508)	40,844	\$ 0.84	\$ 6.41	\$ 0.11	
ACSA-Fishersville	2,887	1,131	1,756	(1,115)	-	-	641		641	-	-
ACSA-Greenville	1,503	928	575	(418)	-	-	157		157	-	-
ACSA-Harriston	586	654	(68)	68	-	-	-		-	-	-
ACSA-Middle River	4,970	2,972	1,998	-	-	-	1,998		1,998	-	-
ACSA-Mt. Sidney	902	1,204	(302)	302	-	-	-		-	-	-
ACSA-Stuarts Draft	2,485	818	1,667	(1,116)	-	-	551		551	-	-
ACSA-Vesper View	586	636	(50)	50	-	-	-		-	-	-
ACSA-Weyers Cave	356	2,585	(2,229)	2,229	-	-	-		-	-	-
Alexandria Renew Ent.	29,603	23,573	6,030	-	-	-	6,030		-	-	6,030
Arlington Co.	21,925	14,390	7,535	-	(916)	-	6,619		6,619	-	-
Berryville	435	298	137	-	-	-	137		100	-	37
Broadway Regional	1,791	1,692	99	-	-	-	99		-	-	99
Fairfax Co-Noman Cole	36,729	27,136	9,593	-	(6)	-	9,587		9,319	-	268
FCWSA-Vint Hill	295	168	127	-	-	-	127		-	-	127
Front Royal	2,924	3,348	(424)	-	-	-	(424)		-	(424)	-
FWSA-Opequon	8,864	5,042	3,822	-	-	-	3,822		191	-	3,631
FWSA-Parkins Mill	3,517	2,040	1,477	-	-	-	1,477		74	-	1,403
HRRSA-North River	16,442	12,034	4,408	-	(68)	-	4,340		-	-	4,340
KGCSA-Dahlgren S.D.	914	285	629	-	-	-	629		629	-	-
KGCSA-Fairview Beach	183	18	165	-	-	-	165		165	-	-
KGCSA-Purkins Corner	110	60	50	-	-	-	50		50	-	-
Leesburg	5,690	2,653	3,037	-	-	(1,508)	1,529		-	-	1,529
Loudoun Water- Broad Run	2,144	1,610	534	-	-	-	534		534	-	-
Luray	1,155	498	657	-	(1)	-	656		656	-	-
Massanutten PSC	507	257	250	-	-	-	250		-	-	250
Merck	866	3,465	(2,599)	-	-	-	(2,599)		-	(2,599)	-
Molson Coors Shenandoah	3,248	3,248	-	-	-	-	-		-	-	-
Mt. Jackson	493	394	99	-	-	-	99		-	-	99
Purcellville	864	432	432	-	-	-	432		216	-	216
PWCSA-HL Mooney	13,157	11,156	2,001	-	-	-	2,001		1,441	-	560
Stafford Co-Aquia	4,386	3,766	620	-	-	-	620		-	-	620
Stoney Creek	514	714	(200)	-	-	-	(200)		-	(200)	-
Strasburg	644	939	(295)	-	-	-	(295)		-	(295)	-
UOSA	658	473	185	-	-	-	185		-	-	185
VA Am. Water PW Sec. 1	2,522	1,891	631	-	-	-	631		379	-	252
VA Am. Water PW Sec. 8	2,522	1,974	548	-	-	-	548		329	-	219
Waynesboro	3,070	2,622	448	-	-	-	448		-	-	448
Purchase by Eastern Shore	-	-	-	-	-	-	-		-	-	-

*** For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.**

*** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.*

POTOMAC Basin: Phosphorus Credit Ledger

Compliance Year:	2027	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)				
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits	PRICE:	Class A Sales	Class A* Purchases	Class B Sales**
The Exchange (group)	180,447	138,195	42,252	-	(765)	(1,508)	39,979	\$ 0.94	\$ 6.94	\$ 0.11	
									22,707	(3,443)	20,715
ACSA-Fishersville	2,887	1,167	1,720	(1,202)	-	-	518		518	-	-
ACSA-Greenville	1,503	1,238	265	(265)	-	-	-		-	-	-
ACSA-Harriston	586	763	(177)	177	-	-	-		-	-	-
ACSA-Middle River	4,970	3,058	1,912	-	-	-	1,912		1,912	-	-
ACSA-Mt. Sidney	902	1,204	(302)	302	-	-	-		-	-	-
ACSA-Stuarts Draft	2,485	844	1,641	(1,367)	-	-	274		274	-	-
ACSA-Vesper View	586	636	(50)	50	-	-	-		-	-	-
ACSA-Weyers Cave	356	2,661	(2,305)	2,305	-	-	-		-	-	-
Alexandria Renew Ent.	29,603	23,573	6,030	-	-	-	6,030		-	-	6,030
Arlington Co.	21,925	14,390	7,535	-	(507)	-	7,028		7,028	-	-
Berryville	435	298	137	-	-	-	137		100	-	37
Broadway Regional	1,791	1,712	79	-	-	-	79		-	-	79
Fairfax Co-Noman Cole	36,729	27,410	9,319	-	(189)	-	9,130		8,217	-	913
FCWSA-Vint Hill	295	174	121	-	-	-	121		-	-	121
Front Royal	2,924	2,901	23	-	-	-	23		-	-	23
FWSA-Opequon	8,864	5,159	3,705	-	-	-	3,705		185	-	3,520
FWSA-Parkins Mill	3,517	2,111	1,406	-	-	-	1,406		70	-	1,336
HRRSA-North River	16,442	12,034	4,408	-	(68)	-	4,340		-	-	4,340
KGCSA-Dahlgren S.D.	914	285	629	-	-	-	629		629	-	-
KGCSA-Fairview Beach	183	22	161	-	-	-	161		161	-	-
KGCSA-Purkins Corner	110	42	68	-	-	-	68		68	-	-
Leesburg	5,690	2,808	2,882	-	-	(1,508)	1,374		-	-	1,374
Loudoun Water- Broad Run	2,144	1,358	786	-	-	-	786		786	-	-
Luray	1,155	498	657	-	(1)	-	656		656	-	-
Massanutten PSC	507	257	250	-	-	-	250		-	-	250
Merck	866	3,465	(2,599)	-	-	-	(2,599)		-	(2,599)	-
Molson Coors Shenandoah	3,248	3,248	-	-	-	-	-		-	-	-
Mt. Jackson	493	394	99	-	-	-	99		-	-	99
Purcellville	864	460	404	-	-	-	404		150	-	254
PWCSA-HL Mooney	13,157	11,211	1,946	-	-	-	1,946		1,383	-	563
Stafford Co-Aquia	4,386	3,826	560	-	-	-	560		-	-	560
Stoney Creek	514	1,055	(541)	-	-	-	(541)		-	(541)	-
Strasburg	644	947	(303)	-	-	-	(303)		-	(303)	-
UOSA	658	471	187	-	-	-	187		-	-	187
VA Am. Water PW Sec. 1	2,522	1,919	603	-	-	-	603		241	-	362
VA Am. Water PW Sec. 8	2,522	1,974	548	-	-	-	548		329	-	219
Waynesboro	3,070	2,622	448	-	-	-	448		-	-	448
Purchase by Eastern Shore	-	-	-	-	-	-	-		-	-	-

*** For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.**

**** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.**

Potomac-Shenandoah River Basin

Supplemental Information for Individual Facilities



Owner Bubble: Augusta County Service Authority

The facilities listed below have received an aggregated mass load limit pursuant to 9 VAC 25-820-70, Part 1.B.2., which is also referred to as an “owner bubble”. Accordingly, compliance is determined solely on an aggregate basis rather than by comparison of individual facility loads with respective individual WLAs.

The “Credit Transferred within Bubble” section of each table forecasts the use of Credits within the owner bubble during each Compliance Year, and must necessarily sum to zero. The specific Credit transfers shown in this table are provided for internal planning purposes only and, accordingly, are not binding and may change based on the actual performance of individual facilities within the bubble.

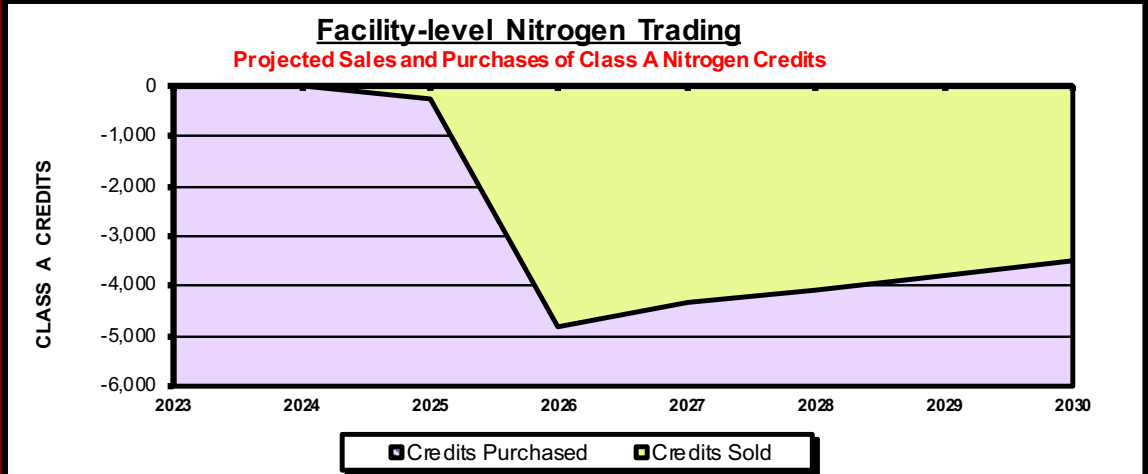
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply with the aggregate Delivered WLA of the bubble.

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
Fishersville	(1,747)	(1,681)	(1,400)	(5,000)	(5,200)	(5,200)	(5,200)	(5,200)
Greenville	-	-	(151)	(600)	(930)	(930)	(930)	(930)
Harriston	-	-	(80)	(600)	(930)	(930)	(930)	(930)
Middle River	-	-	-	-	-	-	-	-
Mt. Sidney	203	164	238	1,856	1,856	1,856	1,856	1,856
Stuarts Draft	(811)	(384)	(507)	(5,272)	(5,135)	(5,135)	(5,135)	(5,135)
Vesper View	-	-	(50)	(300)	-	-	-	-
Weyers Cave	2,355	1,901	1,950	9,916	10,339	10,339	10,339	10,339
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Fishersville	-	-	281	4,814	4,336	4,058	3,781	3,503
Greenville	503	471	285	1,437	456	456	456	456
Harriston	522	470	390	2,218	1,732	1,732	1,732	1,732
Middle River	2,492	2,355	2,377	15,683	15,159	14,597	14,035	13,473
Mt. Sidney	-	-	-	-	-	-	-	-
Stuarts Draft	281	700	588	6,388	6,369	6,214	6,059	5,903
Vesper View	192	157	70	421	721	721	721	721
Weyers Cave	-	-	-	-	-	-	-	-
Expected Net Credits	3,990	4,153	3,991	30,961	28,773	27,778	26,784	25,788
Class A Sales (Purchases)	3,990	4,153	3,991	30,961	28,773	27,778	26,784	25,788
<i>Expected Class B Credits</i>	0	0	0	0	0	0	0	0
<i>WQIF-Held Credits</i>	0	0	0	0	0	0	0	0

PHOSPHORUS Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
Fishersville	(1,142)	(1,110)	(500)	(1,115)	(1,202)	(1,202)	(1,202)	(1,202)
Greenville	-	-	(376)	(418)	(265)	(265)	(265)	(265)
Harriston	-	67	41	68	177	177	177	177
Middle River	-	-	-	-	-	-	-	-
Mt. Sidney	80	66	162	302	302	302	302	302
Stuarts Draft	(153)	(184)	(655)	(1,116)	(1,367)	(1,367)	(1,367)	(1,367)
Vesper View	-	16	31	50	50	50	50	50
Weyers Cave	1,215	1,145	1,297	2,229	2,305	2,305	2,305	2,305
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Fishersville	-	-	610	641	518	482	446	410
Greenville	482	433	-	157	-	-	-	-
Harriston	104	-	-	-	-	-	-	-
Middle River	1,303	1,213	1,227	1,998	1,912	1,821	1,730	1,638
Mt. Sidney	-	-	-	-	-	-	-	-
Stuarts Draft	1,082	1,040	583	551	274	248	222	196
Vesper View	-	-	-	-	-	-	-	-
Weyers Cave	-	-	-	-	-	-	-	-
Expected Net Credits	2,971	2,686	2,420	3,347	2,704	2,551	2,398	2,244
Class A Sales (Purchases)	2,971	2,686	2,420	3,347	2,704	2,551	2,398	2,244
<i>Expected Class B Credits</i>	0	0	0	0	0	0	0	0
<i>WQIF-Held Credits</i>	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

ACSA-Fishersville
POTOMAC Trading Basin



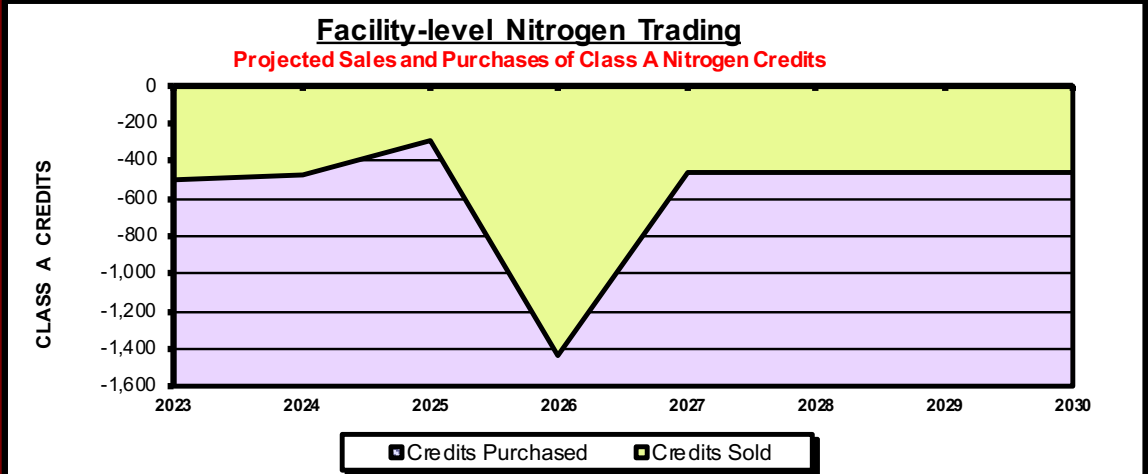
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

2023	2024	2025	2026	2027	2028	2029	2030	
<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>			
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
1.61	1.70	1.70	1.88	1.94	2.00	2.06	2.12	
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
19,613	20,710	20,710	22,903	23,634	24,364	25,095	25,826	
0.06	0.06	0.06	0.38	0.38	0.38	0.38	0.38	
1,177	1,243	1,243	8,703	8,981	9,259	9,536	9,814	
2,924	2,924	2,924	18,517	18,517	18,517	18,517	18,517	
1,747	1,681	1,681	9,814	9,536	9,258	8,981	8,703	
(1,747)	(1,681)	(1,400)	(5,000)	(5,200)	(5,200)	(5,200)	(5,200)	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	281	4,814	4,336	4,058	3,781	3,503	
0	0	281	4,814	4,336	4,058	3,781	3,503	
0	0	0	0	0	0	0	0	

NITROGEN FACILITY SUMMARY

ACSA-Greenville
POTOMAC Trading Basin



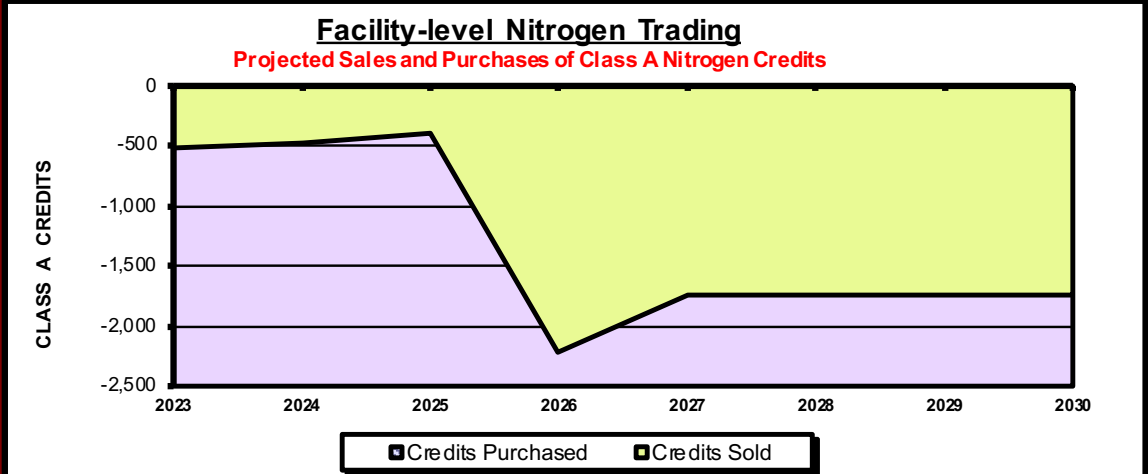
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Projected Flow (mgd)	0.05	0.06	0.06	0.06	0.08	0.08	0.08	0.08
Projected Avg. Annual Concentration (mg/L)	38.41	38.06	38.12	38.12	38.12	38.12	38.12	38.12
Discharged Load (end of pipe)	5,849	6,375	6,966	6,966	9,288	9,288	9,288	9,288
Delivery Factor	0.06	0.06	0.06	0.28	0.28	0.28	0.28	0.28
Expected Load	351	383	418	1,950	2,601	2,601	2,601	2,601
Delivered WLA	854	854	854	3,987	3,987	3,987	3,987	3,987
Expected Credits (delivered)	503	471	436	2,037	1,386	1,386	1,386	1,386
Transfers In (Out) within Owner Bubble	0	0	(151)	(600)	(930)	(930)	(930)	(930)
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	503	471	285	1,437	456	456	456	456
Class A Credit Sales (Purchases)	503	471	285	1,437	456	456	456	456
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

ACSA-Harriston
POTOMAC Trading Basin

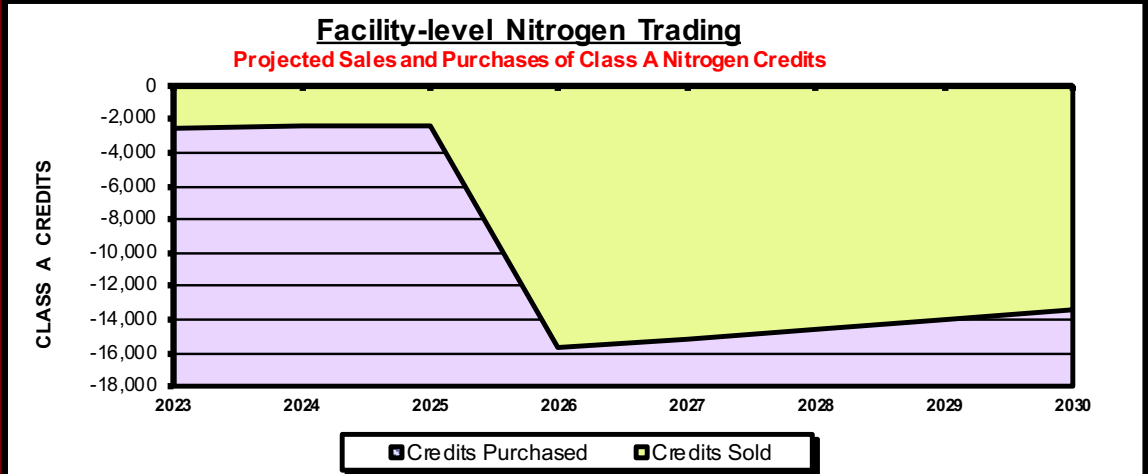


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Projected Flow (mgd)	0.04	0.06	0.06	0.06	0.07	0.07	0.07	0.07
Projected Avg. Annual Concentration (mg/L)	7.78	7.77	7.75	7.80	7.80	7.80	7.80	7.80
Discharged Load (end of pipe)	948	1,420	1,416	1,425	1,663	1,663	1,663	1,663
Delivery Factor	0.11	0.11	0.11	0.66	0.66	0.66	0.66	0.66
Expected Load	104	156	156	941	1,097	1,097	1,097	1,097
Delivered WLA	626	626	626	3,759	3,759	3,759	3,759	3,759
Expected Credits (delivered)	522	470	470	2,818	2,662	2,662	2,662	2,662
Transfers In (Out) within Owner Bubble	0	0	(80)	(600)	(930)	(930)	(930)	(930)
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	522	470	390	2,218	1,732	1,732	1,732	1,732
Class A Credit Sales (Purchases)	522	470	390	2,218	1,732	1,732	1,732	1,732
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

ACSA-Middle River
POTOMAC Trading Basin

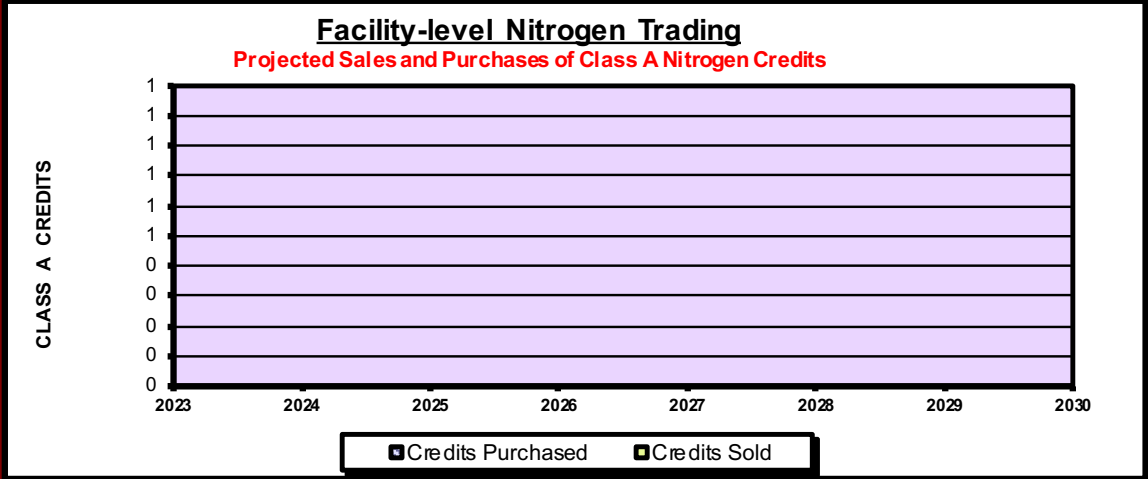


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	6.80	6.80	6.80	6.80	6.80	6.80	6.80	6.80
Projected Flow (mgd)	4.52	4.77	4.73	4.88	5.02	5.17	5.32	5.47
Projected Avg. Annual Concentration (mg/L)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Discharged Load (end of pipe)	41,298	43,582	43,216	44,587	45,866	47,237	48,607	49,978
Delivery Factor	0.06	0.06	0.06	0.41	0.41	0.41	0.41	0.41
Expected Load	2,478	2,615	2,593	18,281	18,805	19,367	19,929	20,491
Delivered WLA	4,970	4,970	4,970	33,964	33,964	33,964	33,964	33,964
Expected Credits (delivered)	2,492	2,355	2,377	15,683	15,159	14,597	14,035	13,473
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	2,492	2,355	2,377	15,683	15,159	14,597	14,035	13,473
Class A Credit Sales (Purchases)	2,492	2,355	2,377	15,683	15,159	14,597	14,035	13,473
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

ACSA-Mt. Sidney
POTOMAC Trading Basin

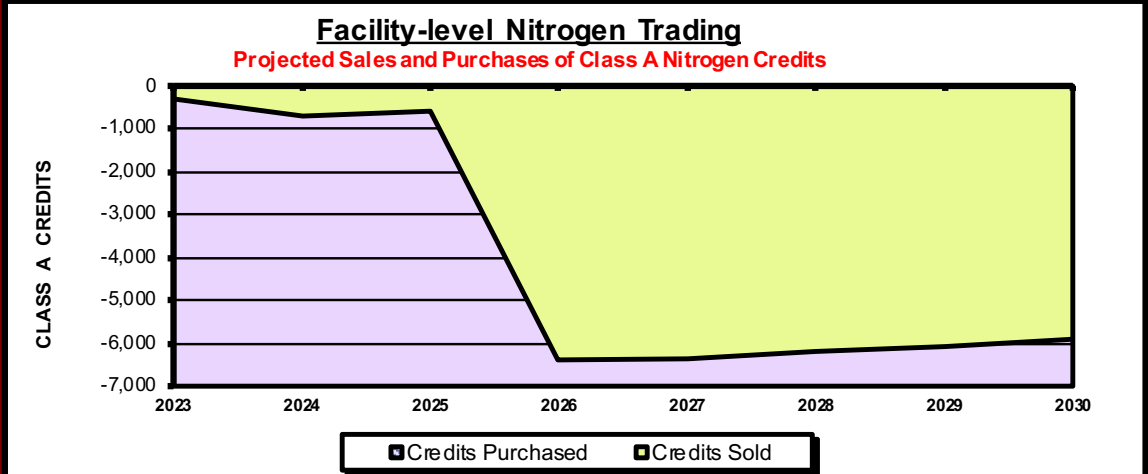


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Projected Flow (mgd)	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12
Projected Avg. Annual Concentration (mg/L)	35.63	33.67	34.24	34.66	34.66	34.66	34.66	34.66
Discharged Load (end of pipe)	11,936	11,280	12,514	12,667	12,667	12,667	12,667	12,667
Delivery Factor	0.06	0.06	0.06	0.45	0.45	0.45	0.45	0.45
Expected Load	716	677	751	5,700	5,700	5,700	5,700	5,700
Delivered WLA	513	513	513	3,844	3,844	3,844	3,844	3,844
Expected Credits (delivered)	(203)	(164)	(238)	(1,856)	(1,856)	(1,856)	(1,856)	(1,856)
Transfers In (Out) within Owner Bubble	203	164	238	1,856	1,856	1,856	1,856	1,856
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

ACSA-Stuarts Draft
POTOMAC Trading Basin



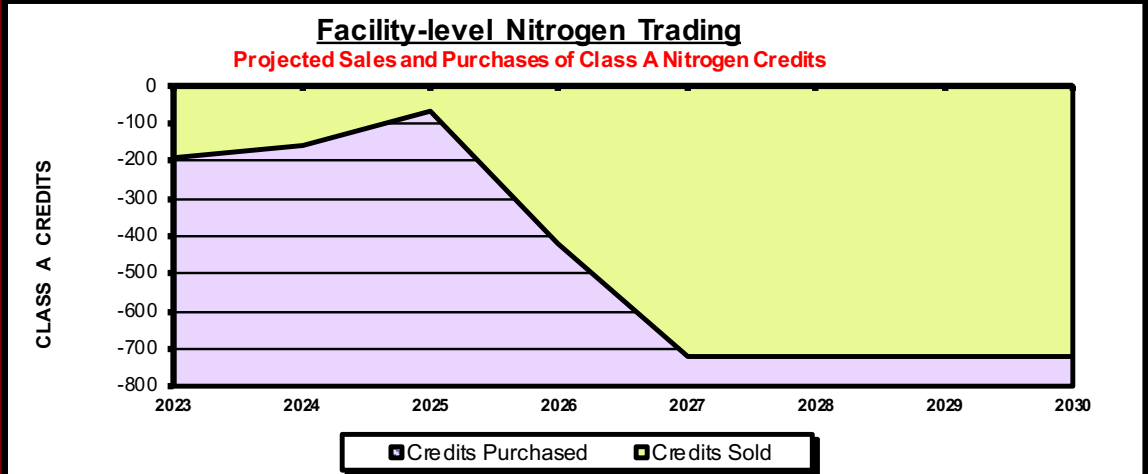
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Projected Flow (mgd)	1.35	1.38	1.34	1.58	1.63	1.68	1.73	1.78
Projected Avg. Annual Concentration (mg/L)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Discharged Load (end of pipe)	12,335	12,609	12,243	14,436	14,893	15,350	15,806	16,263
Delivery Factor	0.03	0.03	0.03	0.34	0.34	0.34	0.34	0.34
Expected Load	370	378	367	4,908	5,064	5,219	5,374	5,530
Delivered WLA	1,462	1,462	1,462	16,568	16,568	16,568	16,568	16,568
Expected Credits (delivered)	1,092	1,084	1,095	11,660	11,504	11,349	11,194	11,038
Transfers In (Out) within Owner Bubble	(811)	(384)	(507)	(5,272)	(5,135)	(5,135)	(5,135)	(5,135)
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	281	700	588	6,388	6,369	6,214	6,059	5,903
Class A Credit Sales (Purchases)	281	700	588	6,388	6,369	6,214	6,059	5,903
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

ACSA-Vesper View
POTOMAC Trading Basin



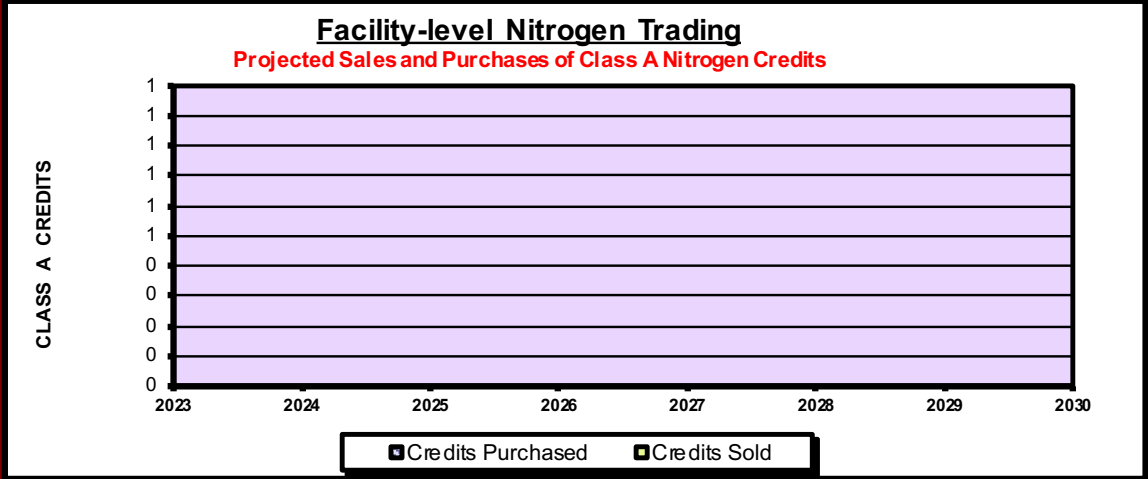
Loading & Credit Summary

Design Flow (mgd)	0.10
Projected Flow (mgd)	0.06
Projected Avg. Annual Concentration (mg/L)	21.57
Discharged Load (end of pipe)	
Delivery Factor	0.11
Expected Load	434
Delivered WLA	626
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	192
Class A Credit Sales (Purchases)	192
Expected Class B Credits	0

2023	2024	2025	2026	2027	2028	2029	2030
<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
21.57	23.31	25.19	25.19	25.19	25.19	25.19	25.19
3,942	4,260	4,603	4,603	4,603	4,603	4,603	4,603
0.11	0.11	0.11	0.66	0.66	0.66	0.66	0.66
434	469	506	3,038	3,038	3,038	3,038	3,038
626	626	626	3,759	3,759	3,759	3,759	3,759
192	157	120	721	721	721	721	721
0	0	(50)	(300)	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
192	157	70	421	721	721	721	721
192	157	70	421	721	721	721	721
0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

ACSA-Weyers Cave
POTOMAC Trading Basin

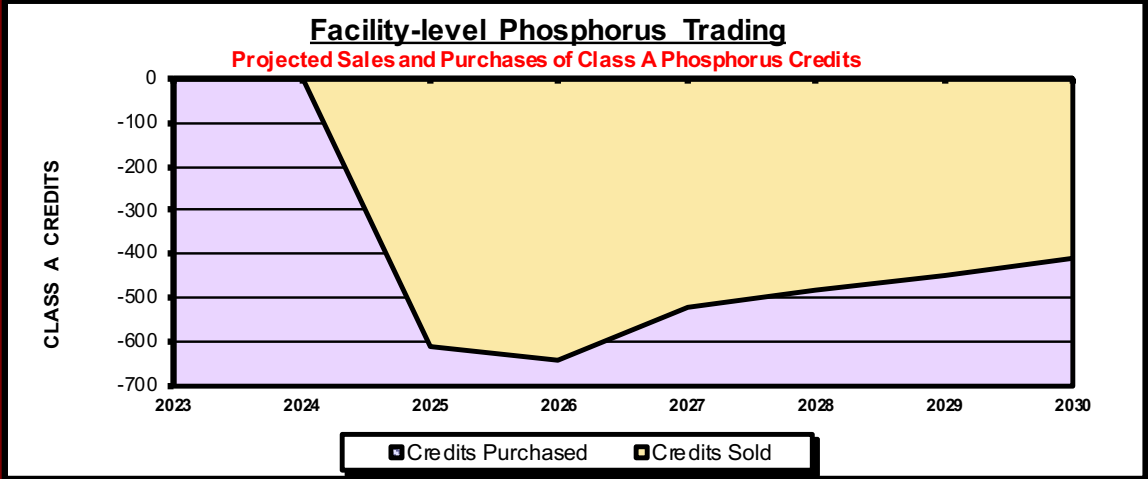


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Projected Flow (mgd)	0.37	0.33	0.33	0.34	0.35	0.35	0.35	0.35
Projected Avg. Annual Concentration (mg/L)	19.34	18.67	19.00	19.00	19.00	19.00	19.00	19.00
Discharged Load (end of pipe)	21,793	18,764	19,096	19,674	20,253	20,253	20,253	20,253
Delivery Factor	0.15	0.15	0.15	0.73	0.73	0.73	0.73	0.73
Expected Load	3,269	2,815	2,864	14,362	14,785	14,785	14,785	14,785
Delivered WLA	914	914	914	4,446	4,446	4,446	4,446	4,446
Expected Credits (delivered)	(2,355)	(1,901)	(1,950)	(9,916)	(10,339)	(10,339)	(10,339)	(10,339)
Transfers In (Out) within Owner Bubble	2,355	1,901	1,950	9,916	10,339	10,339	10,339	10,339
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

ACSA-Fishersville
POTOMAC Trading Basin

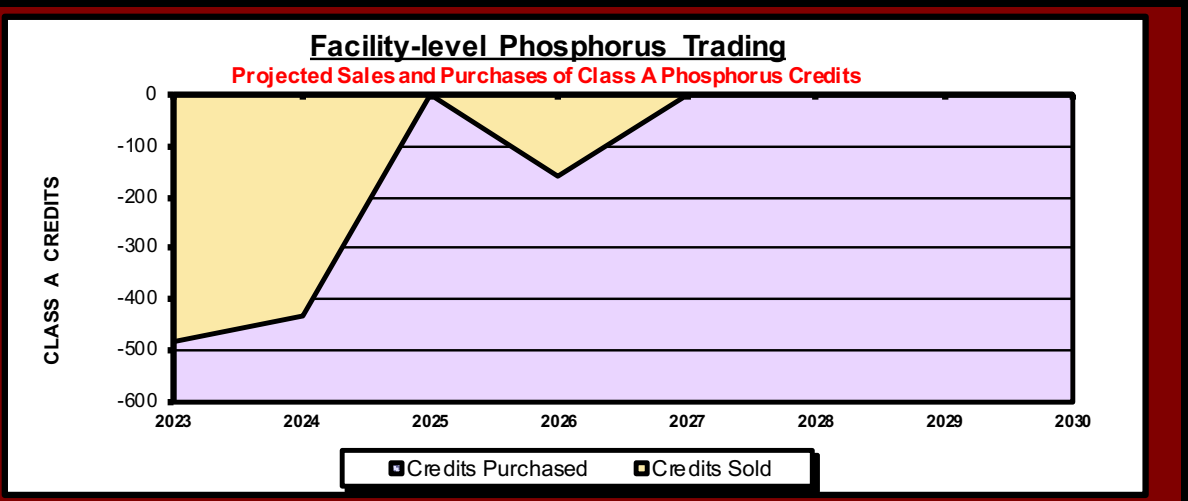


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Projected Flow (mgd)	1.61	1.70	1.70	1.88	1.94	2.00	2.06	2.12
Projected Avg. Annual Concentration (mg/L)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Discharged Load (end of pipe)	1,226	1,294	1,294	1,431	1,477	1,523	1,568	1,614
Delivery Factor	0.47	0.47	0.47	0.79	0.79	0.79	0.79	0.79
Expected Load	576	608	608	1,131	1,167	1,203	1,239	1,275
Delivered WLA	1,718	1,718	1,718	2,887	2,887	2,887	2,887	2,887
Expected Credits (delivered)	1,142	1,110	1,110	1,756	1,720	1,684	1,648	1,612
Transfers In (Out) within Owner Bubble	(1,142)	(1,110)	(500)	(1,115)	(1,202)	(1,202)	(1,202)	(1,202)
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	610	641	518	482	446	410
Class A Credit Sales (Purchases)	0	0	610	641	518	482	446	410
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

ACSA-Greenville
POTOMAC Trading Basin

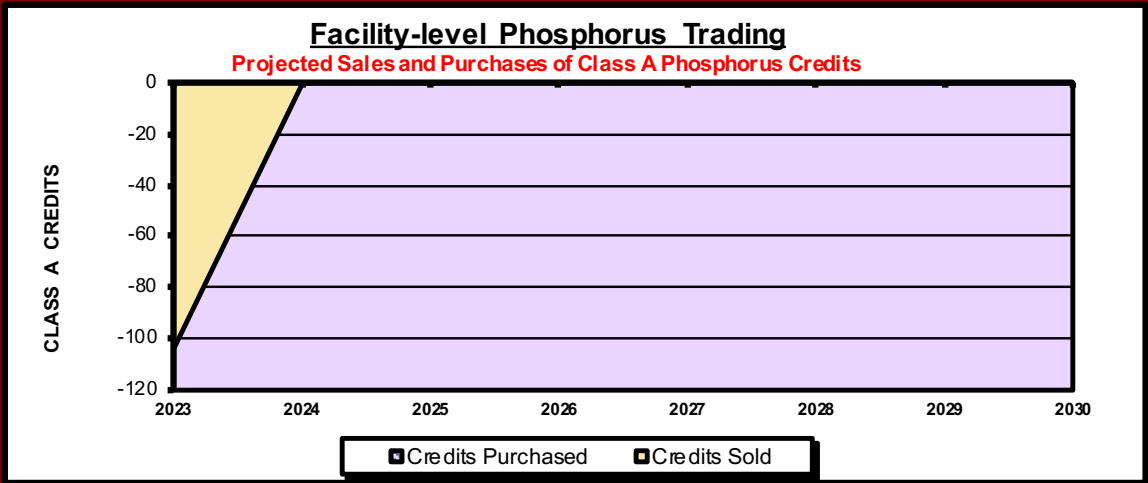


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Projected Flow (mgd)	0.05	0.06	0.06	0.06	0.08	0.08	0.08	0.08
Projected Avg. Annual Concentration (mg/L)	5.75	5.85	6.03	6.43	6.43	6.43	6.43	6.43
Discharged Load (end of pipe)	876	980	1,102	1,175	1,567	1,567	1,567	1,567
Delivery Factor	0.47	0.47	0.47	0.79	0.79	0.79	0.79	0.79
Expected Load	412	461	518	928	1,238	1,238	1,238	1,238
Delivered WLA	894	894	894	1,503	1,503	1,503	1,503	1,503
Expected Credits (delivered)	482	433	376	575	265	265	265	265
Transfers In (Out) within Owner Bubble	0	0	(376)	(418)	(265)	(265)	(265)	(265)
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	482	433	0	157	0	0	0	0
Class A Credit Sales (Purchases)	482	433	0	157	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

ACSA-Harriston
 POTOMAC Trading Basin

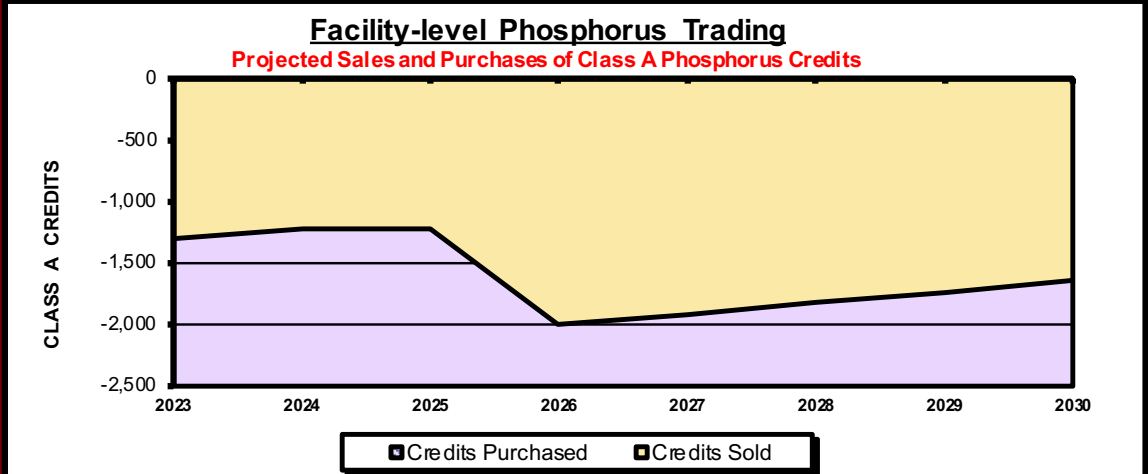


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Projected Flow (mgd)	0.04	0.06	0.06	0.06	0.07	0.07	0.07	0.07
Projected Avg. Annual Concentration (mg/L)	4.43	4.95	4.65	4.65	4.65	4.65	4.65	4.65
Discharged Load (end of pipe)	540	905	850	850	991	991	991	991
Delivery Factor	0.47	0.47	0.47	0.77	0.77	0.77	0.77	0.77
Expected Load	254	425	399	654	763	763	763	763
Delivered WLA	358	358	358	586	586	586	586	586
Expected Credits (delivered)	104	(67)	(41)	(68)	(177)	(177)	(177)	(177)
Transfers In (Out) within Owner Bubble	0	67	41	68	177	177	177	177
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	104	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	104	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

ACSA-Middle River
POTOMAC Trading Basin

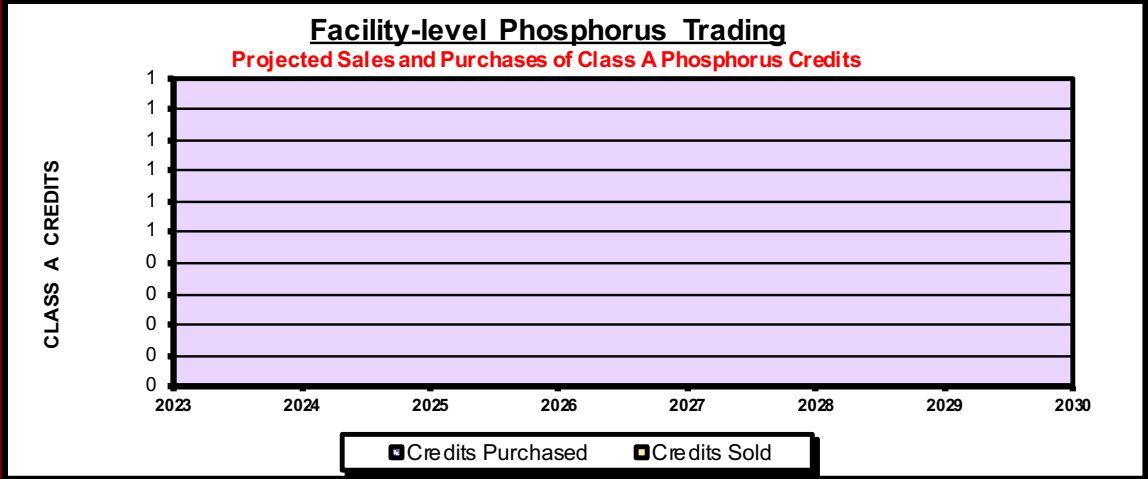


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	6.80	6.80	6.80	6.80	6.80	6.80	6.80	6.80
Projected Flow (mgd)	4.52	4.77	4.73	4.88	5.02	5.17	5.32	5.47
Projected Avg. Annual Concentration (mg/L)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Discharged Load (end of pipe)	3,441	3,632	3,601	3,716	3,822	3,936	4,051	4,165
Delivery Factor	0.47	0.47	0.47	0.80	0.80	0.80	0.80	0.80
Expected Load	1,617	1,707	1,693	2,972	3,058	3,149	3,240	3,332
Delivered WLA	2,920	2,920	2,920	4,970	4,970	4,970	4,970	4,970
Expected Credits (delivered)	1,303	1,213	1,227	1,998	1,912	1,821	1,730	1,638
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	1,303	1,213	1,227	1,998	1,912	1,821	1,730	1,638
Class A Credit Sales (Purchases)	1,303	1,213	1,227	1,998	1,912	1,821	1,730	1,638
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

ACSA-Mt. Sidney
POTOMAC Trading Basin

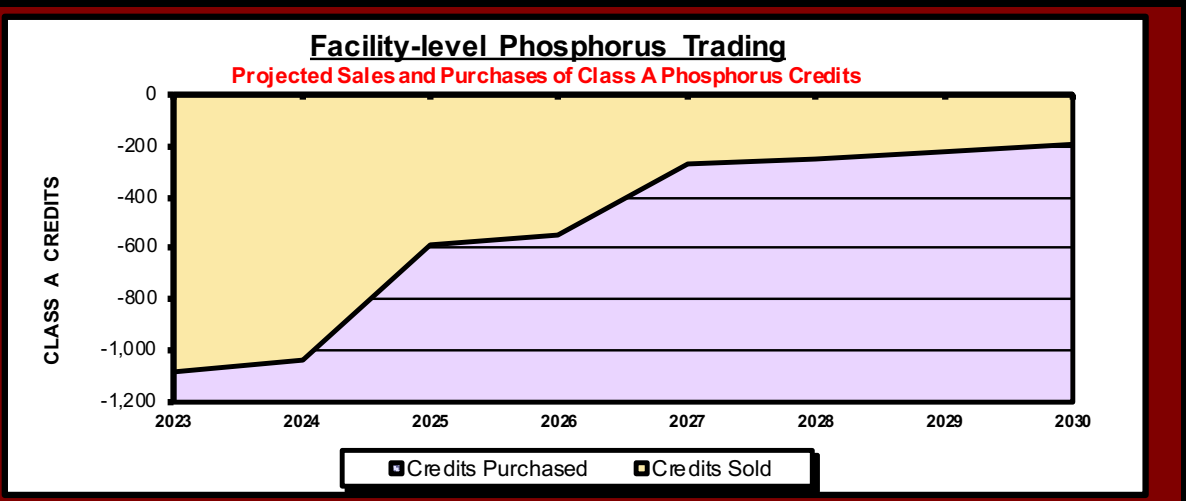


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Projected Flow (mgd)	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12
Projected Avg. Annual Concentration (mg/L)	3.92	3.83	4.07	4.17	4.17	4.17	4.17	4.17
Discharged Load (end of pipe)	1,313	1,283	1,487	1,524	1,524	1,524	1,524	1,524
Delivery Factor	0.47	0.47	0.47	0.79	0.79	0.79	0.79	0.79
Expected Load	617	603	699	1,204	1,204	1,204	1,204	1,204
Delivered WLA	537	537	537	902	902	902	902	902
Expected Credits (delivered)	(80)	(66)	(162)	(302)	(302)	(302)	(302)	(302)
Transfers In (Out) within Owner Bubble	80	66	162	302	302	302	302	302
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

ACSA-Stuarts Draft
POTOMAC Trading Basin



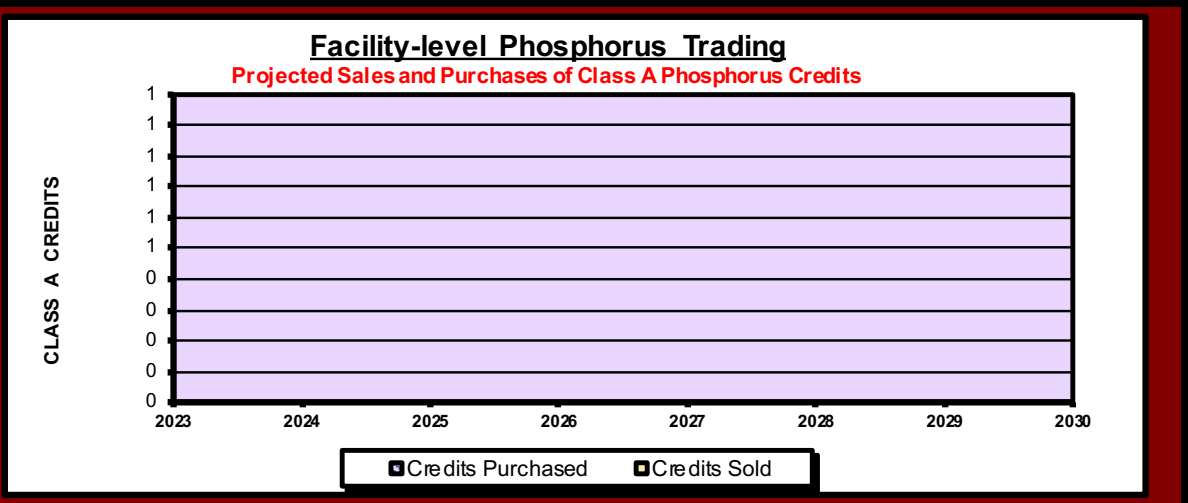
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

2023	2024	2025	2026	2027	2028	2029	2030	
Planning Period					Future Estimates (non-binding)			
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
1.35	1.38	1.34	1.58	1.63	1.68	1.73	1.78	
0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
1,028	1,051	1,020	1,203	1,241	1,279	1,317	1,355	
0.47	0.47	0.47	0.68	0.68	0.68	0.68	0.68	
483	494	480	818	844	870	896	922	
1,718	1,718	1,718	2,485	2,485	2,485	2,485	2,485	
1,235	1,224	1,238	1,667	1,641	1,615	1,589	1,563	
(153)	(184)	(655)	(1,116)	(1,367)	(1,367)	(1,367)	(1,367)	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
1,082	1,040	583	551	274	248	222	196	
1,082	1,040	583	551	274	248	222	196	
0	0	0	0	0	0	0	0	

PHOSPHORUS FACILITY SUMMARY

ACSA-Vesper View
POTOMAC Trading Basin



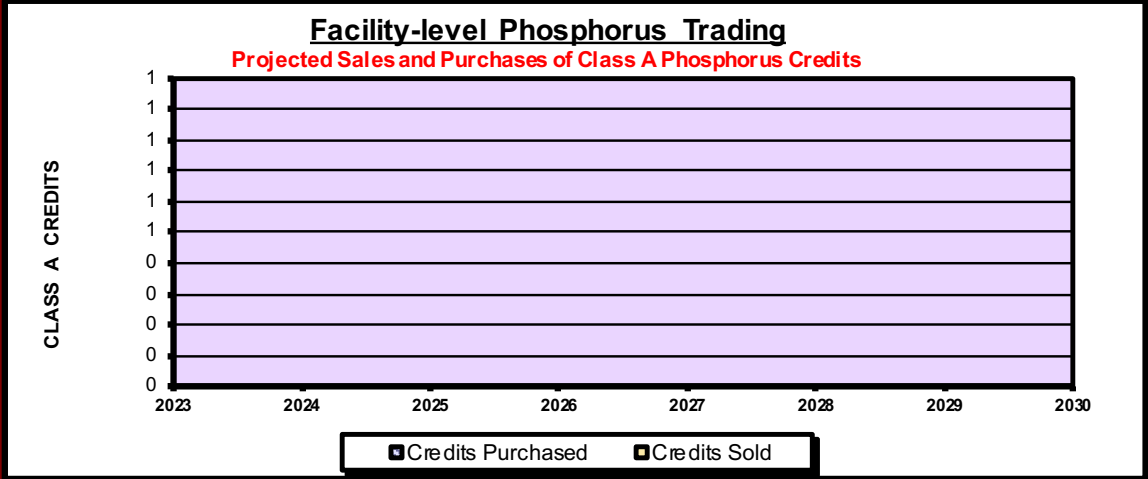
Loading & Credit Summary

Design Flow (mgd)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Projected Flow (mgd)	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Projected Avg. Annual Concentration (mg/L)	4.17	4.35	4.53	4.52	4.52	4.52	4.52	4.52
Discharged Load (end of pipe)	762	795	828	826	826	826	826	826
Delivery Factor	0.47	0.47	0.47	0.77	0.77	0.77	0.77	0.77
Expected Load	358	374	389	636	636	636	636	636
Delivered WLA	358	358	358	586	586	586	586	586
Expected Credits (delivered)	0	(16)	(31)	(50)	(50)	(50)	(50)	(50)
Transfers In (Out) within Owner Bubble	0	16	31	50	50	50	50	50
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

2023	2024	2025	2026	2027	2028	2029	2030	
Planning Period					Future Estimates (non-binding)			
0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	
0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	
4.17	4.35	4.53	4.52	4.52	4.52	4.52	4.52	
762	795	828	826	826	826	826	826	
0.47	0.47	0.47	0.77	0.77	0.77	0.77	0.77	
358	374	389	636	636	636	636	636	
358	358	358	586	586	586	586	586	
0	(16)	(31)	(50)	(50)	(50)	(50)	(50)	
0	16	31	50	50	50	50	50	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	

PHOSPHORUS FACILITY SUMMARY

ACSA-Weyers Cave
POTOMAC Trading Basin



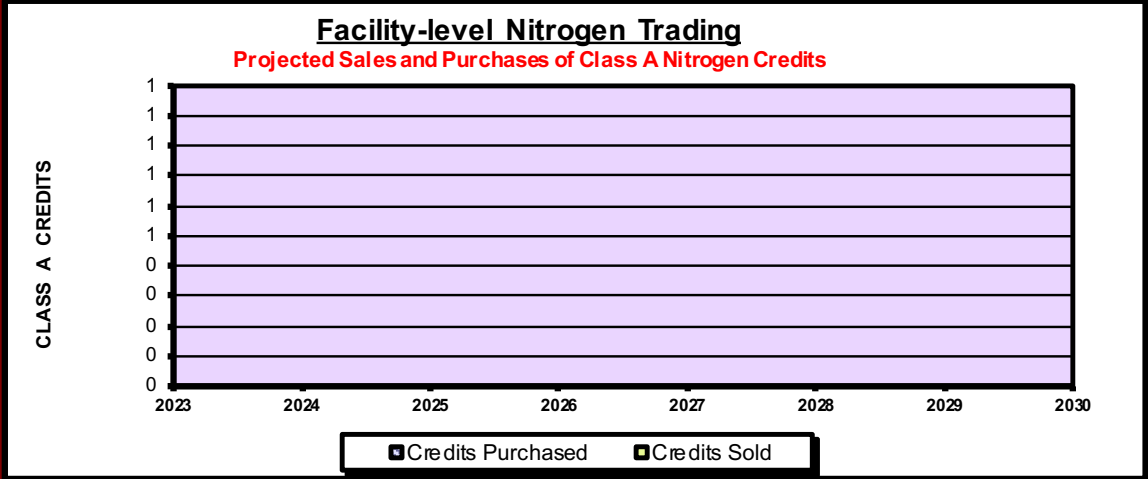
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

2023	2024	2025	2026	2027	2028	2029	2030
<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
0.37	0.33	0.33	0.34	0.35	0.35	0.35	0.35
2.70	2.88	3.20	3.20	3.20	3.20	3.20	3.20
3,043	2,895	3,216	3,314	3,411	3,411	3,411	3,411
0.47	0.47	0.47	0.78	0.78	0.78	0.78	0.78
1,430	1,360	1,512	2,585	2,661	2,661	2,661	2,661
215	215	215	356	356	356	356	356
(1,215)	(1,145)	(1,297)	(2,229)	(2,305)	(2,305)	(2,305)	(2,305)
1,215	1,145	1,297	2,229	2,305	2,305	2,305	2,305
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

Alexandria Renew Ent.
POTOMAC Trading Basin



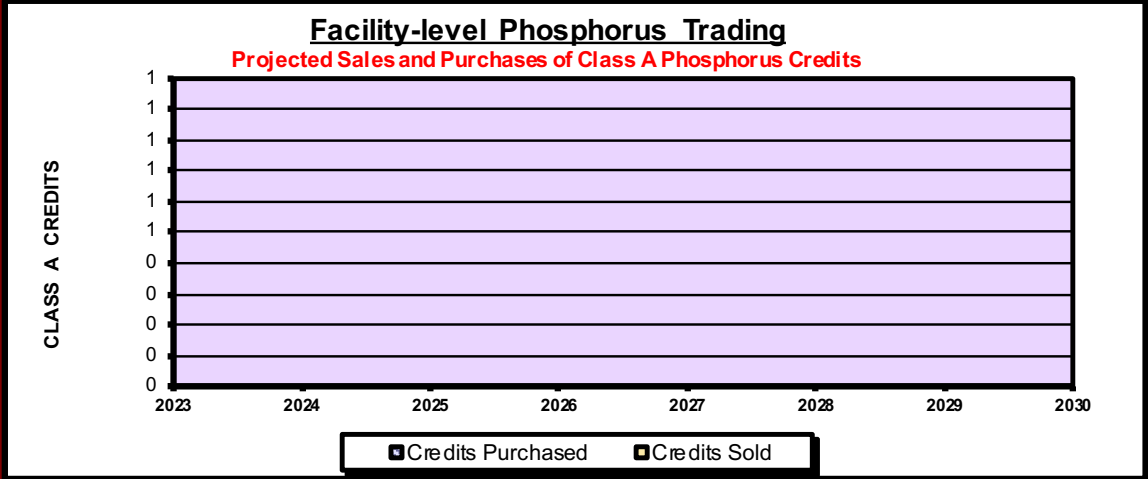
Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00
Projected Flow (mgd)	41.05	43.00	43.00	43.00	43.00	43.00	43.00	43.00
Projected Avg. Annual Concentration (mg/L)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Discharged Load (end of pipe)	375,061	392,877	392,877	392,877	392,877	392,877	392,877	392,877
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	375,061	392,877	392,877	392,877	392,877	392,877	392,877	392,877
Delivered WLA*	493,381	493,381	493,381	493,381	493,381	493,381	493,381	493,381
Expected Credits (delivered)	118,320	100,504	100,504	100,504	100,504	100,504	100,504	100,504
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	118,320	100,504	100,504	100,504	100,504	100,504	100,504	100,504
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	118,320	100,504	100,504	100,504	100,504	100,504	100,504	100,504

* Wasteload allocations for localities served by combined sewers are based on dry weather design flow capacity. Reported discharge loads for the AlexRenew Water Resource Recovery Facility are based on the loads associated with the first 54 MGD of flow on each day.

PHOSPHORUS FACILITY SUMMARY

Alexandria Renew Ent.
POTOMAC Trading Basin



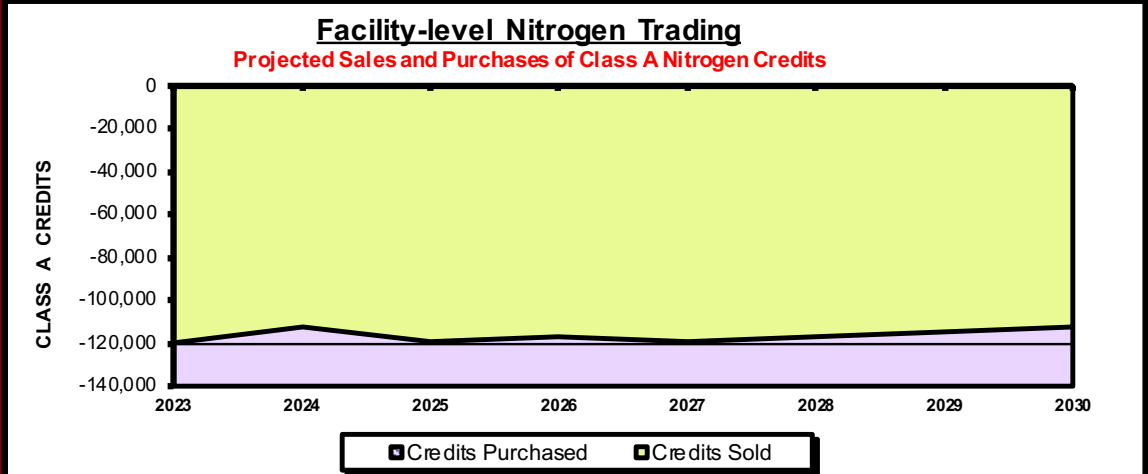
Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00
Projected Flow (mgd)	41.05	43.00	43.00	43.00	43.00	43.00	43.00	43.00
Projected Avg. Annual Concentration (mg/L)	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Discharged Load (end of pipe)	22,504	23,573	23,573	23,573	23,573	23,573	23,573	23,573
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	22,504	23,573	23,573	23,573	23,573	23,573	23,573	23,573
Delivered WLA*	29,603	29,603	29,603	29,603	29,603	29,603	29,603	29,603
Expected Credits (delivered)	7,099	6,030	6,030	6,030	6,030	6,030	6,030	6,030
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	7,099	6,030	6,030	6,030	6,030	6,030	6,030	6,030
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	7,099	6,030	6,030	6,030	6,030	6,030	6,030	6,030

* Wasteload allocations for localities served by combined sewers are based on dry weather design flow capacity. Reported discharge loads for the AlexRenew Water Resource Recovery Facility are based on the loads associated with the first 54 MGD of flow on each day.

NITROGEN FACILITY SUMMARY

Arlington Co.
 POTOMAC Trading Basin



Loading & Credit Summary

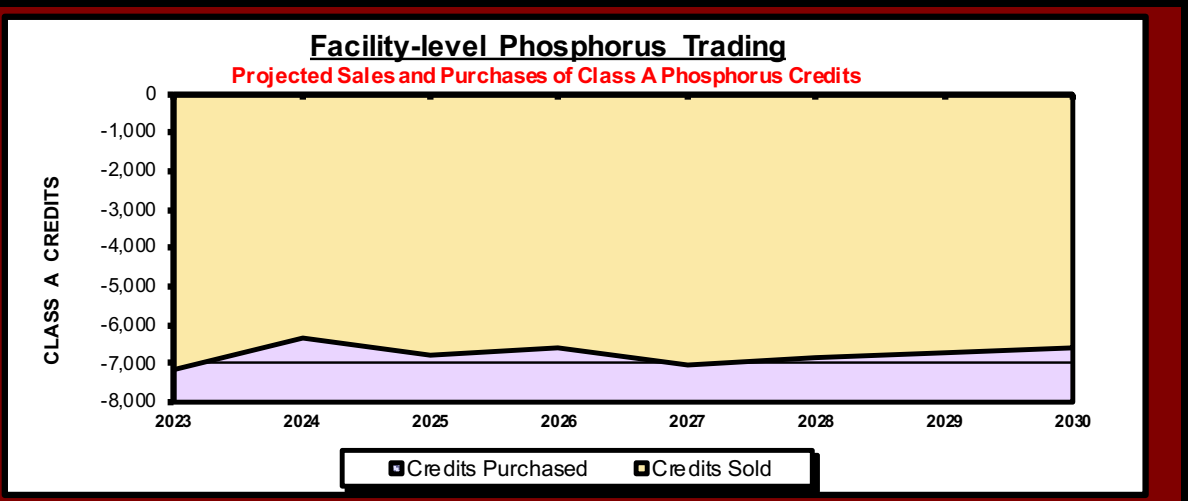
	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00
Projected Flow (mgd)	26.50	26.75	26.00	26.25	26.25	26.50	26.75	27.00
Projected Avg. Annual Concentration (mg/L)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Discharged Load (end of pipe)	242,122	244,406	237,554	239,838	239,838	242,122	244,406	246,690
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	242,122	244,406	237,554	239,838	239,838	242,122	244,406	246,690
Delivered WLA*	365,284	365,284	365,284	365,284	365,284	365,284	365,284	365,284
Expected Credits (delivered)	123,162	120,878	127,730	125,446	125,446	123,162	120,878	118,594
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange**	(3,326)	(8,326)	(8,117)	(8,117)	(6,400)	(6,521)	(6,521)	(6,521)
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	119,836	112,552	119,613	117,329	119,046	116,641	114,357	112,073
Class A Credit Sales (Purchases)	119,836	112,552	119,613	117,329	119,046	116,641	114,357	112,073
Expected Class B Credits	0	0	0	0	0	0	0	0

* Reflects allocation transfer to George Mason University of 183 delivered pounds of TN (renewal of contract beyond 2021 is expected)

** Reflects use of Credits for Arlington County and Arlington County Public Schools stormwater programs

PHOSPHORUS FACILITY SUMMARY

Arlington Co.
 POTOMAC Trading Basin



Loading & Credit Summary

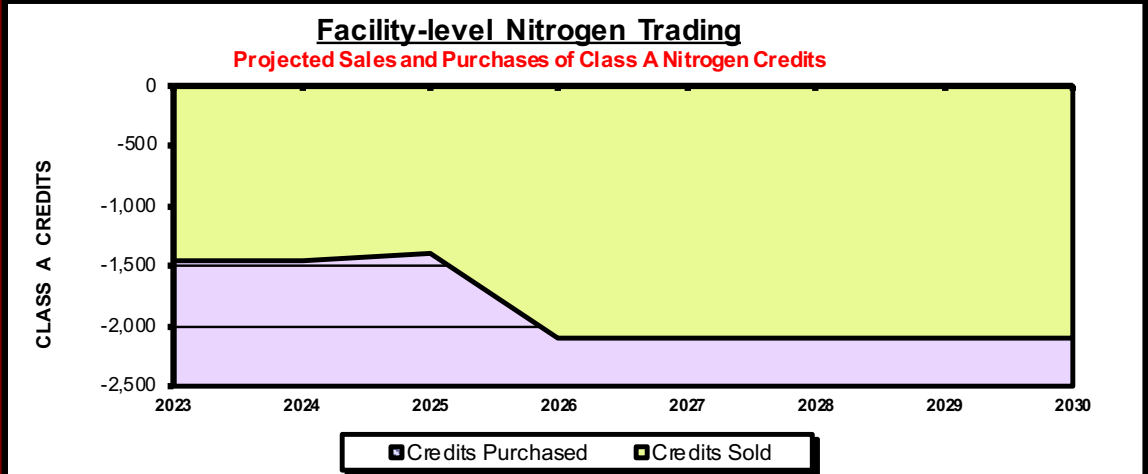
	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00
Projected Flow (mgd)	26.50	26.75	26.00	26.25	26.25	26.50	26.75	27.00
Projected Avg. Annual Concentration (mg/L)	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Discharged Load (end of pipe)	14,527	14,664	14,253	14,390	14,390	14,527	14,664	14,801
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	14,527	14,664	14,253	14,390	14,390	14,527	14,664	14,801
Delivered WLA*	21,925	21,925	21,925	21,925	21,925	21,925	21,925	21,925
Expected Credits (delivered)	7,398	7,261	7,672	7,535	7,535	7,398	7,261	7,124
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange**	(242)	(942)	(916)	(916)	(507)	(531)	(531)	(531)
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	7,156	6,319	6,756	6,619	7,028	6,867	6,730	6,593
Class A Credit Sales (Purchases)	7,156	6,319	6,756	6,619	7,028	6,867	6,730	6,593
Expected Class B Credits	0	0	0	0	0	0	0	0

* Reflects allocation transfer to George Mason University of 3 delivered pounds of TP (renewal of contract beyond 2021 is expected)

** Reflects use of Credits for Arlington County and Arlington County Public Schools stormwater programs

NITROGEN FACILITY SUMMARY

Berryville
 POTOMAC Trading Basin



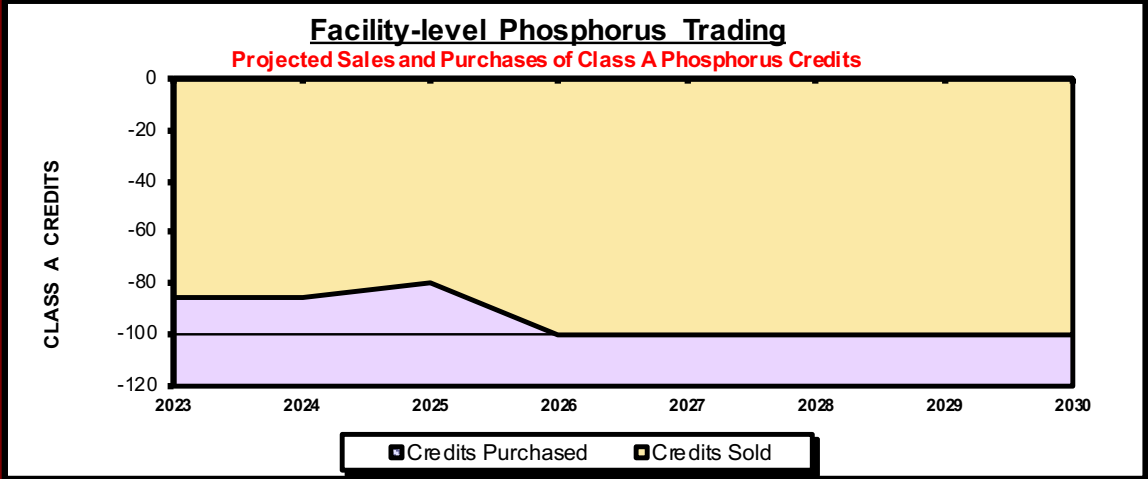
Loading & Credit Summary

Design Flow (mgd)	0.70
Projected Flow (mgd)	0.46
Projected Avg. Annual Concentration (mg/L)	4.00
Discharged Load (end of pipe)	5,604
Delivery Factor	0.52
Expected Load	2,914
Delivered WLA	4,435
Expected Credits (delivered)	1,521
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	1,521
Class A Credit Sales (Purchases)	1,450
Expected Class B Credits	71

2023	2024	2025	2026	2027	2028	2029	2030	
<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>			
0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	
0.46	0.46	0.47	0.48	0.48	0.48	0.48	0.48	
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
5,604	5,604	5,726	5,847	5,847	5,847	5,847	5,847	
0.52	0.52	0.52	0.92	0.92	0.92	0.92	0.92	
2,914	2,914	2,977	5,380	5,380	5,380	5,380	5,380	
4,435	4,435	4,435	7,846	7,846	7,846	7,846	7,846	
1,521	1,521	1,458	2,466	2,466	2,466	2,466	2,466	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
1,521	1,521	1,458	2,466	2,466	2,466	2,466	2,466	
1,450	1,450	1,400	2,100	2,100	2,100	2,100	2,100	
71	71	58	366	366	366	366	366	

PHOSPHORUS FACILITY SUMMARY

Berryville
POTOMAC Trading Basin

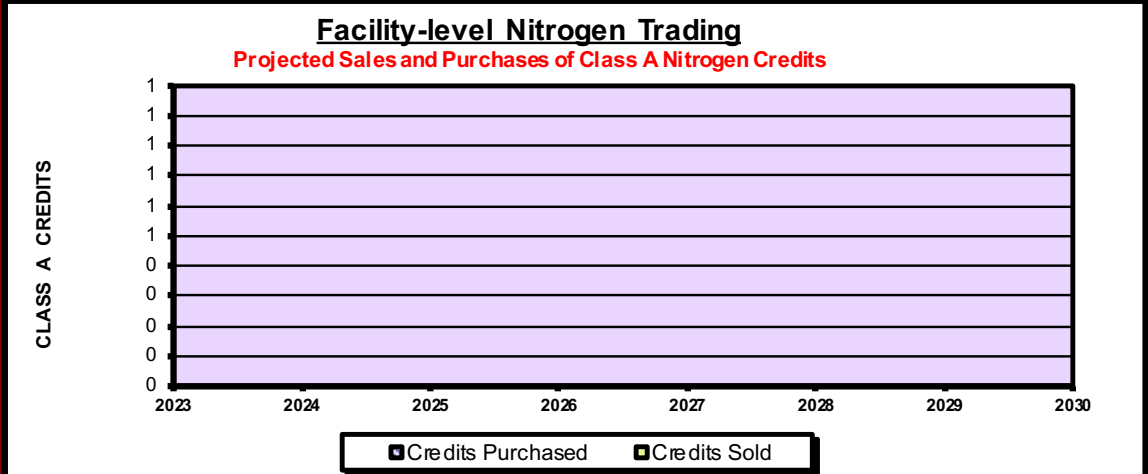


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Projected Flow (mgd)	0.46	0.46	0.47	0.48	0.48	0.48	0.48	0.48
Projected Avg. Annual Concentration (mg/L)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	420	420	429	439	439	439	439	439
Delivery Factor	0.47	0.47	0.47	0.68	0.68	0.68	0.68	0.68
Expected Load	198	198	202	298	298	298	298	298
Delivered WLA	301	301	301	435	435	435	435	435
Expected Credits (delivered)	103	103	99	137	137	137	137	137
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	103	103	99	137	137	137	137	137
Class A Credit Sales (Purchases)	85	85	80	100	100	100	100	100
Expected Class B Credits	18	18	19	37	37	37	37	37

NITROGEN FACILITY SUMMARY

Broadway Regional
 POTOMAC Trading Basin



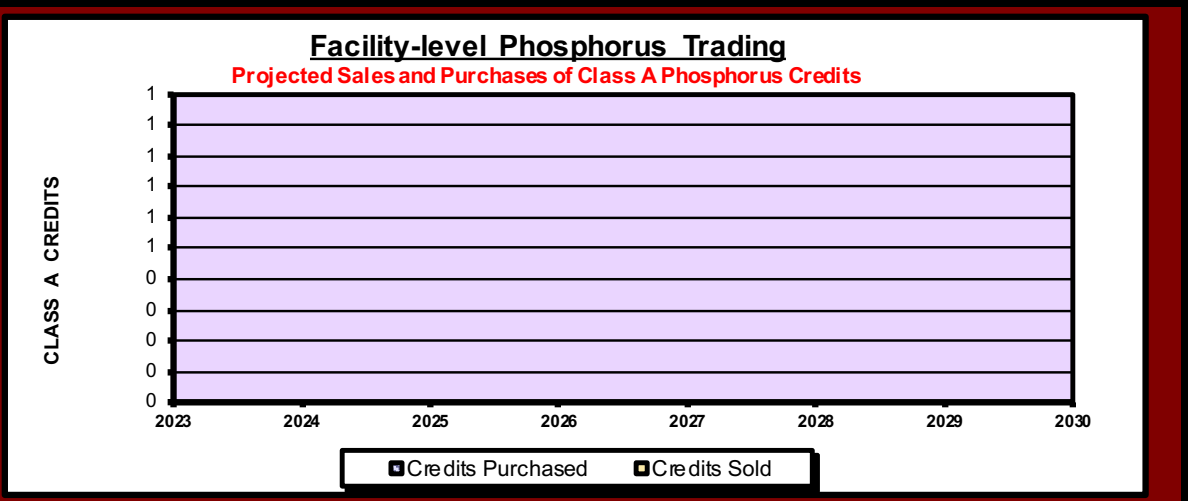
Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
Projected Flow (mgd)	2.45	2.48	2.51	2.54	2.57	2.60	2.63	2.66
Projected Avg. Annual Concentration (mg/L)	3.50	3.50	3.60	3.60	3.60	3.60	3.60	3.60
Discharged Load (end of pipe)	26,116	26,435	27,520	27,849	28,178	28,506	28,835	29,164
Delivery Factor	0.12	0.12	0.12	0.87	0.87	0.87	0.87	0.87
Expected Load	3,134	3,172	3,302	24,228	24,514	24,801	25,087	25,373
Delivered WLA*	3,538	3,538	3,538	25,648	25,648	25,648	25,648	25,648
Expected Credits (delivered)	404	366	236	1,420	1,134	847	561	275
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	404	366	236	1,420	1,134	847	561	275
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	404	366	236	1,420	1,134	847	561	275

* Reflects allocation transfer from the Town of New Market of 6,091 discharged pounds of TN according to agreement dated August 5, 2008

PHOSPHORUS FACILITY SUMMARY

Broadway Regional
POTOMAC Trading Basin



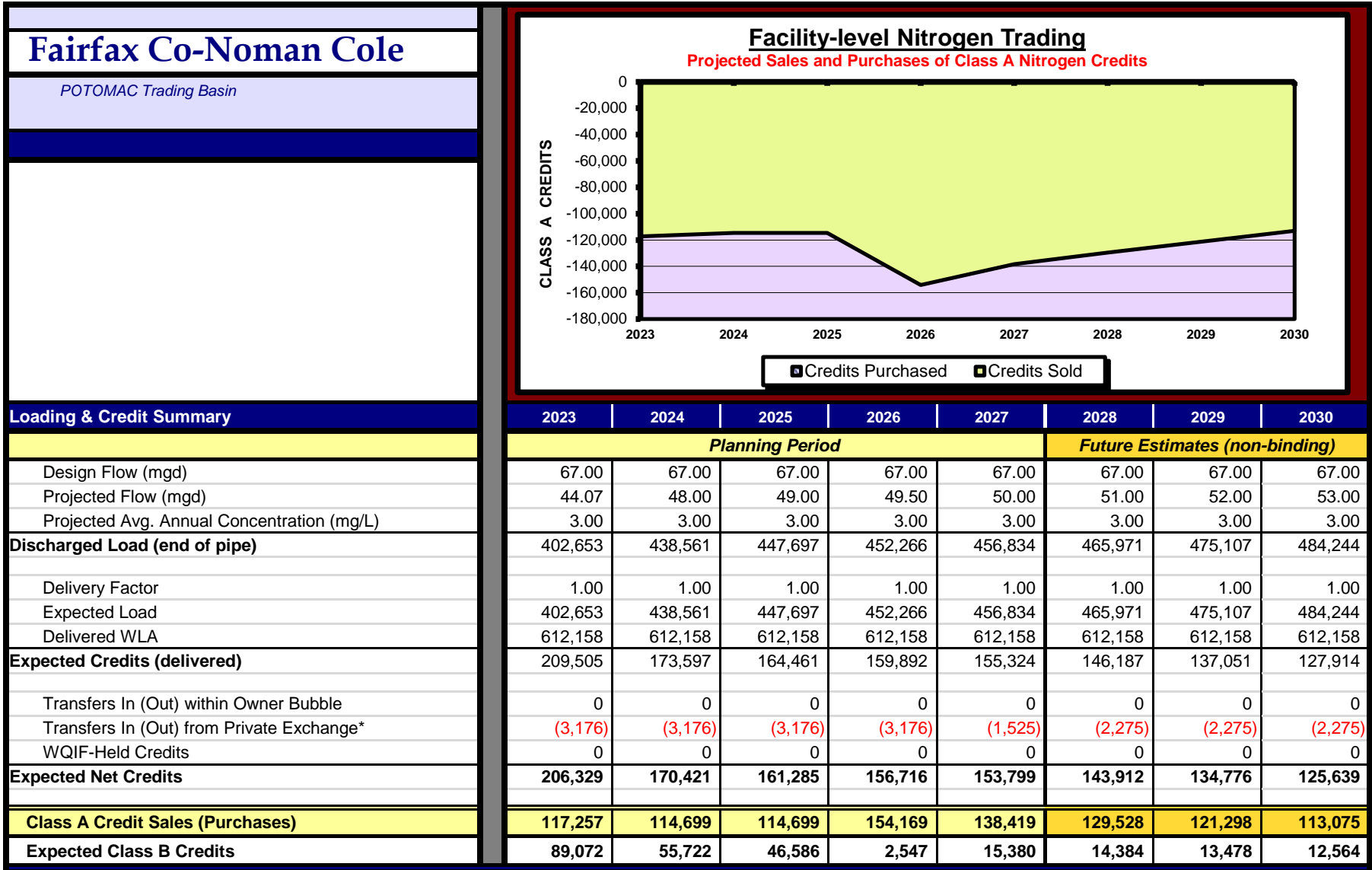
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA*
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

2023	2024	2025	2026	2027	2028	2029	2030	
<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>			
2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	
2.45	2.48	2.51	2.54	2.57	2.60	2.63	2.66	
0.26	0.26	0.27	0.27	0.27	0.27	0.27	0.27	
1,940	1,964	2,064	2,089	2,113	2,138	2,163	2,187	
0.47	0.47	0.47	0.81	0.81	0.81	0.81	0.81	
912	923	970	1,692	1,712	1,732	1,752	1,772	
1,039	1,039	1,039	1,791	1,791	1,791	1,791	1,791	
127	116	69	99	79	59	39	19	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
127	116	69	99	79	59	39	19	
0	0	0	0	0	0	0	0	
127	116	69	99	79	59	39	19	

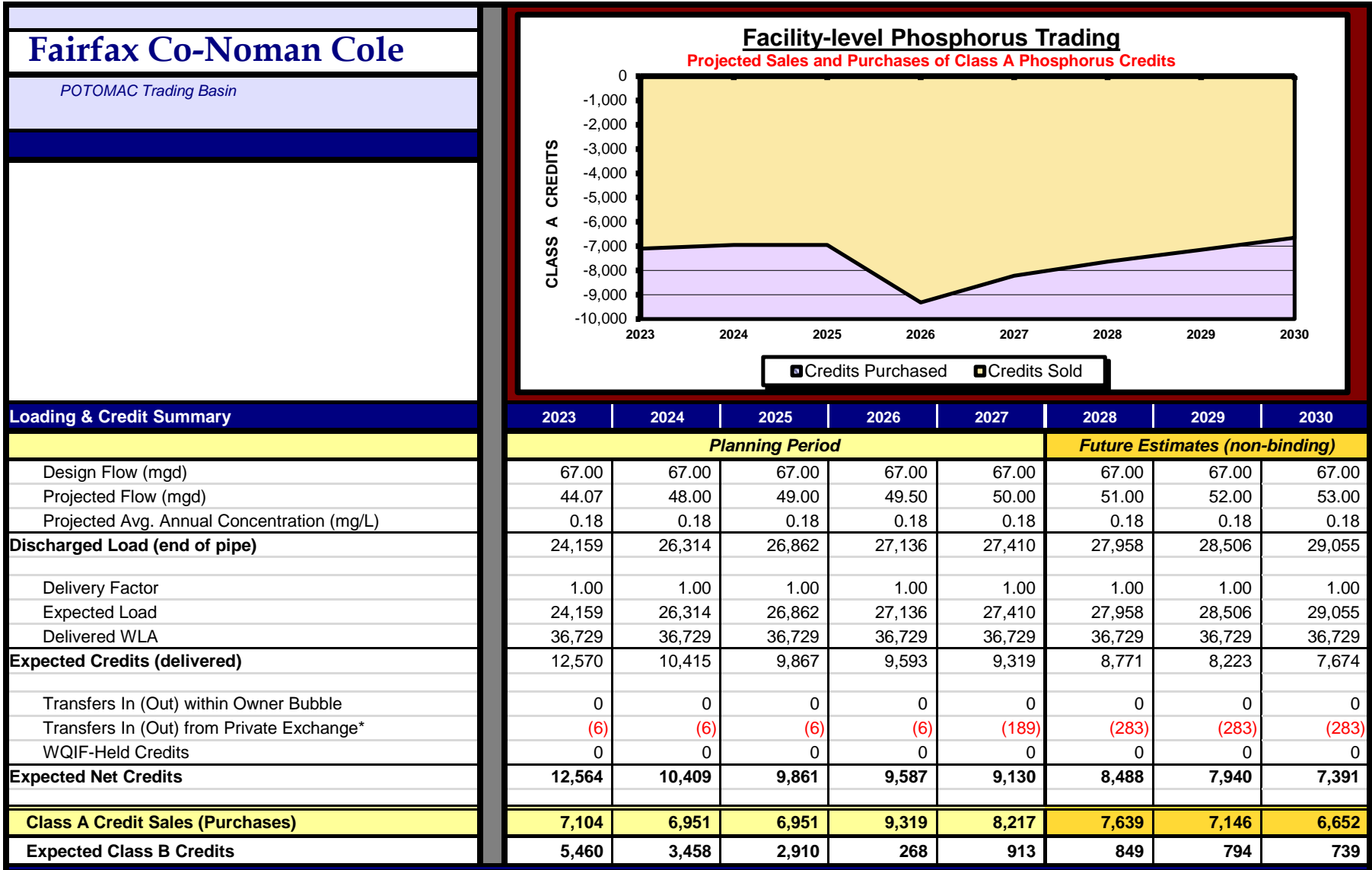
* Reflects allocation transfer from the Town of New Market of 457 discharged pounds of TP according to agreement dated August 5, 2008

NITROGEN FACILITY SUMMARY



* Represents private trades with Fairfax County Department of Vehicle Services and City of Fairfax

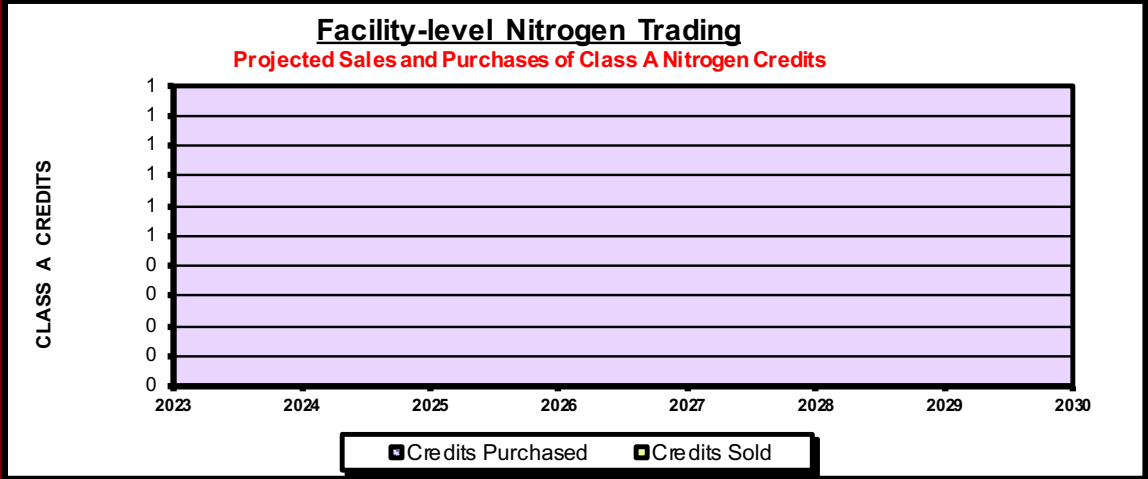
PHOSPHORUS FACILITY SUMMARY



* Represents private trade with City of Fairfax

NITROGEN FACILITY SUMMARY

FCWSA-Vint Hill
POTOMAC Trading Basin

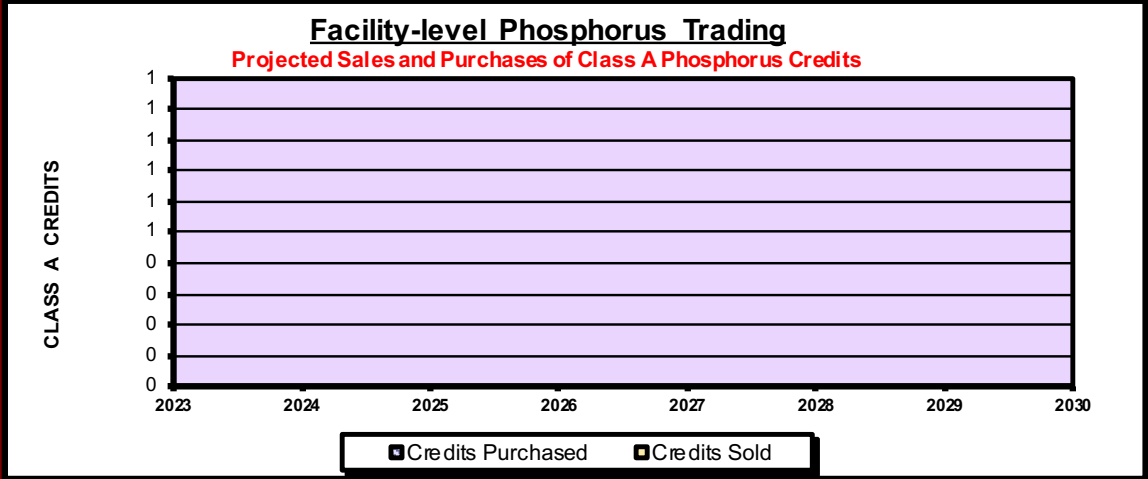


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Projected Flow (mgd)	0.48	0.50	0.52	0.54	0.56	0.58	0.60	0.62
Projected Avg. Annual Concentration (mg/L)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Discharged Load (end of pipe)	5,847	6,091	6,335	6,578	6,822	7,066	7,309	7,553
Delivery Factor	0.05	0.05	0.05	0.29	0.29	0.29	0.29	0.29
Expected Load	292	305	317	1,908	1,978	2,049	2,120	2,190
Delivered WLA	579	579	579	3,356	3,356	3,356	3,356	3,356
Expected Credits (delivered)	287	274	262	1,448	1,378	1,307	1,236	1,166
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	287	274	262	1,448	1,378	1,307	1,236	1,166
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	287	274	262	1,448	1,378	1,307	1,236	1,166

PHOSPHORUS FACILITY SUMMARY

FCWSA-Vint Hill
 POTOMAC Trading Basin

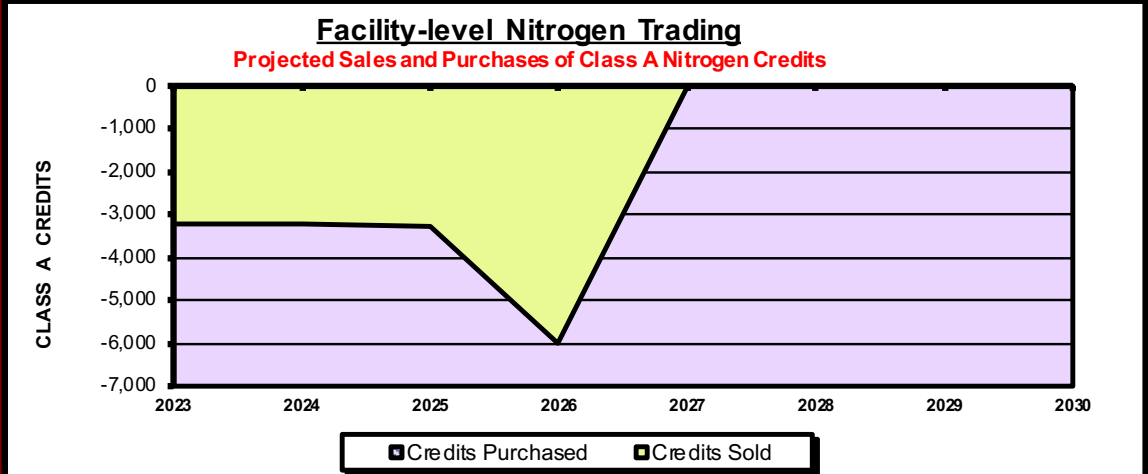


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Projected Flow (mgd)	0.48	0.50	0.52	0.54	0.56	0.58	0.60	0.62
Projected Avg. Annual Concentration (mg/L)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	439	457	475	493	512	530	548	566
Delivery Factor	0.17	0.17	0.17	0.34	0.34	0.34	0.34	0.34
Expected Load	75	78	81	168	174	180	186	193
Delivered WLA	148	148	148	295	295	295	295	295
Expected Credits (delivered)	73	70	67	127	121	115	109	102
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	73	70	67	127	121	115	109	102
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	73	70	67	127	121	115	109	102

NITROGEN FACILITY SUMMARY

Front Royal
POTOMAC Trading Basin



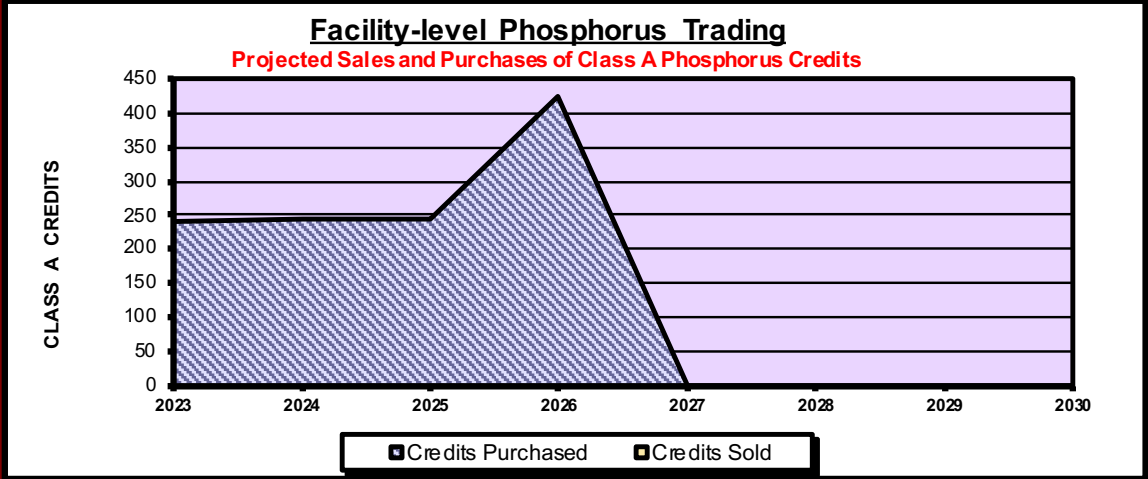
Loading & Credit Summary

Design Flow (mgd)	4.00
Projected Flow (mgd)	4.56
Projected Avg. Annual Concentration (mg/L)	3.00
Discharged Load (end of pipe)	41,663
Delivery Factor	0.50
Expected Load	20,832
Delivered WLA	24,365
Expected Credits (delivered)	3,533
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	3,533
Class A Credit Sales (Purchases)	3,200
Expected Class B Credits	333

2023	2024	2025	2026	2027	2028	2029	2030	
Planning Period					Future Estimates (non-binding)			
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
4.56	4.57	4.57	4.58	4.58	4.58	4.58	4.58	
3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	
41,663	41,755	41,755	41,846	41,846	41,846	41,846	41,846	
0.50	0.50	0.50	0.92	0.92	0.92	0.92	0.92	
20,832	20,877	20,877	38,498	38,498	38,498	38,498	38,498	
24,365	24,365	24,365	44,831	44,831	44,831	44,831	44,831	
3,533	3,488	3,488	6,333	6,333	6,333	6,333	6,333	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
3,533	3,488	3,488	6,333	6,333	6,333	6,333	6,333	
3,200	3,200	3,300	6,000	0	0	0	0	
333	288	188	333	6,333	6,333	6,333	6,333	

PHOSPHORUS FACILITY SUMMARY

Front Royal
POTOMAC Trading Basin



Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

2023	2024	2025	2026	2027	2028	2029	2030	
Planning Period					Future Estimates (non-binding)			
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
4.56	4.57	4.57	4.58	4.58	4.58	4.58	4.58	
0.30	0.30	0.30	0.30	0.26	0.26	0.26	0.26	
4,166	4,175	4,175	4,185	3,627	3,627	3,627	3,627	
0.47	0.47	0.47	0.80	0.80	0.80	0.80	0.80	
1,958	1,962	1,962	3,348	2,901	2,901	2,901	2,901	
1,718	1,718	1,718	2,924	2,924	2,924	2,924	2,924	
(240)	(244)	(244)	(424)	23	23	23	23	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
(240)	(244)	(244)	(424)	23	23	23	23	
(240)	(244)	(244)	(424)	0	0	0	0	
0	0	0	0	23	23	23	23	

Owner Bubble: Frederick-Winchester Service Authority

The facilities listed below have received an aggregated mass load limit pursuant to 9 VAC 25-820-70, Part 1.B.2., which is also referred to as an “owner bubble”. Accordingly, compliance is determined solely on an aggregate basis rather than by comparison of individual facility loads with respective individual WLAs.

The “Credit Transferred within Bubble” section of each table forecasts the use of Credits within the owner bubble during each Compliance Year, and must necessarily sum to zero. The specific Credit transfers shown in this table are provided for internal planning purposes only and, accordingly, are not binding and may change based on the actual performance of individual facilities within the bubble.

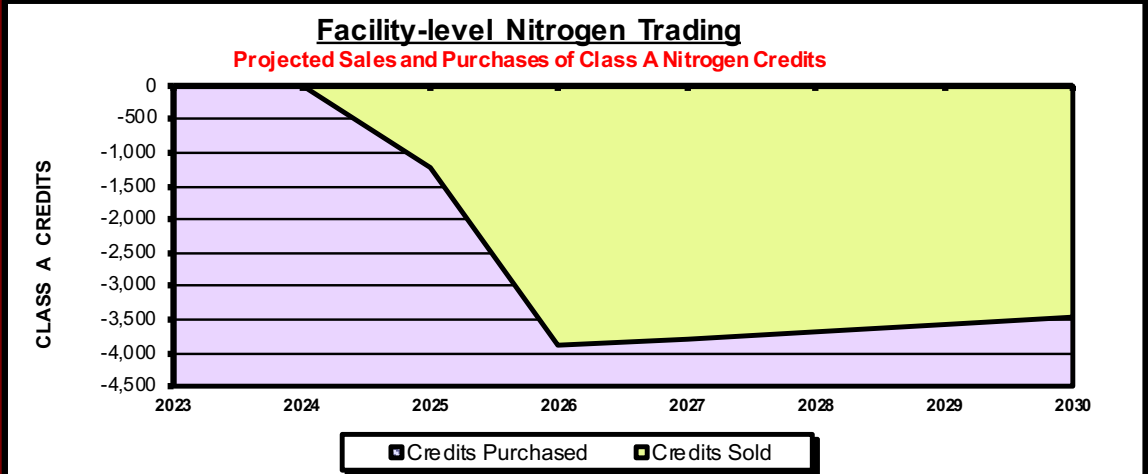
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply with the aggregate Delivered WLA of the bubble.

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
Opequon	-	-	-	-	-	-	-	-
Parkins Mill	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Opequon	12,798	12,478	12,158	38,896	37,845	36,795	35,744	34,693
Parkins Mill	7,802	7,611	7,419	24,779	24,121	23,463	22,805	22,147
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Credits	20,600	20,089	19,577	63,675	61,966	60,258	58,549	56,840
Private Exchanges	(59)	(59)	(59)	(59)	(59)	(59)	(60)	(60)
Expected Net Credits	20,541	20,030	19,518	63,616	61,907	60,199	58,489	56,780
Class A Sales (Purchases)	0	0	1,957	6,364	6,195	6,024	5,854	5,682
<i>Expected Class B Credits</i>	<i>20,541</i>	<i>20,030</i>	<i>17,561</i>	<i>57,252</i>	<i>55,712</i>	<i>54,175</i>	<i>52,635</i>	<i>51,098</i>
<i>WQIF-Held Credits</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>

PHOSPHORUS Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
Opequon	-	-	-	-	-	-	-	-
Parkins Mill	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Opequon	2,548	2,477	2,405	3,822	3,705	3,588	3,470	3,353
Parkins Mill	1,030	988	945	1,477	1,406	1,336	1,266	1,195
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Credits	3,578	3,465	3,350	5,299	5,111	4,924	4,736	4,548
Private Exchanges	-	-	-	-	-	-	-	-
Expected Net Credits	3,578	3,465	3,350	5,299	5,111	4,924	4,736	4,548
Class A Sales (Purchases)	0	0	167	265	255	246	237	228
<i>Expected Class B Credits</i>	<i>3,578</i>	<i>3,465</i>	<i>3,183</i>	<i>5,034</i>	<i>4,856</i>	<i>4,678</i>	<i>4,499</i>	<i>4,320</i>
<i>WQIF-Held Credits</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>

NITROGEN FACILITY SUMMARY

FWSA-Opequon
POTOMAC Trading Basin



Loading & Credit Summary

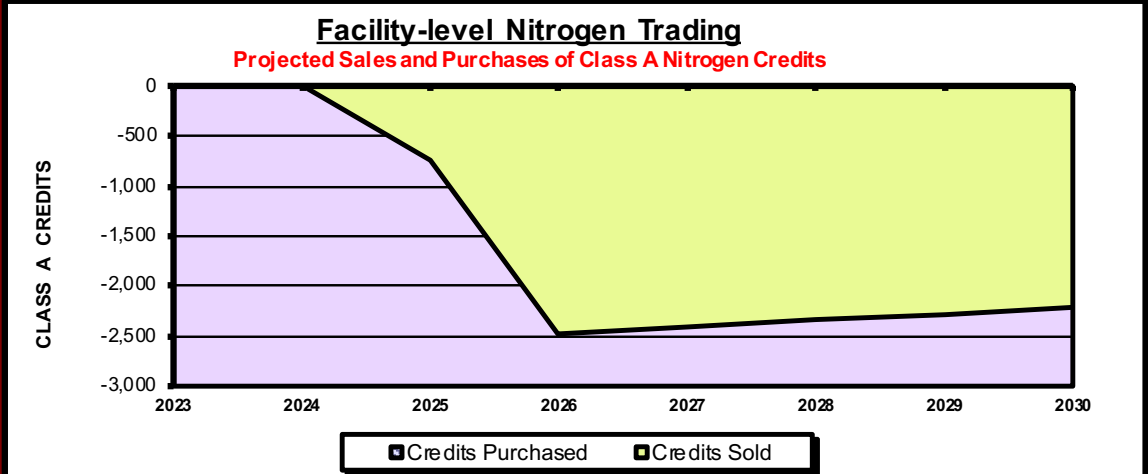
Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange*
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

2023	2024	2025	2026	2027	2028	2029	2030	
Planning Period					Future Estimates (non-binding)			
12.60	12.60	12.60	12.60	12.60	12.60	12.60	12.60	
8.00	8.20	8.40	8.60	8.80	9.00	9.20	9.40	
2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	
60,911	62,434	63,957	65,480	67,002	68,525	70,048	71,571	
0.21	0.21	0.21	0.69	0.69	0.69	0.69	0.69	
12,791	13,111	13,431	45,181	46,232	47,282	48,333	49,384	
25,589	25,589	25,589	84,077	84,077	84,077	84,077	84,077	
12,798	12,478	12,158	38,896	37,845	36,795	35,744	34,693	
0	0	0	0	0	0	0	0	
(59)	(59)	(59)	(59)	(59)	(59)	(60)	(60)	
0	0	0	0	0	0	0	0	
12,739	12,419	12,099	38,837	37,786	36,736	35,684	34,633	
0	0	1,215	3,886	3,783	3,678	3,573	3,467	
12,739	12,419	10,884	34,951	34,003	33,058	32,111	31,166	

* Represents private trade with City of Winchester to meet MS4 requirements

NITROGEN FACILITY SUMMARY

FWSA-Parkins Mill
POTOMAC Trading Basin



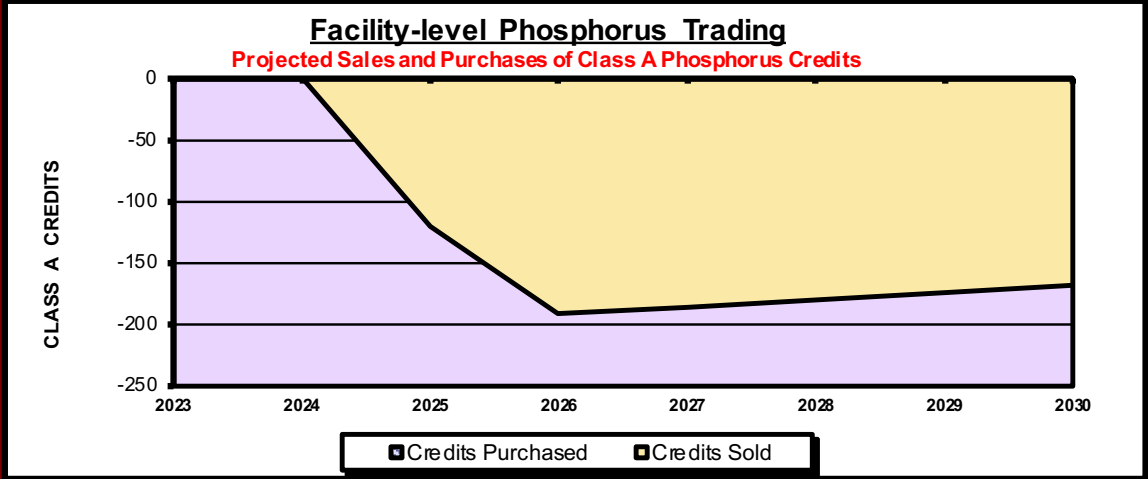
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

2023	2024	2025	2026	2027	2028	2029	2030	
Planning Period					Future Estimates (non-binding)			
5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
2.60	2.70	2.80	2.90	3.00	3.10	3.20	3.30	
3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	
23,755	24,669	25,583	26,496	27,410	28,324	29,237	30,151	
0.21	0.21	0.21	0.72	0.72	0.72	0.72	0.72	
4,989	5,180	5,372	19,077	19,735	20,393	21,051	21,709	
12,791	12,791	12,791	43,856	43,856	43,856	43,856	43,856	
7,802	7,611	7,419	24,779	24,121	23,463	22,805	22,147	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
7,802	7,611	7,419	24,779	24,121	23,463	22,805	22,147	
0	0	742	2,478	2,412	2,346	2,281	2,215	
7,802	7,611	6,677	22,301	21,709	21,117	20,524	19,932	

PHOSPHORUS FACILITY SUMMARY

FWSA-Opequon
POTOMAC Trading Basin

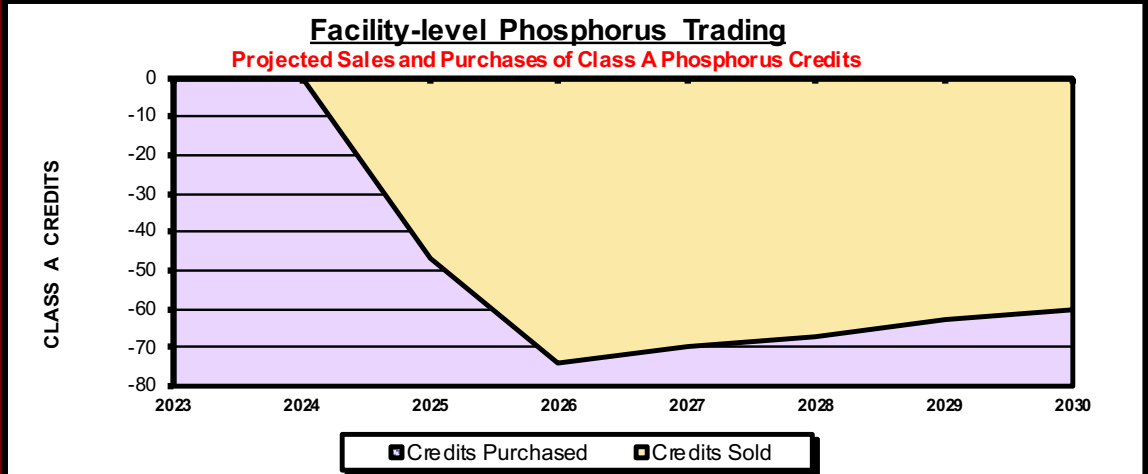


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	12.60	12.60	12.60	12.60	12.60	12.60	12.60	12.60
Projected Flow (mgd)	8.00	8.20	8.40	8.60	8.80	9.00	9.20	9.40
Projected Avg. Annual Concentration (mg/L)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Discharged Load (end of pipe)	6,091	6,243	6,396	6,548	6,700	6,853	7,005	7,157
Delivery Factor	0.47	0.47	0.47	0.77	0.77	0.77	0.77	0.77
Expected Load	2,863	2,934	3,006	5,042	5,159	5,276	5,394	5,511
Delivered WLA	5,411	5,411	5,411	8,864	8,864	8,864	8,864	8,864
Expected Credits (delivered)	2,548	2,477	2,405	3,822	3,705	3,588	3,470	3,353
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	2,548	2,477	2,405	3,822	3,705	3,588	3,470	3,353
Class A Credit Sales (Purchases)	0	0	120	191	185	179	174	168
Expected Class B Credits	2,548	2,477	2,285	3,631	3,520	3,409	3,296	3,185

PHOSPHORUS FACILITY SUMMARY

FWSA-Parkins Mill
POTOMAC Trading Basin

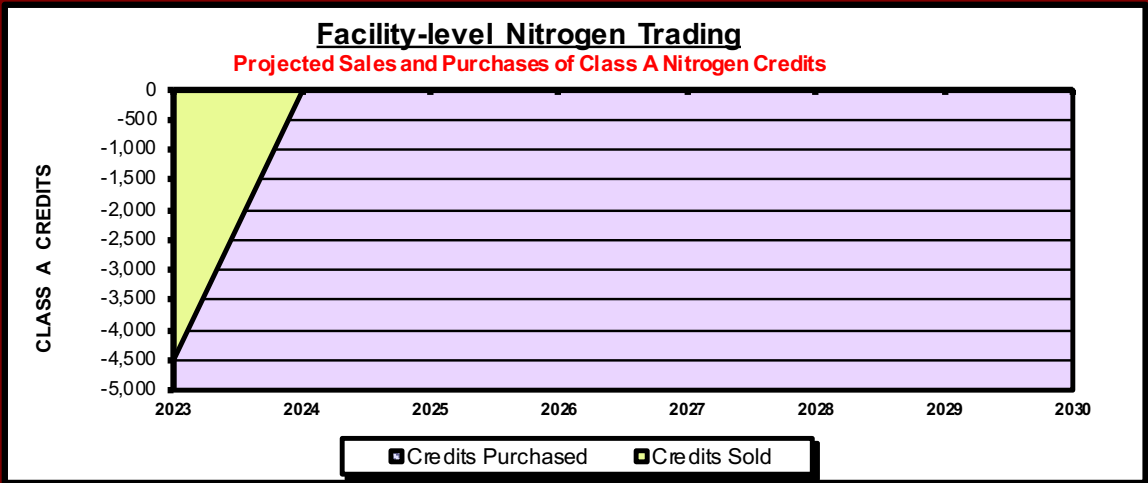


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Projected Flow (mgd)	2.60	2.70	2.80	2.90	3.00	3.10	3.20	3.30
Projected Avg. Annual Concentration (mg/L)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	2,376	2,467	2,558	2,650	2,741	2,832	2,924	3,015
Delivery Factor	0.47	0.47	0.47	0.77	0.77	0.77	0.77	0.77
Expected Load	1,117	1,159	1,202	2,040	2,111	2,181	2,251	2,322
Delivered WLA	2,147	2,147	2,147	3,517	3,517	3,517	3,517	3,517
Expected Credits (delivered)	1,030	988	945	1,477	1,406	1,336	1,266	1,195
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	1,030	988	945	1,477	1,406	1,336	1,266	1,195
Class A Credit Sales (Purchases)	0	0	47	74	70	67	63	60
Expected Class B Credits	1,030	988	898	1,403	1,336	1,269	1,203	1,135

NITROGEN FACILITY SUMMARY

HRRSA-North River
POTOMAC Trading Basin



Loading & Credit Summary

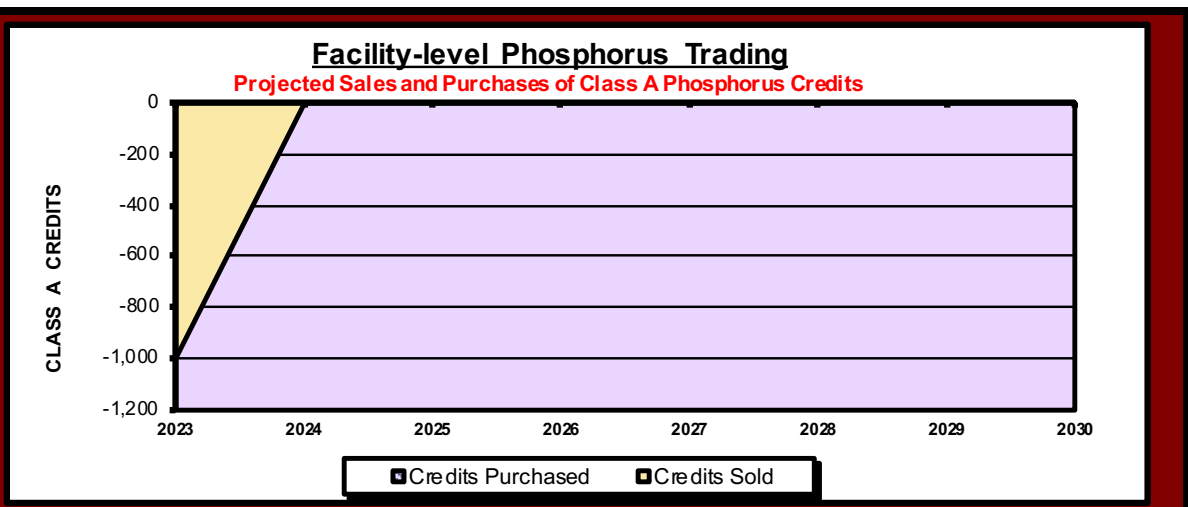
	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00
Projected Flow (mgd)	15.60	16.40	16.40	16.80	16.80	16.80	16.80	16.80
Projected Avg. Annual Concentration (mg/L)	3.80	3.70	3.70	3.70	3.70	3.70	3.70	3.70
Discharged Load (end of pipe)	180,541	184,805	184,805	189,312	189,312	189,312	189,312	189,312
Delivery Factor	0.14	0.14	0.14	0.74	0.74	0.74	0.74	0.74
Expected Load	25,276	25,873	25,873	140,091	140,091	140,091	140,091	140,091
Delivered WLA*	36,432	36,432	36,432	192,567	192,567	192,567	192,567	192,567
Expected Credits (delivered)	11,156	10,559	10,559	52,476	52,476	52,476	52,476	52,476
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange**	(1,381)	(1,381)	(1,381)	(266)	(266)	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	9,775	9,178	9,178	52,210	52,210	52,476	52,476	52,476
Class A Credit Sales (Purchases)	4,500	0	0	0	0	0	0	0
Expected Class B Credits	5,275	9,178	9,178	52,210	52,210	52,476	52,476	52,476

* Reflects the transfer of the McGaheysville STP wasteload allocation

** Represents private trade with City of Harrisonburg to meet MS4 requirements and Rockingham County Public Schools nutrient offset agreement

PHOSPHORUS FACILITY SUMMARY

HRRSA-North River
POTOMAC Trading Basin



Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA*
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange**
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

2023	2024	2025	2026	2027	2028	2029	2030
Planning Period					Future Estimates (non-binding)		
23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00
15.60	16.40	16.40	16.80	16.80	16.80	16.80	16.80
0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
13,303	13,985	13,985	14,326	14,326	14,326	14,326	14,326
0.47	0.47	0.47	0.84	0.84	0.84	0.84	0.84
6,252	6,573	6,573	12,034	12,034	12,034	12,034	12,034
9,200	9,200	9,200	16,442	16,442	16,442	16,442	16,442
2,948	2,627	2,627	4,408	4,408	4,408	4,408	4,408
0	0	0	0	0	0	0	0
(141)	(141)	(141)	(68)	(68)	0	0	0
0	0	0	0	0	0	0	0
2,807	2,486	2,486	4,340	4,340	4,408	4,408	4,408
1,000	0	0	0	0	0	0	0
1,807	2,486	2,486	4,340	4,340	4,408	4,408	4,408

* Reflects the transfer of the McGaheysville STP wasteload allocation

** Represents private trade with City of Harrisonburg to meet MS4 requirements and Rockingham County Public Schools nutrient offset agreement

Owner Bubble: King George County Service Authority (Potomac)

The facilities listed below have received an aggregated mass load limit pursuant to 9 VAC 25-820-70, Part 1.B.2., which is also referred to as an “owner bubble”. Accordingly, compliance is determined solely on an aggregate basis rather than by comparison of individual facility loads with respective individual WLAs.

The “Credit Transferred within Bubble” section of each table forecasts the use of Credits within the owner bubble during each Compliance Year, and must necessarily sum to zero. The specific Credit transfers shown in this table are provided for internal planning purposes only and, accordingly, are not binding and may change based on the actual performance of individual facilities within the bubble.

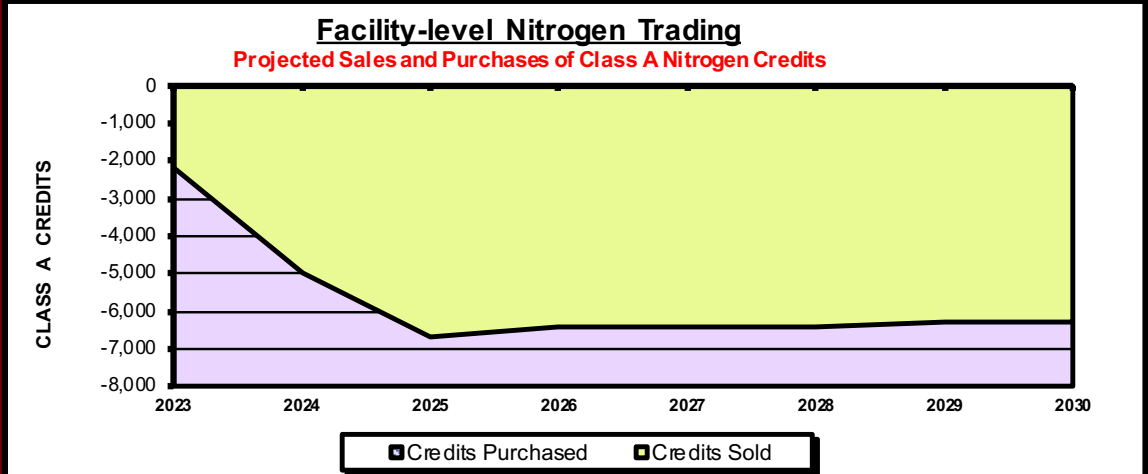
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply with the aggregate Delivered WLA of the bubble.

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
Dahlgren	(1,797)	(439)	(213)	(170)	-	-	-	-
Fairview Beach	-	-	-	-	-	-	-	-
Purkins Corner	1,797	439	213	170	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Dahlgren	2,772	5,957	6,689	6,235	6,405	6,405	6,265	6,265
Fairview Beach	365	913	1,458	1,486	1,418	1,418	1,281	1,281
Purkins Corner	-	-	-	-	698	698	698	631
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
Expected Net Credits	3,137	6,870	8,147	7,721	8,521	8,521	8,244	8,177
Class A Sales (Purchases)	2,200	5,913	8,147	7,721	8,518	8,518	8,241	8,174
<i>Expected Class B Credits</i>	937	957	0	0	3	3	3	3
<i>WQIF-Held Credits</i>	0	0	0	0	0	0	0	0

PHOSPHORUS Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
Dahlgren	(200)	-	-	-	-	-	-	-
Fairview Beach	36	-	-	-	-	-	-	-
Purkins Corner	164	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Dahlgren	257	640	679	629	629	629	614	614
Fairview Beach	-	-	163	165	161	161	154	154
Purkins Corner	-	14	47	50	68	68	68	61
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
Expected Net Credits	257	654	889	844	858	858	836	829
Class A Sales (Purchases)	200	514	889	844	858	858	836	829
<i>Expected Class B Credits</i>	57	140	0	0	0	0	0	0
<i>WQIF-Held Credits</i>	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

KGCSA-Dahlgren S.D.
POTOMAC Trading Basin



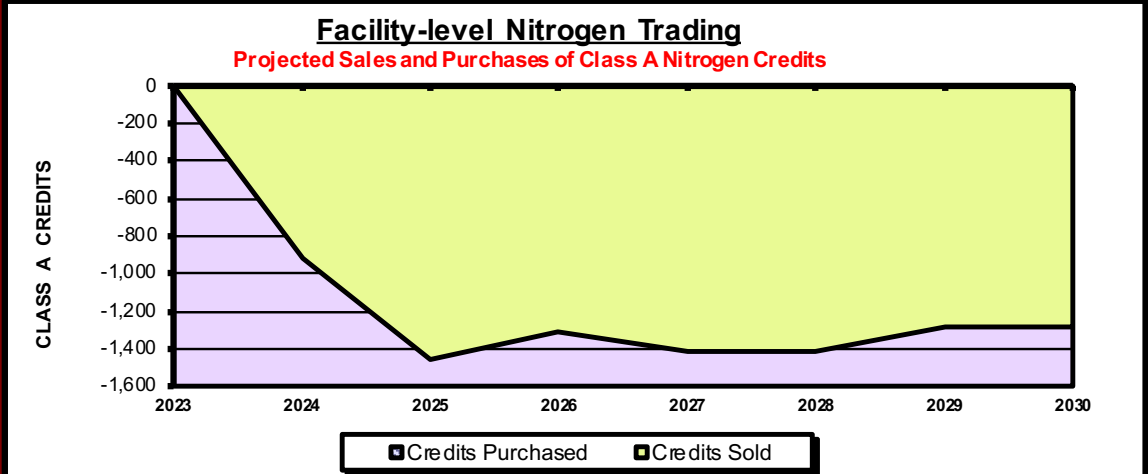
Loading & Credit Summary

Design Flow (mgd)	1.00
Projected Flow (mgd)	0.50
Projected Avg. Annual Concentration (mg/L)	3.00
Discharged Load (end of pipe)	4,568
Delivery Factor	1.00
Expected Load	4,568
Delivered WLA	9,137
Expected Credits (delivered)	4,569
Transfers In (Out) within Owner Bubble	(1,797)
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	2,772
Class A Credit Sales (Purchases)	2,200
Expected Class B Credits	572

2023	2024	2025	2026	2027	2028	2029	2030
Planning Period					Future Estimates (non-binding)		
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
0.50	0.30	0.32	0.39	0.39	0.39	0.41	0.41
3.00	3.00	2.29	2.30	2.30	2.30	2.30	2.30
4,568	2,741	2,235	2,732	2,732	2,732	2,872	2,872
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4,568	2,741	2,235	2,732	2,732	2,732	2,872	2,872
9,137	9,137	9,137	9,137	9,137	9,137	9,137	9,137
4,569	6,396	6,902	6,405	6,405	6,405	6,265	6,265
(1,797)	(439)	(213)	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
2,772	5,957	6,689	6,405	6,405	6,405	6,265	6,265
2,200	5,000	6,689	6,405	6,405	6,405	6,265	6,265
572	957	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

KGCSA-Fairview Beach
POTOMAC Trading Basin

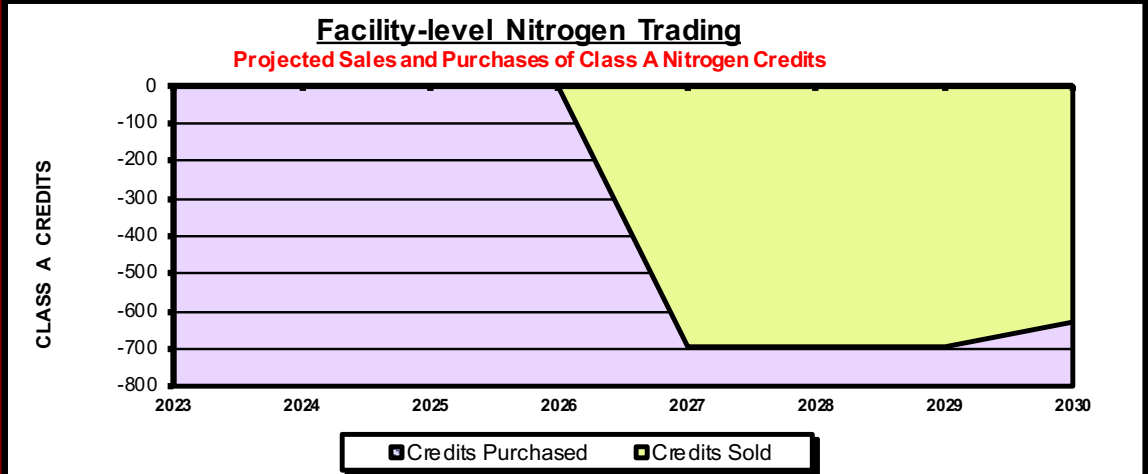


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Projected Flow (mgd)	0.08	0.06	0.05	0.05	0.06	0.06	0.08	0.08
Projected Avg. Annual Concentration (mg/L)	6.00	5.00	2.24	2.24	2.24	2.24	2.24	2.24
Discharged Load (end of pipe)	1,462	914	369	341	409	409	546	546
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	1,462	914	369	341	409	409	546	546
Delivered WLA	1,827	1,827	1,827	1,827	1,827	1,827	1,827	1,827
Expected Credits (delivered)	365	913	1,458	1,486	1,418	1,418	1,281	1,281
Transfers In (Out) within Owner Bubble	0	0	0	(170)	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	365	913	1,458	1,316	1,418	1,418	1,281	1,281
Class A Credit Sales (Purchases)	0	913	1,458	1,316	1,418	1,418	1,281	1,281
Expected Class B Credits	365	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

KGCSA-Purkins Corner
 POTOMAC Trading Basin

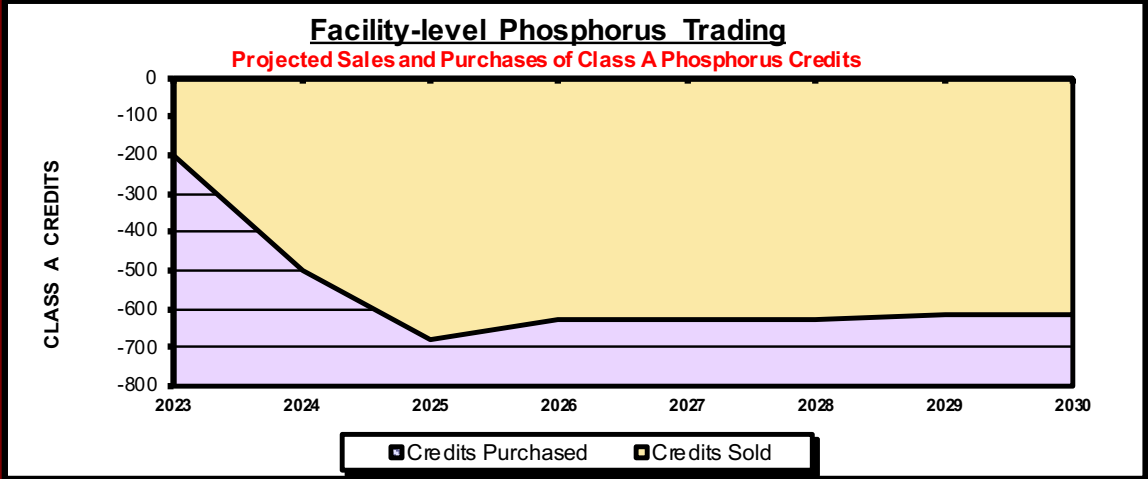


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Projected Flow (mgd)	0.10	0.06	0.06	0.06	0.06	0.06	0.06	0.07
Projected Avg. Annual Concentration (mg/L)	9.50	8.00	6.93	6.93	2.18	2.18	2.18	2.18
Discharged Load (end of pipe)	2,893	1,535	1,309	1,266	398	398	398	465
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	2,893	1,535	1,309	1,266	398	398	398	465
Delivered WLA	1,096	1,096	1,096	1,096	1,096	1,096	1,096	1,096
Expected Credits (delivered)	(1,797)	(439)	(213)	(170)	698	698	698	631
Transfers In (Out) within Owner Bubble	1,797	439	213	170	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	698	698	698	631
Class A Credit Sales (Purchases)	0	0	0	0	695	695	695	628
Expected Class B Credits	0	0	0	0	3	3	3	3

PHOSPHORUS FACILITY SUMMARY

KGCSA-Dahlgren S.D.
POTOMAC Trading Basin

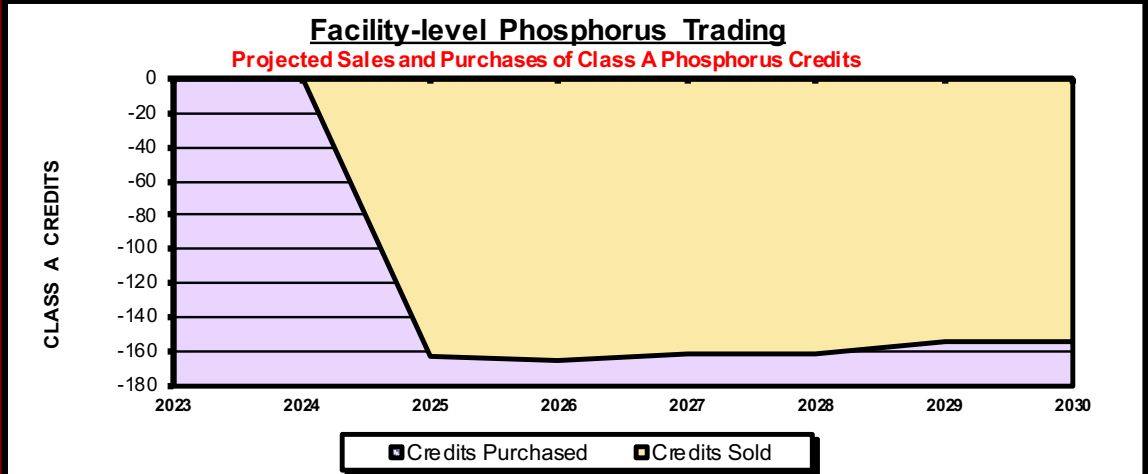


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Projected Flow (mgd)	0.50	0.30	0.32	0.39	0.39	0.39	0.41	0.41
Projected Avg. Annual Concentration (mg/L)	0.30	0.30	0.24	0.24	0.24	0.24	0.24	0.24
Discharged Load (end of pipe)	457	274	235	285	285	285	300	300
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	457	274	235	285	285	285	300	300
Delivered WLA	914	914	914	914	914	914	914	914
Expected Credits (delivered)	457	640	679	629	629	629	614	614
Transfers In (Out) within Owner Bubble	(200)	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	257	640	679	629	629	629	614	614
Class A Credit Sales (Purchases)	200	500	679	629	629	629	614	614
Expected Class B Credits	57	140	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

KGCSA-Fairview Beach
POTOMAC Trading Basin

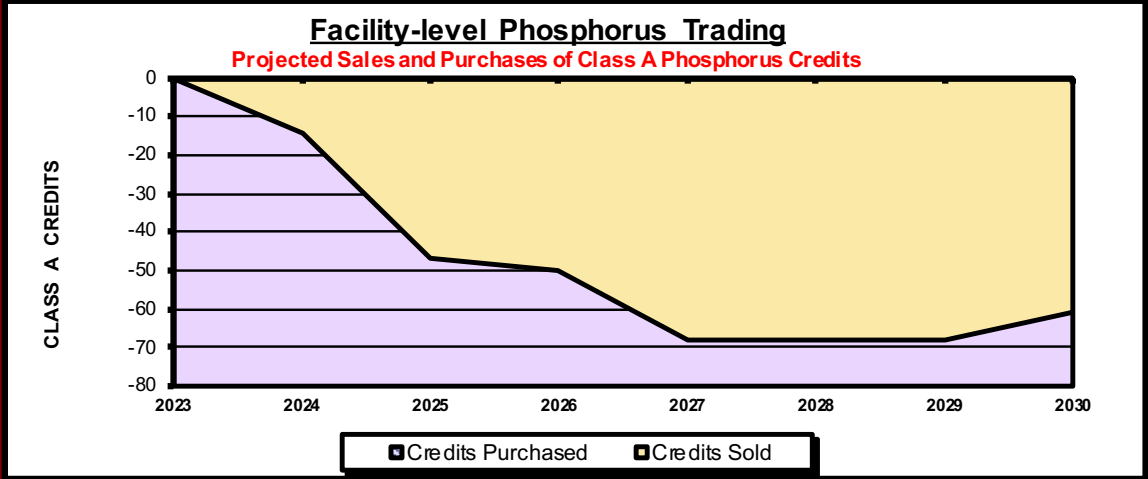


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Projected Flow (mgd)	0.08	0.06	0.05	0.05	0.06	0.06	0.08	0.08
Projected Avg. Annual Concentration (mg/L)	0.90	1.00	0.12	0.12	0.12	0.12	0.12	0.12
Discharged Load (end of pipe)	219	183	20	18	22	22	29	29
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	219	183	20	18	22	22	29	29
Delivered WLA	183	183	183	183	183	183	183	183
Expected Credits (delivered)	(36)	0	163	165	161	161	154	154
Transfers In (Out) within Owner Bubble	36	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	163	165	161	161	154	154
Class A Credit Sales (Purchases)	0	0	163	165	161	161	154	154
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

KGCSA-Purkins Corner
POTOMAC Trading Basin



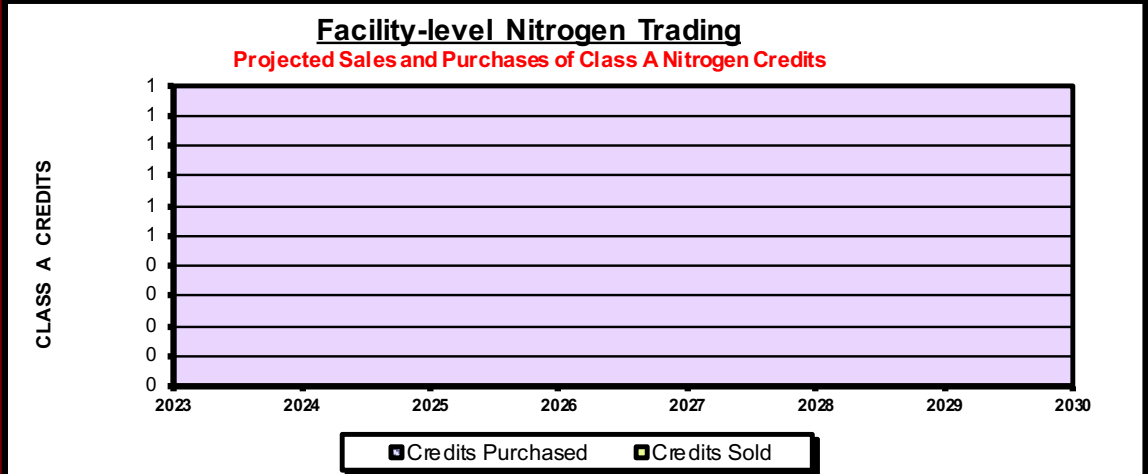
Loading & Credit Summary

Design Flow (mgd)	0.12
Projected Flow (mgd)	0.10
Projected Avg. Annual Concentration (mg/L)	0.90
Discharged Load (end of pipe)	274
Delivery Factor	1.00
Expected Load	274
Delivered WLA	110
Expected Credits (delivered)	(164)
Transfers In (Out) within Owner Bubble	164
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	0
Class A Credit Sales (Purchases)	0
Expected Class B Credits	0

2023	2024	2025	2026	2027	2028	2029	2030
<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
0.10	0.06	0.06	0.06	0.06	0.06	0.06	0.07
0.90	0.50	0.33	0.33	0.23	0.23	0.23	0.23
274	96	63	60	42	42	42	49
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
274	96	63	60	42	42	42	49
110	110	110	110	110	110	110	110
(164)	14	47	50	68	68	68	61
164	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	14	47	50	68	68	68	61
0	14	47	50	68	68	68	61
0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

Leesburg
 POTOMAC Trading Basin



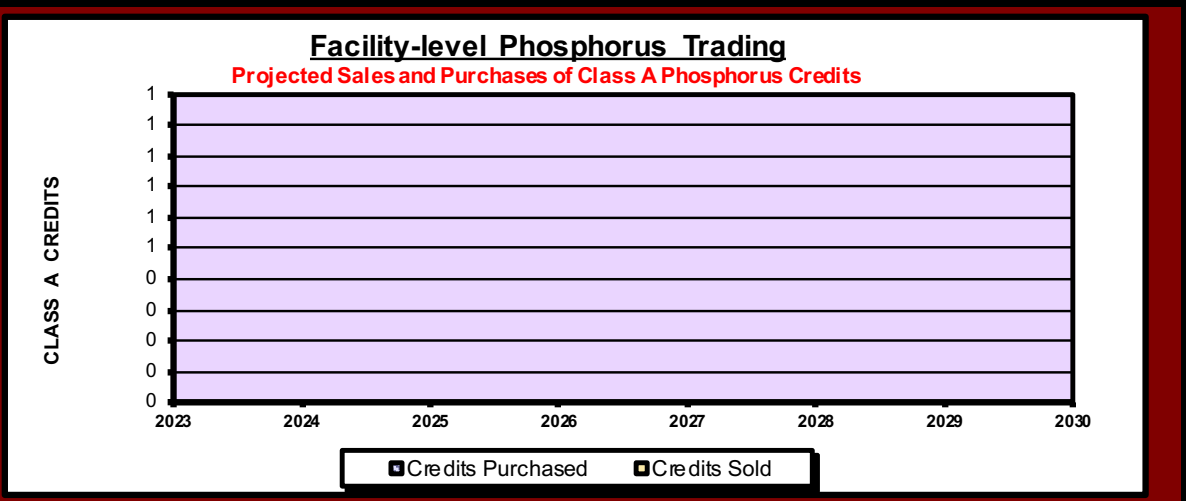
Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Projected Flow (mgd)	1.98	2.12	2.26	2.40	2.54	2.68	2.82	2.96
Projected Avg. Annual Concentration (mg/L)	5.50	5.50	5.50	5.50	5.70	5.70	5.70	5.70
Discharged Load (end of pipe)	33,166	35,511	37,856	40,201	44,094	46,524	48,954	51,385
Delivery Factor	0.64	0.64	0.64	0.76	0.76	0.76	0.76	0.76
Expected Load	21,226	22,727	24,228	30,553	33,511	35,358	37,205	39,052
Delivered WLA*	76,620	76,620	76,620	91,239	91,239	92,153	92,153	92,153
Expected Credits (delivered)	55,394	53,893	52,392	60,686	57,728	56,795	54,948	53,101
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	(19,492)	(19,492)	(19,492)	(23,146)	(23,146)	(23,146)	(23,146)	(23,146)
Expected Net Credits	35,902	34,401	32,900	37,540	34,582	33,649	31,802	29,955
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	35,902	34,401	32,900	37,540	34,582	33,649	31,802	29,955

* WLA reflects transfer agreements with Loudoun Milling (274 delivered pounds, beginning in CY 2016), City of Hillsboro (158 delivered pounds, beginning in CY 2022), and Blue Camp Luray LLC (914 pounds from CY 2023 through CY 2027); the credit forecast assumes Loudoun and Hillsboro agreements will be extended through the duration of the planning period

PHOSPHORUS FACILITY SUMMARY

Leesburg
 POTOMAC Trading Basin



Loading & Credit Summary

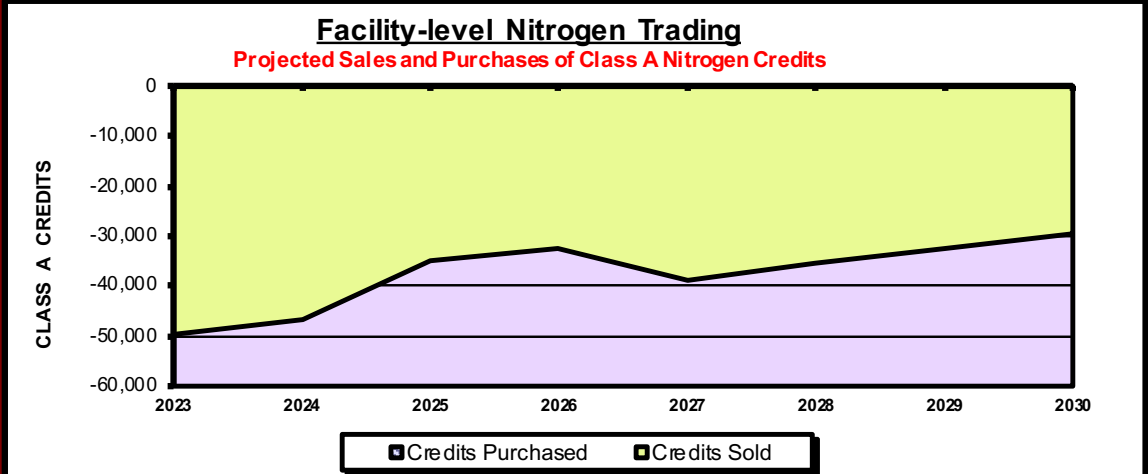
	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Projected Flow (mgd)	1.98	2.12	2.26	2.40	2.54	2.68	2.82	2.96
Projected Avg. Annual Concentration (mg/L)	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Discharged Load (end of pipe)	3,317	3,551	3,786	4,020	4,255	4,489	4,724	4,958
Delivery Factor	0.47	0.47	0.47	0.66	0.66	0.66	0.66	0.66
Expected Load	1,559	1,669	1,779	2,653	2,808	2,963	3,118	3,272
Delivered WLA*	3,954	3,954	3,954	5,690	5,690	5,813	5,813	5,813
Expected Credits (delivered)	2,395	2,285	2,175	3,037	2,882	2,850	2,695	2,541
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	(1,074)	(1,074)	(1,074)	(1,508)	(1,508)	(1,508)	(1,508)	(1,508)
Expected Net Credits	1,321	1,211	1,101	1,529	1,374	1,342	1,187	1,033
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	1,321	1,211	1,101	1,529	1,374	1,342	1,187	1,033

* WLA reflects transfer agreements with Loudoun Milling (27 delivered pounds, beginning in CY 2016), City of Hillsboro (190 delivered pounds, beginning in CY 2022), and Blue Camp Luray LLC (123 pounds from CY 2023 through CY 2027); the credit forecast assumes the Loudoun and Hillsboro agreements will be extended through the duration of the planning period

NITROGEN FACILITY SUMMARY

Loudoun Water- Broad Run

POTOMAC Trading Basin

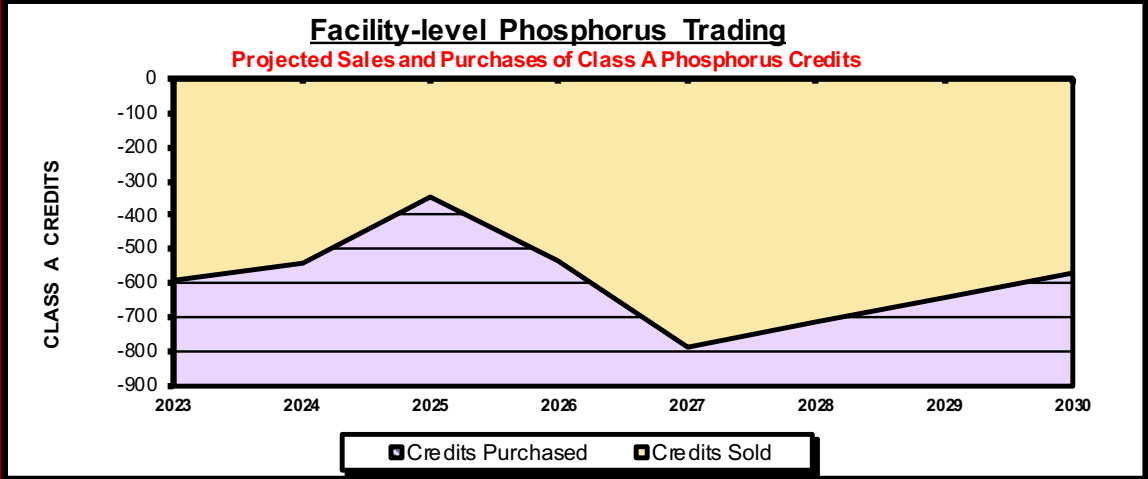


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
Projected Flow (mgd)	6.89	7.23	8.59	8.26	8.71	9.17	9.63	10.12
Projected Avg. Annual Concentration (mg/L)	3.50	3.50	3.50	3.50	3.00	3.00	3.00	3.00
Discharged Load (end of pipe)	73,444	77,068	91,565	88,047	79,580	83,783	87,986	92,463
Delivery Factor	0.82	0.82	0.82	0.71	0.71	0.71	0.71	0.71
Expected Load	60,224	63,196	75,083	62,513	56,502	59,486	62,470	65,649
Delivered WLA	109,884	109,884	109,884	95,144	95,144	95,144	95,144	95,144
Expected Credits (delivered)	49,660	46,688	34,801	32,631	38,642	35,658	32,674	29,495
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	49,660	46,688	34,801	32,631	38,642	35,658	32,674	29,495
Class A Credit Sales (Purchases)	49,660	46,688	34,801	32,631	38,642	35,658	32,674	29,495
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Loudoun Water- Broad Run
POTOMAC Trading Basin

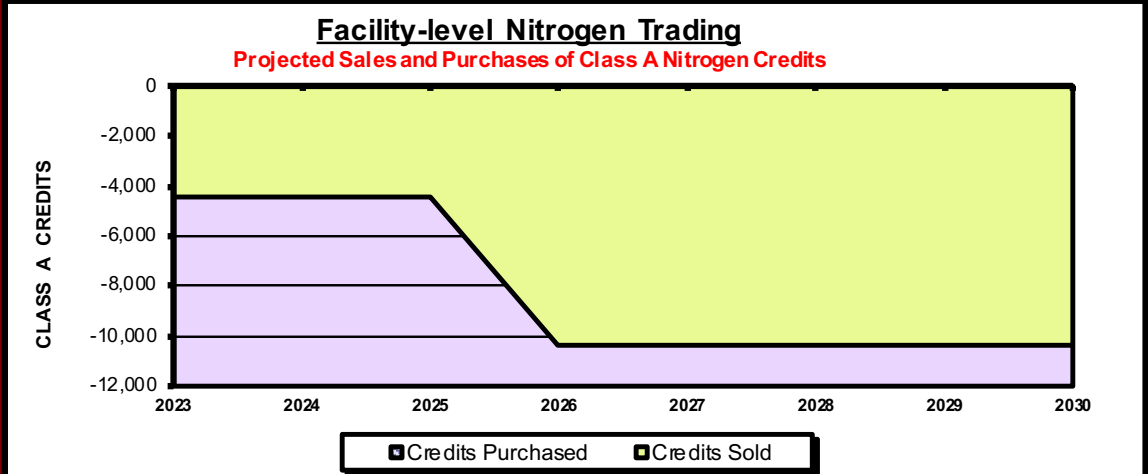


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
Projected Flow (mgd)	6.89	7.23	8.59	8.26	8.71	9.17	9.63	10.12
Projected Avg. Annual Concentration (mg/L)	0.10	0.10	0.10	0.10	0.08	0.08	0.08	0.08
Discharged Load (end of pipe)	2,098	2,202	2,616	2,516	2,122	2,234	2,346	2,466
Delivery Factor	0.47	0.47	0.47	0.64	0.64	0.64	0.64	0.64
Expected Load	986	1,035	1,230	1,610	1,358	1,430	1,502	1,578
Delivered WLA	1,575	1,575	1,575	2,144	2,144	2,144	2,144	2,144
Expected Credits (delivered)	589	540	345	534	786	714	642	566
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	589	540	345	534	786	714	642	566
Class A Credit Sales (Purchases)	589	540	345	534	786	714	642	566
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

Luray
 POTOMAC Trading Basin

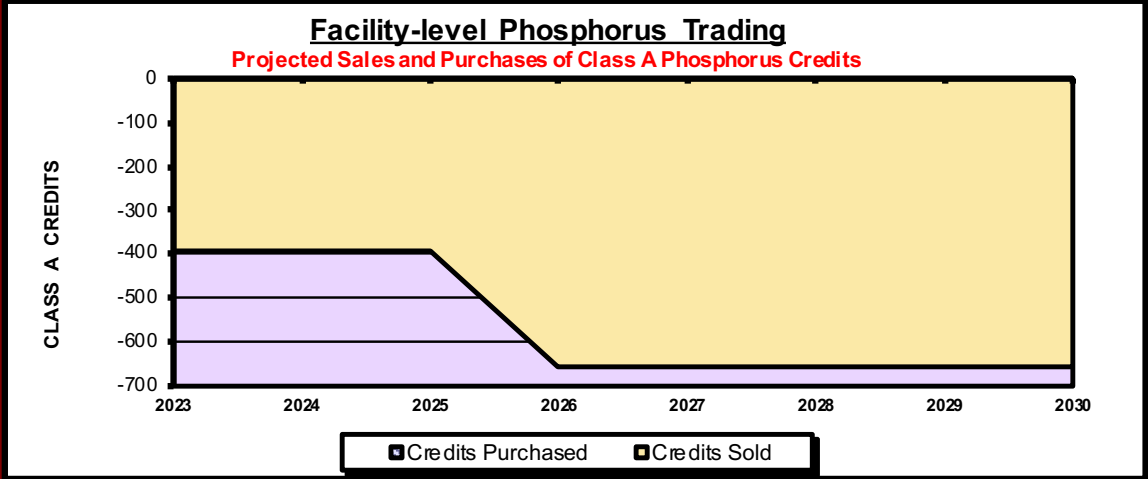


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
Projected Flow (mgd)	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Projected Avg. Annual Concentration (mg/L)	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Discharged Load (end of pipe)	6,030	6,030	6,030	6,030	6,030	6,030	6,030	6,030
Delivery Factor	0.33	0.33	0.33	0.77	0.77	0.77	0.77	0.77
Expected Load	1,990	1,990	1,990	4,643	4,643	4,643	4,643	4,643
Delivered WLA	6,432	6,432	6,432	15,009	15,009	15,009	15,009	15,009
Expected Credits (delivered)	4,442	4,442	4,442	10,366	10,366	10,366	10,366	10,366
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	4,442	4,442	4,442	10,366	10,366	10,366	10,366	10,366
Class A Credit Sales (Purchases)	4,442	4,442	4,442	10,366	10,366	10,366	10,366	10,366
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Luray
 POTOMAC Trading Basin



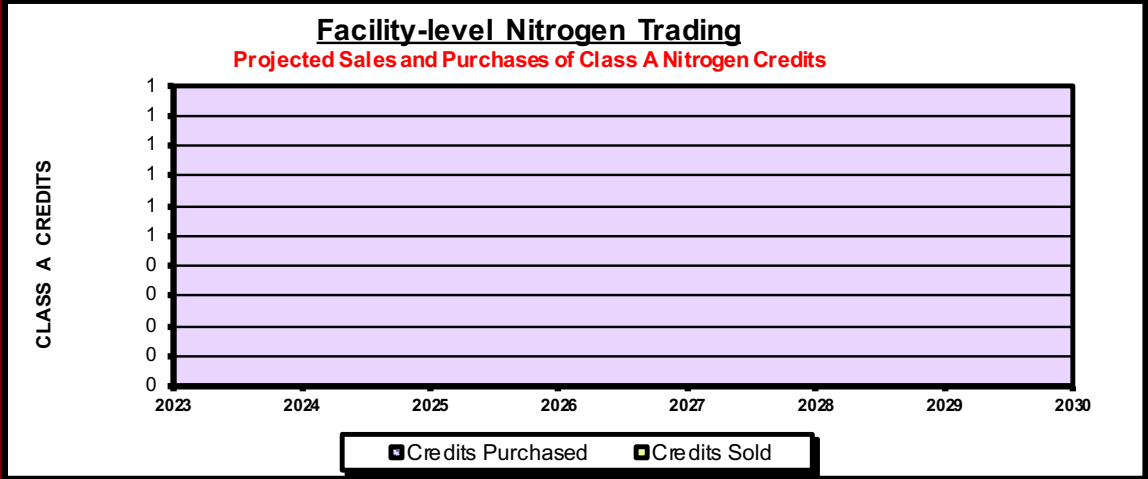
Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
Projected Flow (mgd)	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Projected Avg. Annual Concentration (mg/L)	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Discharged Load (end of pipe)	630	630	630	630	630	630	630	630
Delivery Factor	0.47	0.47	0.47	0.79	0.79	0.79	0.79	0.79
Expected Load	296	296	296	498	498	498	498	498
Delivered WLA	687	687	687	1,155	1,155	1,155	1,155	1,155
Expected Credits (delivered)	391	391	391	657	657	657	657	657
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange*	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	390	390	390	656	656	656	656	656
Class A Credit Sales (Purchases)	390	390	390	656	656	656	656	656
Expected Class B Credits	0	0	0	0	0	0	0	0

* Credit reduction to satisfy stormwater requirements associated with Town's construction activities at Lake Arrowhead Complex

NITROGEN FACILITY SUMMARY

Massanutten PSC
POTOMAC Trading Basin

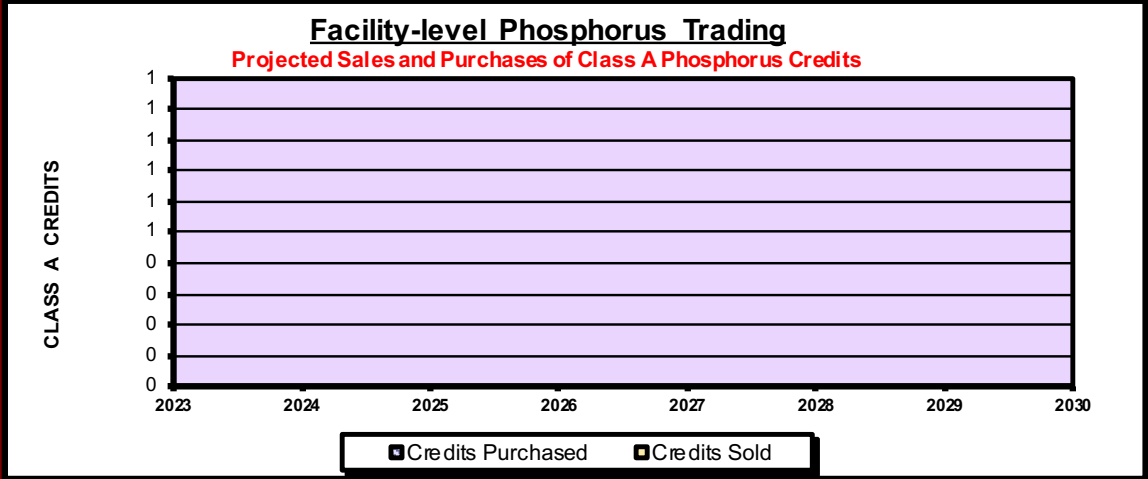


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Projected Flow (mgd)	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Projected Avg. Annual Concentration (mg/L)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Discharged Load (end of pipe)	9,259	9,259	9,259	9,259	9,259	9,259	9,259	9,259
Delivery Factor	0.22	0.22	0.22	0.60	0.60	0.60	0.60	0.60
Expected Load	2,037	2,037	2,037	5,555	5,555	5,555	5,555	5,555
Delivered WLA	4,020	4,020	4,020	10,964	10,964	10,964	10,964	10,964
Expected Credits (delivered)	1,983	1,983	1,983	5,409	5,409	5,409	5,409	5,409
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	1,983	1,983	1,983	5,409	5,409	5,409	5,409	5,409
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	1,983	1,983	1,983	5,409	5,409	5,409	5,409	5,409

PHOSPHORUS FACILITY SUMMARY

Massanutten PSC
POTOMAC Trading Basin



Loading & Credit Summary

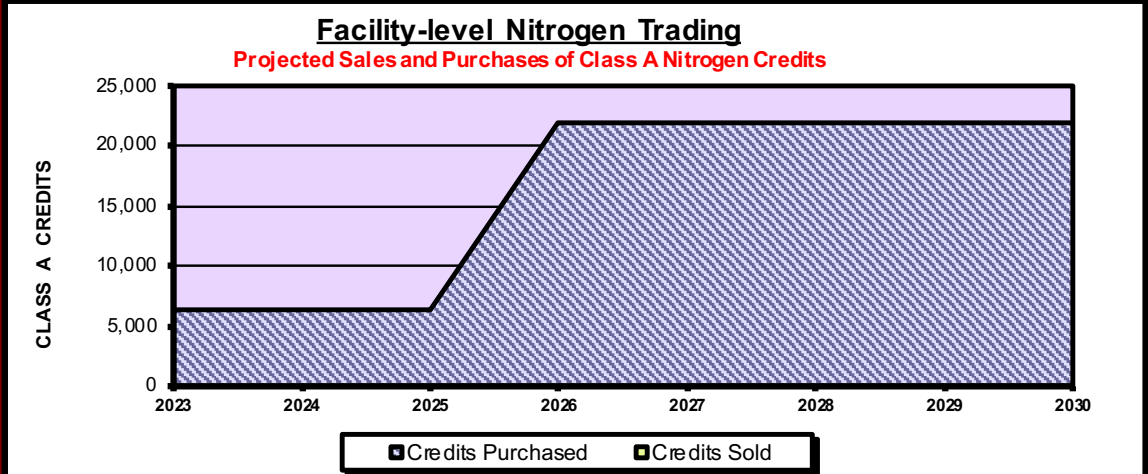
Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

2023	2024	2025	2026	2027	2028	2029	2030
<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
694	694	694	694	694	694	694	694
0.47	0.47	0.47	0.37	0.37	0.37	0.37	0.37
326	326	326	257	257	257	257	257
644	644	644	507	507	507	507	507
318	318	318	250	250	250	250	250
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
318	318	318	250	250	250	250	250
0	0	0	0	0	0	0	0
318	318	318	250	250	250	250	250

NITROGEN FACILITY SUMMARY

Merck

POTOMAC Trading Basin



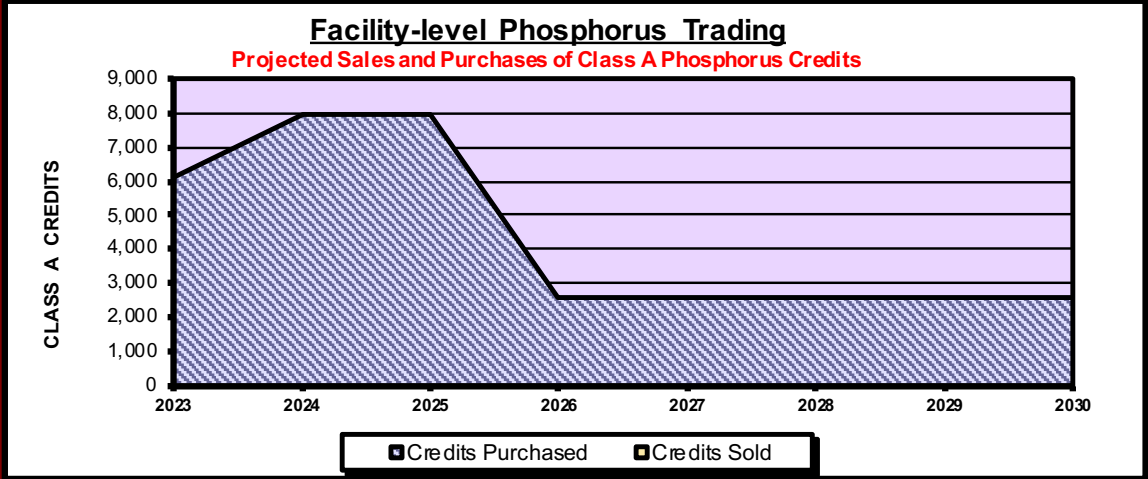
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Projected Flow (mgd)	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Projected Avg. Annual Concentration (mg/L)	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
Discharged Load (end of pipe)	43,856	43,856	43,856	43,856	43,856	43,856	43,856	43,856
Delivery Factor	0.22	0.22	0.22	0.75	0.75	0.75	0.75	0.75
Expected Load	9,648	9,648	9,648	32,892	32,892	32,892	32,892	32,892
Delivered WLA	3,216	3,216	3,216	10,964	10,964	10,964	10,964	10,964
Expected Credits (delivered)	(6,432)	(6,432)	(6,432)	(21,928)	(21,928)	(21,928)	(21,928)	(21,928)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	(6,432)	(6,432)	(6,432)	(21,928)	(21,928)	(21,928)	(21,928)	(21,928)
Class A Credit Sales (Purchases)	(6,432)	(6,432)	(6,432)	(21,928)	(21,928)	(21,928)	(21,928)	(21,928)
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Merck
 POTOMAC Trading Basin



Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Projected Flow (mgd)	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Projected Avg. Annual Concentration (mg/L)	3.84	4.93	4.93	1.20	1.20	1.20	1.20	1.20
Discharged Load (end of pipe)	14,034	18,018	18,018	4,386	4,386	4,386	4,386	4,386
Delivery Factor	0.47	0.47	0.47	0.79	0.79	0.79	0.79	0.79
Expected Load	6,596	8,468	8,468	3,465	3,465	3,465	3,465	3,465
Delivered WLA	515	515	515	866	866	866	866	866
Expected Credits (delivered)	(6,081)	(7,953)	(7,953)	(2,599)	(2,599)	(2,599)	(2,599)	(2,599)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	(6,081)	(7,953)	(7,953)	(2,599)	(2,599)	(2,599)	(2,599)	(2,599)
Class A Credit Sales (Purchases)	(6,081)	(7,953)	(7,953)	(2,599)	(2,599)	(2,599)	(2,599)	(2,599)
Expected Class B Credits	0	0	0	0	0	0	0	0

Merck – Additional Information

Description of Merck-Stonewall WQMP Regulation Note (10) as it Applies to the Exchange Compliance Plan:

Under the Water Quality Management Planning Regulation (9VAC 25-720-50.C) and Watershed General Permit Registration List for the Potomac/Shenandoah River Basin, the Merck-Stonewall facility's WLAs are as follows:

Discharged TN WLA: 43,835 lbs/yr

Discharged TP WLA: 4,384 lbs/yr

The Discharged WLAs stated above are subject to the following conditions in the Water Quality Management Planning Regulation (9VAC 25-720-50.C):

(10) Merck-Stonewall – (a) these waste load allocations will be subject to further consideration, consistent with the Chesapeake Bay TMDL, as it may be amended, and possible reduction upon "full-scale" results showing the optimal treatment capability of the 4-stage Bardenpho technology at this facility consistent with the level of effort by other dischargers in the region. The "full scale" evaluation will be completed by December 31, 2011, and the results submitted to DEQ for review and subsequent board action; (b) in any year when credits are available after all other exchanges within the Shenandoah-Potomac River Basin are completed in accordance with § 62.1-44.19:18 of the Code of Virginia, Merck shall acquire credits for total nitrogen discharged in excess of 14,619 lbs/yr and total phosphorus discharged in excess of 1,096 lbs/yr; and (c) the allocations are not transferable and compliance credits are only generated if discharged loads are less than the loads identified in clause (b).

Note that the WLAs stated in Note (10) are expressed as Discharged WLAs. Consistent with Note (10) clauses (b) and (c), the Watershed General Permit and manner in which the Exchange Trading Model is designed, this Exchange Compliance Plan is prepared and presented based on the following Delivered WLAs derived using the applicable Delivery Factors ("DF"):

Delivered TN WLA: 3,216 lbs/yr (0.22 DF for Compliance Years 2021 through 2025)

Delivered TN WLA: 10,964 lbs/yr (0.75 DF for Compliance Year 2026 and beyond)

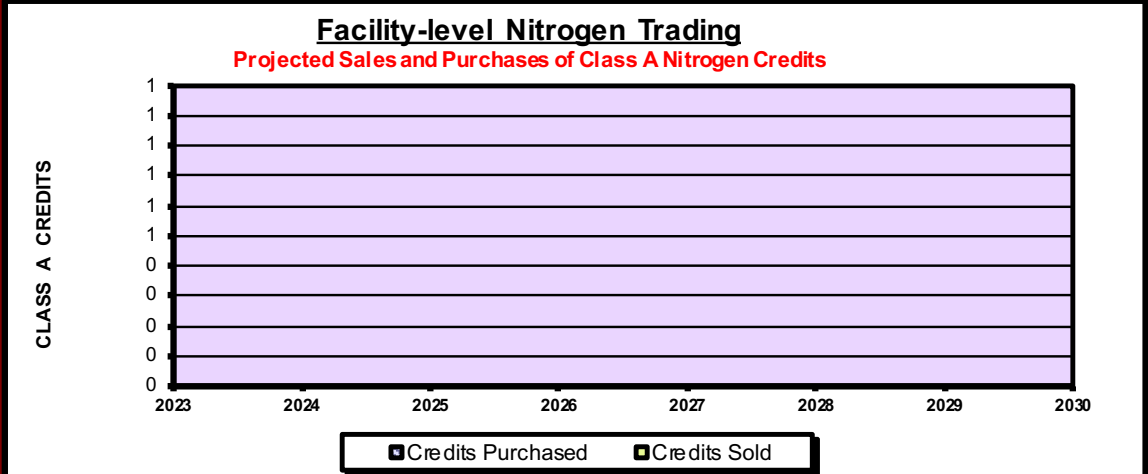
Delivered TP WLA: 515 lbs/yr (0.47 DF for Compliance Years 2021 through 2025)

Delivered TP WLA: 866 lbs/yr (0.79 DF for Compliance Year 2026 and beyond)

This description neither creates nor implies any limitation on Merck's use of its full WLAs in the manner authorized under Note (10).

NITROGEN FACILITY SUMMARY

Molson Coors Shenandoah
POTOMAC Trading Basin

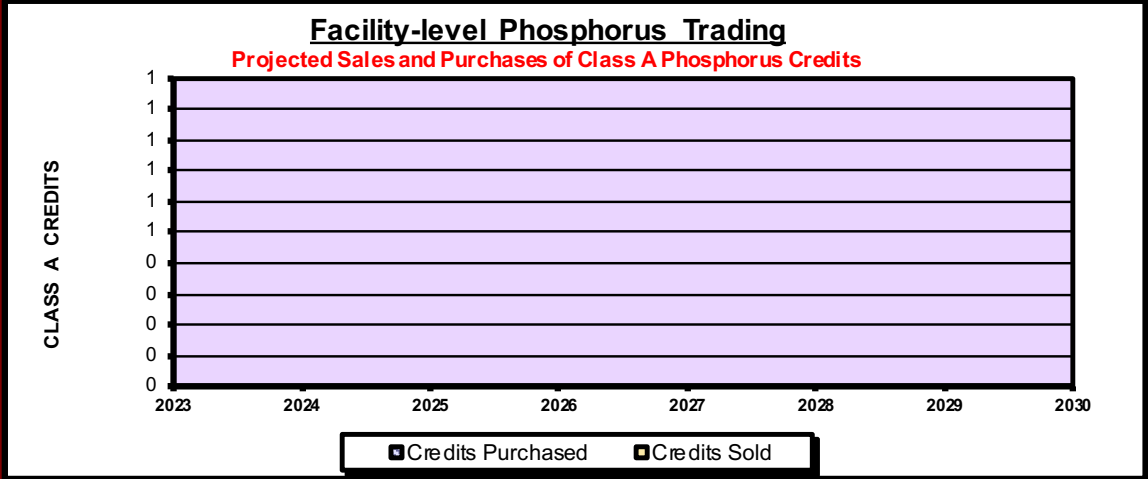


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Projected Flow (mgd)	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Projected Avg. Annual Concentration (mg/L)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Discharged Load (end of pipe)	54,820	54,820	54,820	54,820	54,820	54,820	54,820	54,820
Delivery Factor	0.22	0.22	0.22	0.78	0.78	0.78	0.78	0.78
Expected Load	12,060	12,060	12,060	42,760	42,760	42,760	42,760	42,760
Delivered WLA	12,060	12,060	12,060	42,760	42,760	42,760	42,760	42,760
Expected Credits (delivered)	0	0	0	0	0	0	0	0
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Molson Coors Shenandoah
POTOMAC Trading Basin



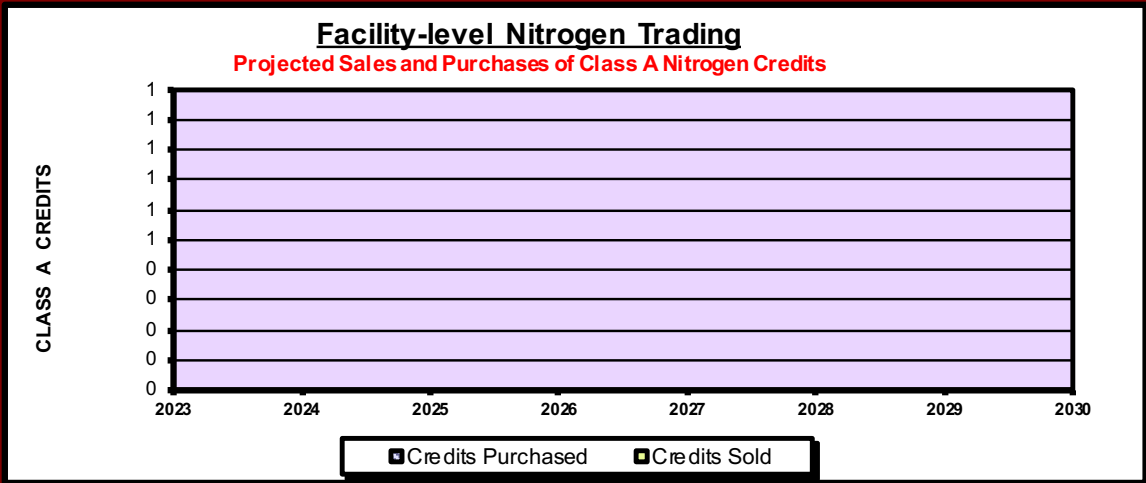
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

2023	2024	2025	2026	2027	2028	2029	2030
<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
4,112	4,112	4,112	4,112	4,112	4,112	4,112	4,112
0.47	0.47	0.47	0.79	0.79	0.79	0.79	0.79
1,932	1,932	1,932	3,248	3,248	3,248	3,248	3,248
1,933	1,933	1,933	3,248	3,248	3,248	3,248	3,248
1	1	1	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
1	1	1	0	0	0	0	0
0	0	0	0	0	0	0	0
1	1	1	0	0	0	0	0

NITROGEN FACILITY SUMMARY

Mt. Jackson
POTOMAC Trading Basin

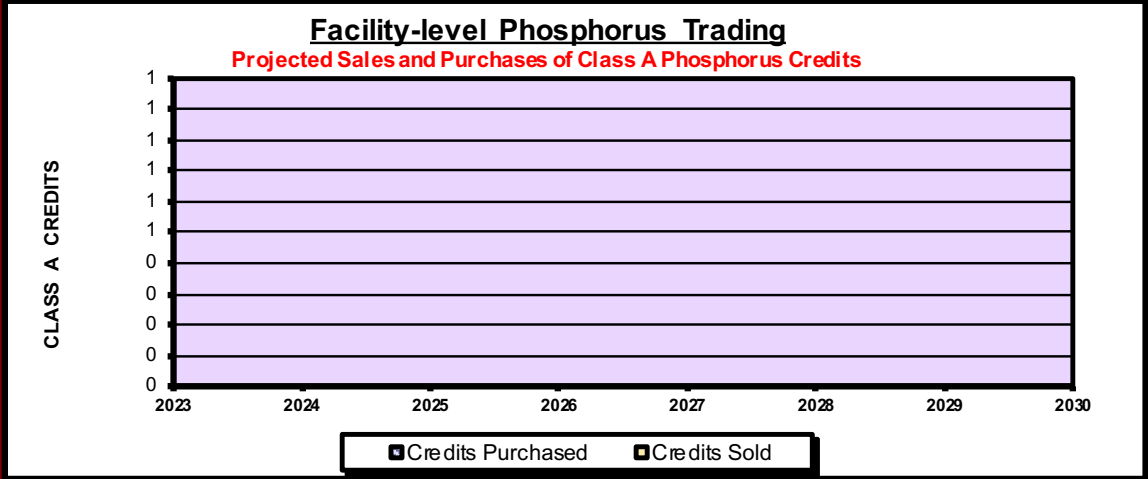


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Projected Flow (mgd)	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Projected Avg. Annual Concentration (mg/L)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Discharged Load (end of pipe)	6,822	6,822	6,822	6,822	6,822	6,822	6,822	6,822
Delivery Factor	0.25	0.25	0.25	0.99	0.99	0.99	0.99	0.99
Expected Load	1,706	1,706	1,706	6,754	6,754	6,754	6,754	6,754
Delivered WLA	2,132	2,132	2,132	8,443	8,443	8,443	8,443	8,443
Expected Credits (delivered)	426	426	426	1,689	1,689	1,689	1,689	1,689
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	426	426	426	1,689	1,689	1,689	1,689	1,689
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	426	426	426	1,689	1,689	1,689	1,689	1,689

PHOSPHORUS FACILITY SUMMARY

Mt. Jackson
POTOMAC Trading Basin

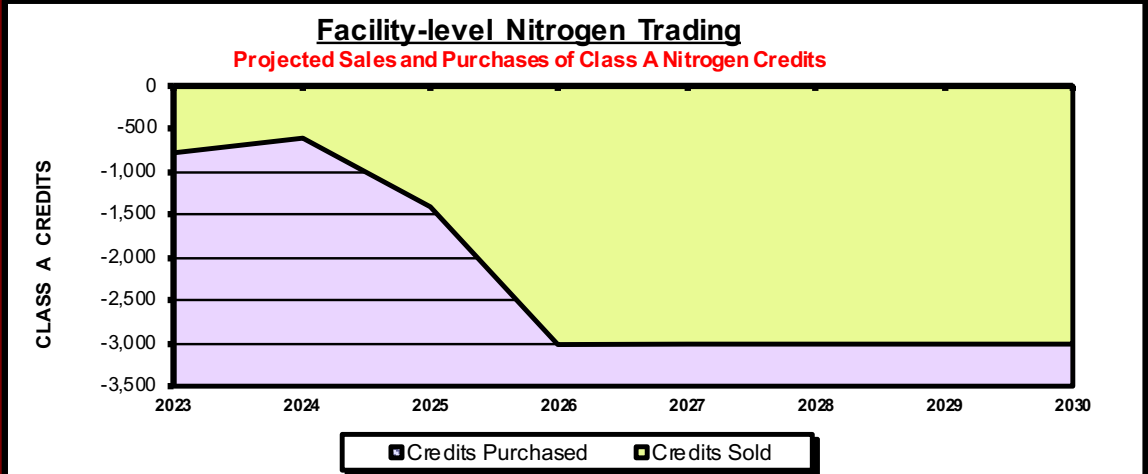


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Projected Flow (mgd)	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Projected Avg. Annual Concentration (mg/L)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	512	512	512	512	512	512	512	512
Delivery Factor	0.47	0.47	0.47	0.77	0.77	0.77	0.77	0.77
Expected Load	240	240	240	394	394	394	394	394
Delivered WLA	301	301	301	493	493	493	493	493
Expected Credits (delivered)	61	61	61	99	99	99	99	99
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	61	61	61	99	99	99	99	99
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	61	61	61	99	99	99	99	99

NITROGEN FACILITY SUMMARY

Purcellville
 POTOMAC Trading Basin



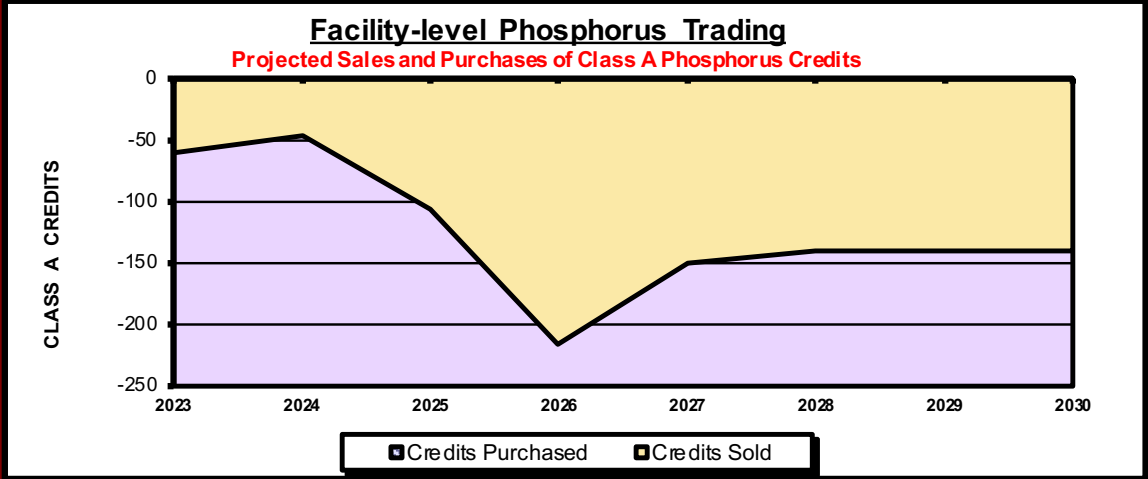
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

2023	2024	2025	2026	2027	2028	2029	2030
Planning Period					Future Estimates (non-binding)		
1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
1.22	1.28	1.00	0.75	0.80	0.85	0.85	0.85
4.00	4.00	4.00	4.00	2.00	2.00	2.00	2.00
14,862	15,593	12,182	9,137	4,873	5,177	5,177	5,177
0.46	0.46	0.46	0.66	0.66	0.66	0.66	0.66
6,837	7,173	5,604	6,030	3,216	3,417	3,417	3,417
8,406	8,406	8,406	12,060	12,060	12,060	12,060	12,060
1,569	1,233	2,802	6,030	8,844	8,643	8,643	8,643
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
1,569	1,233	2,802	6,030	8,844	8,643	8,643	8,643
785	617	1,401	3,015	3,000	3,000	3,000	3,000
784	616	1,401	3,015	5,844	5,643	5,643	5,643

PHOSPHORUS FACILITY SUMMARY

Purcellville
POTOMAC Trading Basin



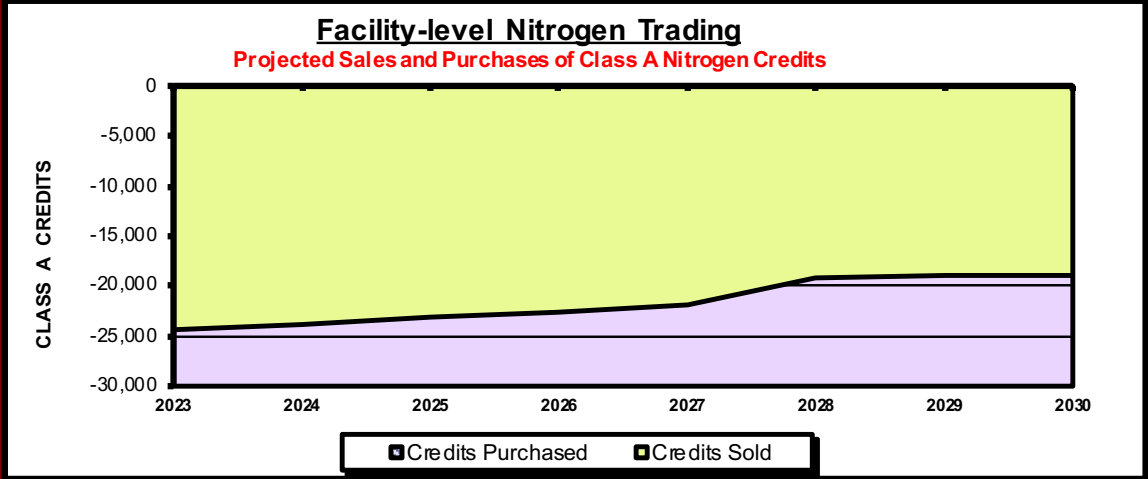
Loading & Credit Summary

Design Flow (mgd)	1.50
Projected Flow (mgd)	1.22
Projected Avg. Annual Concentration (mg/L)	0.30
Discharged Load (end of pipe)	1,115
Delivery Factor	0.47
Expected Load	524
Delivered WLA	644
Expected Credits (delivered)	120
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	120
Class A Credit Sales (Purchases)	60
Expected Class B Credits	60

2023	2024	2025	2026	2027	2028	2029	2030
<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
1.22	1.28	1.00	0.75	0.80	0.85	0.85	0.85
0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
1,115	1,169	914	685	731	777	777	777
0.47	0.47	0.47	0.63	0.63	0.63	0.63	0.63
524	550	429	432	460	489	489	489
644	644	644	864	864	864	864	864
120	94	215	432	404	375	375	375
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
120	94	215	432	404	375	375	375
60	47	107	216	150	140	140	140
60	47	108	216	254	235	235	235

NITROGEN FACILITY SUMMARY

PWCSA-HL Mooney
POTOMAC Trading Basin

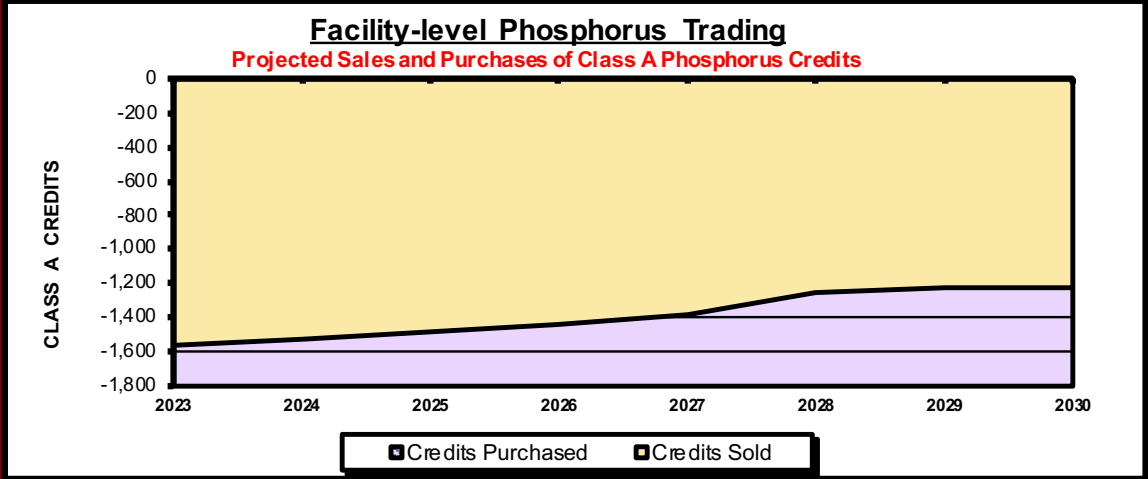


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Projected Flow (mgd)	20.05	20.15	20.25	20.35	20.45	20.50	20.55	20.60
Projected Avg. Annual Concentration (mg/L)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Discharged Load (end of pipe)	183,190	184,104	185,018	185,931	186,845	187,302	187,759	188,216
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	183,190	184,104	185,018	185,931	186,845	187,302	187,759	188,216
Delivered WLA	219,280	219,280	219,280	219,280	219,280	219,280	219,280	219,280
Expected Credits (delivered)	36,090	35,176	34,262	33,349	32,435	31,978	31,521	31,064
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	36,090	35,176	34,262	33,349	32,435	31,978	31,521	31,064
Class A Credit Sales (Purchases)	24,363	23,743	23,124	22,509	21,763	19,200	18,920	18,920
Expected Class B Credits	11,727	11,433	11,138	10,840	10,672	12,778	12,601	12,144

PHOSPHORUS FACILITY SUMMARY

PWCSA-HL Mooney
POTOMAC Trading Basin



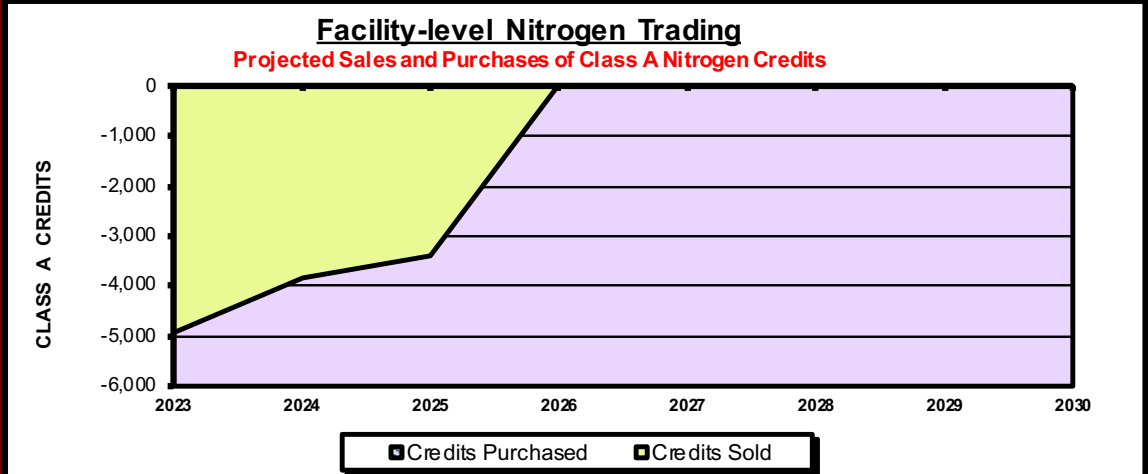
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

2023	2024	2025	2026	2027	2028	2029	2030
<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
20.05	20.15	20.25	20.35	20.45	20.50	20.55	20.60
0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
10,991	11,046	11,101	11,156	11,211	11,238	11,266	11,293
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
10,991	11,046	11,101	11,156	11,211	11,238	11,266	11,293
13,157	13,157	13,157	13,157	13,157	13,157	13,157	13,157
2,166	2,111	2,056	2,001	1,946	1,919	1,891	1,864
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
2,166	2,111	2,056	2,001	1,946	1,919	1,891	1,864
1,561	1,520	1,479	1,441	1,383	1,248	1,230	1,230
605	591	577	560	563	671	661	634

NITROGEN FACILITY SUMMARY

Stafford Co-Aquia
POTOMAC Trading Basin

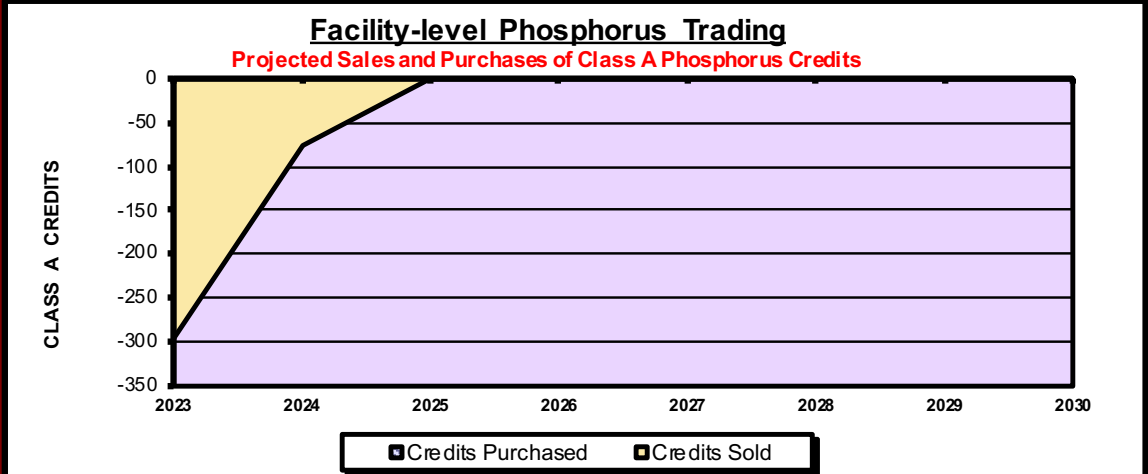


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Projected Flow (mgd)	7.46	6.60	6.77	6.87	6.98	7.08	7.18	7.29
Projected Avg. Annual Concentration (mg/L)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Discharged Load (end of pipe)	68,160	60,302	61,855	62,769	63,774	64,688	65,601	66,606
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	68,160	60,302	61,855	62,769	63,774	64,688	65,601	66,606
Delivered WLA	73,093	73,093	73,093	73,093	73,093	73,093	73,093	73,093
Expected Credits (delivered)	4,933	12,791	11,238	10,324	9,319	8,405	7,492	6,487
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	4,933	12,791	11,238	10,324	9,319	8,405	7,492	6,487
Class A Credit Sales (Purchases)	4,933	3,837	3,385	0	0	0	0	0
Expected Class B Credits	0	8,954	7,853	10,324	9,319	8,405	7,492	6,487

PHOSPHORUS FACILITY SUMMARY

Stafford Co-Aquia
POTOMAC Trading Basin

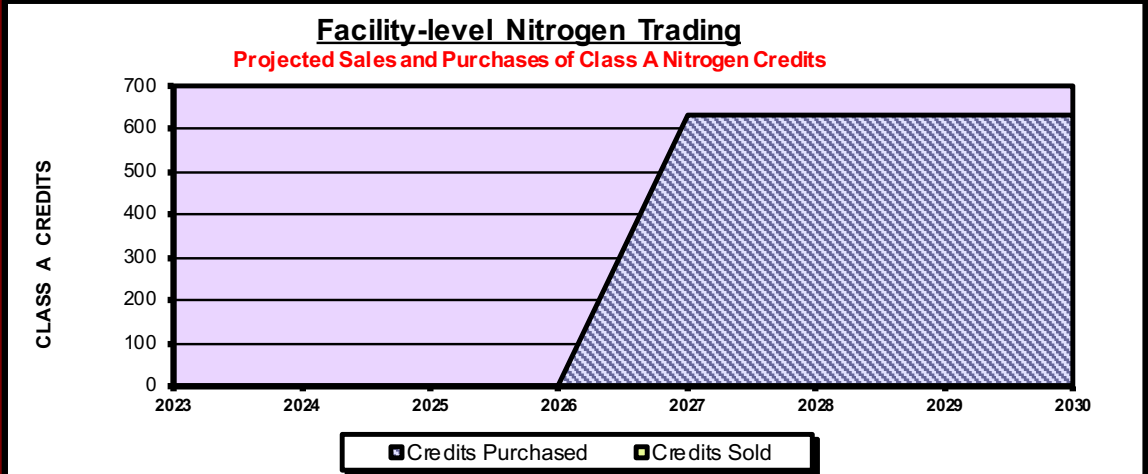


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Projected Flow (mgd)	7.46	6.60	6.77	6.87	6.98	7.08	7.18	7.29
Projected Avg. Annual Concentration (mg/L)	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Discharged Load (end of pipe)	4,090	3,618	3,711	3,766	3,826	3,881	3,936	3,996
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	4,090	3,618	3,711	3,766	3,826	3,881	3,936	3,996
Delivered WLA	4,386	4,386	4,386	4,386	4,386	4,386	4,386	4,386
Expected Credits (delivered)	296	768	675	620	560	505	450	390
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	296	768	675	620	560	505	450	390
Class A Credit Sales (Purchases)	296	77	0	0	0	0	0	0
Expected Class B Credits	0	691	675	620	560	505	450	390

NITROGEN FACILITY SUMMARY

Stoney Creek
 POTOMAC Trading Basin



Loading & Credit Summary

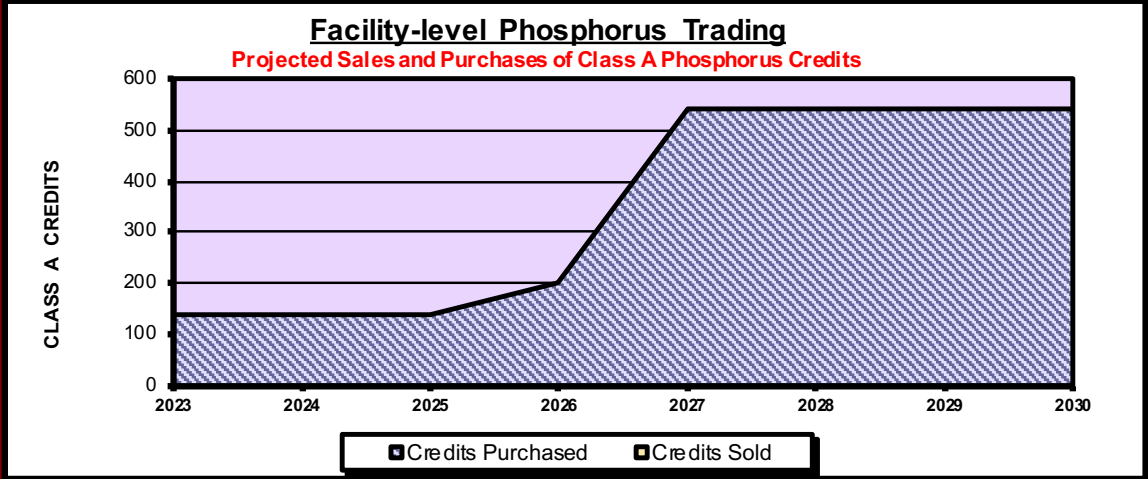
Design Flow (mgd)	0.60
Projected Flow (mgd)	0.35
Projected Avg. Annual Concentration (mg/L)	7.00
Discharged Load (end of pipe)	7,462
Delivery Factor	0.25
Expected Load	1,865
Delivered WLA*	2,065
Expected Credits (delivered)	200
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	200
Class A Credit Sales (Purchases)	0
Expected Class B Credits	200

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>				<i>Future Estimates (non-binding)</i>			
Design Flow (mgd)	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Projected Flow (mgd)	0.35	0.35	0.35	0.35	0.30	0.30	0.30	0.30
Projected Avg. Annual Concentration (mg/L)	7.00	7.00	7.00	7.00	10.00	10.00	10.00	10.00
Discharged Load (end of pipe)	7,462	7,462	7,462	7,462	9,137	9,137	9,137	9,137
Delivery Factor	0.25	0.25	0.25	0.72	0.72	0.72	0.72	0.72
Expected Load	1,865	1,865	1,865	5,372	6,578	6,578	6,578	6,578
Delivered WLA*	2,065	2,065	2,065	5,946	5,946	5,946	5,946	5,946
Expected Credits (delivered)	200	200	200	574	(632)	(632)	(632)	(632)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	200	200	200	574	(632)	(632)	(632)	(632)
Class A Credit Sales (Purchases)	0	0	0	0	(632)	(632)	(632)	(632)
Expected Class B Credits	200	200	200	574	0	0	0	0

* Reflects consolidation of the Shrine Mont STP wasteload allocation

PHOSPHORUS FACILITY SUMMARY

Stoney Creek
 POTOMAC Trading Basin



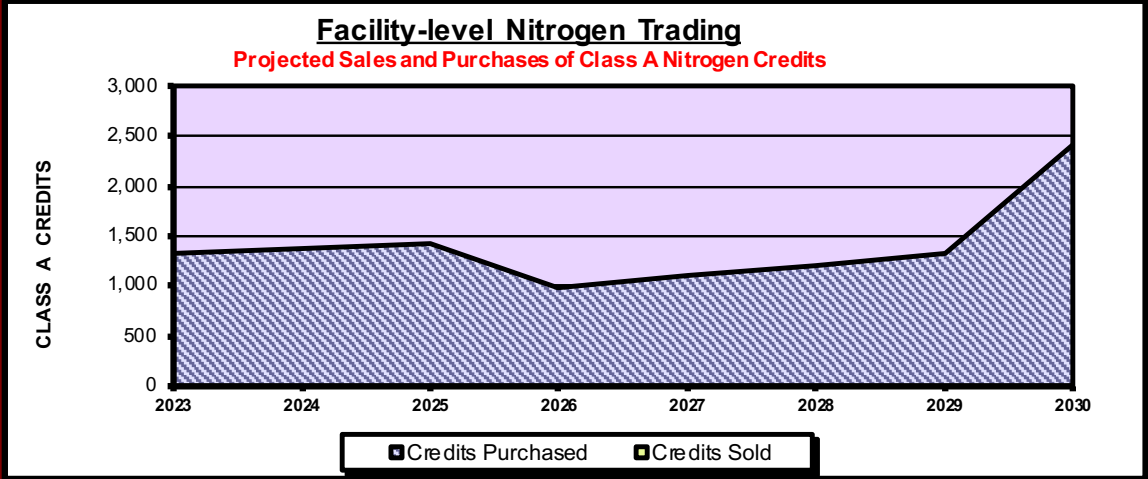
Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Projected Flow (mgd)	0.35	0.35	0.35	0.35	0.30	0.30	0.30	0.30
Projected Avg. Annual Concentration (mg/L)	0.90	0.90	0.90	0.87	1.50	1.50	1.50	1.50
Discharged Load (end of pipe)	959	959	959	927	1,371	1,371	1,371	1,371
Delivery Factor	0.47	0.47	0.47	0.77	0.77	0.77	0.77	0.77
Expected Load	451	451	451	714	1,055	1,055	1,055	1,055
Delivered WLA*	313	313	313	514	514	514	514	514
Expected Credits (delivered)	(138)	(138)	(138)	(200)	(541)	(541)	(541)	(541)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	(138)	(138)	(138)	(200)	(541)	(541)	(541)	(541)
Class A Credit Sales (Purchases)	(138)	(138)	(138)	(200)	(541)	(541)	(541)	(541)
Expected Class B Credits	0	0	0	0	0	0	0	0

* Reflects consolidation of the Shrine Mont STP wasteload allocation

NITROGEN FACILITY SUMMARY

Strasburg
POTOMAC Trading Basin

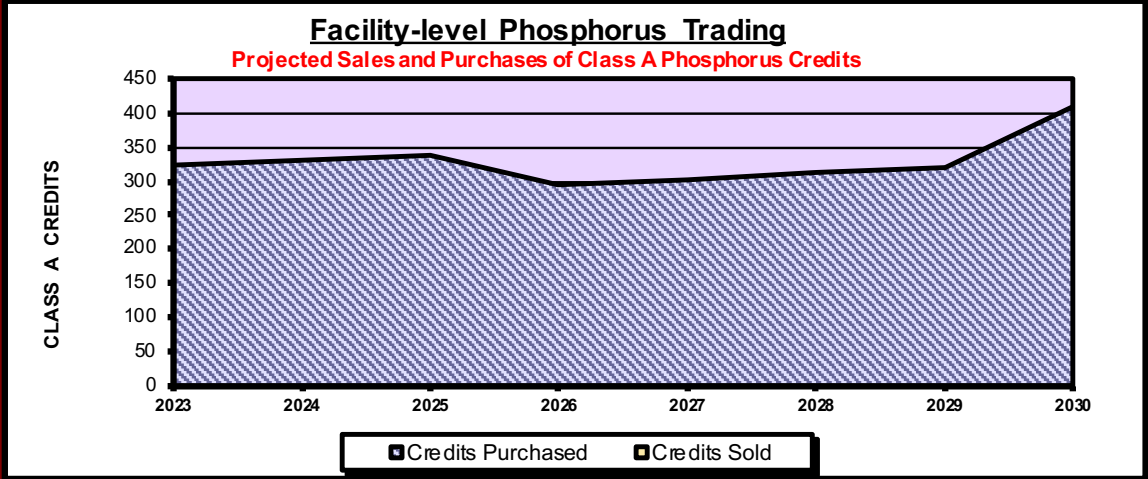


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Projected Flow (mgd)	1.04	1.05	1.06	1.07	1.08	1.09	1.10	1.20
Projected Avg. Annual Concentration (mg/L)	5.00	5.00	5.00	4.00	4.00	4.00	4.00	4.00
Discharged Load (end of pipe)	15,837	15,989	16,141	13,035	13,157	13,279	13,400	14,619
Delivery Factor	0.34	0.34	0.34	0.90	0.90	0.90	0.90	0.90
Expected Load	5,385	5,436	5,488	11,731	11,841	11,951	12,060	13,157
Delivered WLA	4,059	4,059	4,059	10,745	10,745	10,745	10,745	10,745
Expected Credits (delivered)	(1,326)	(1,377)	(1,429)	(986)	(1,096)	(1,206)	(1,315)	(2,412)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	(1,326)	(1,377)	(1,429)	(986)	(1,096)	(1,206)	(1,315)	(2,412)
Class A Credit Sales (Purchases)	(1,326)	(1,377)	(1,429)	(986)	(1,096)	(1,206)	(1,315)	(2,412)
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Strasburg
 POTOMAC Trading Basin



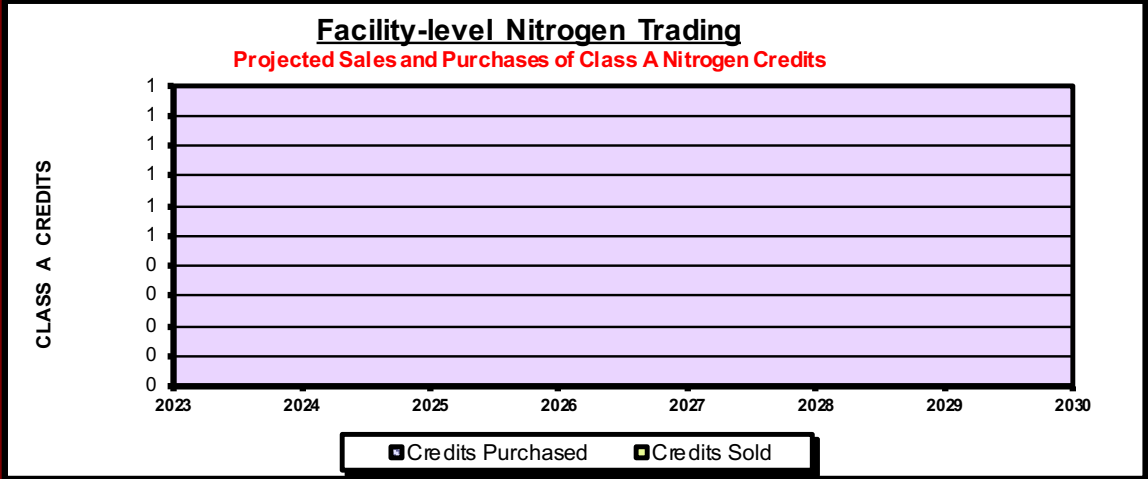
Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Projected Flow (mgd)	1.04	1.05	1.06	1.07	1.08	1.09	1.10	1.20
Projected Avg. Annual Concentration (mg/L)	0.50	0.50	0.50	0.40	0.40	0.40	0.40	0.40
Discharged Load (end of pipe)	1,584	1,599	1,614	1,303	1,316	1,328	1,340	1,462
Delivery Factor	0.47	0.47	0.47	0.72	0.72	0.72	0.72	0.72
Expected Load	744	751	759	939	947	956	965	1,053
Delivered WLA	421	421	421	644	644	644	644	644
Expected Credits (delivered)	(323)	(330)	(338)	(295)	(303)	(312)	(321)	(409)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	(323)	(330)	(338)	(295)	(303)	(312)	(321)	(409)
Class A Credit Sales (Purchases)	(323)	(330)	(338)	(295)	(303)	(312)	(321)	(409)
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

UOSA

POTOMAC Trading Basin

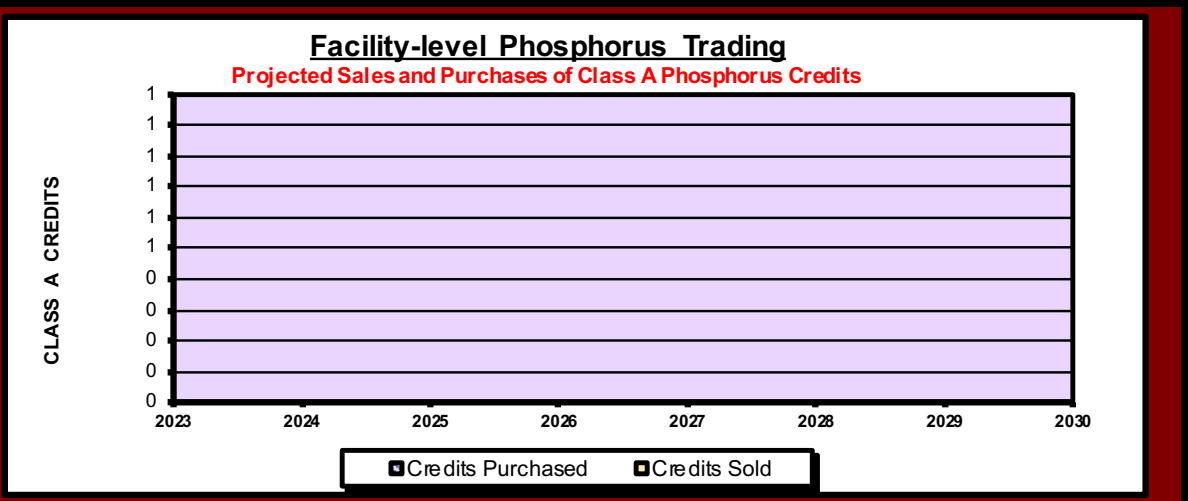


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00
Projected Flow (mgd)	36.37	37.56	37.55	38.80	38.70	39.28	39.74	40.18
Projected Avg. Annual Concentration (mg/L)	11.80	11.50	11.50	11.10	11.15	10.99	10.86	10.75
Discharged Load (end of pipe)	1,307,051	1,315,499	1,315,149	1,311,662	1,314,174	1,314,729	1,314,392	1,315,484
Delivery Factor	0.23	0.23	0.23	0.30	0.30	0.30	0.30	0.30
Expected Load	300,622	302,565	302,484	393,499	394,252	394,419	394,318	394,645
Delivered WLA	302,607	302,607	302,607	394,705	394,705	394,705	394,705	394,705
Expected Credits (delivered)	1,985	42	123	1,206	453	286	387	60
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	1,985	42	123	1,206	453	286	387	60
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	1,985	42	123	1,206	453	286	387	60

PHOSPHORUS FACILITY SUMMARY

UOSA
POTOMAC Trading Basin



Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00
Projected Flow (mgd)	36.37	37.56	37.55	38.80	38.70	39.28	39.74	40.18
Projected Avg. Annual Concentration (mg/L)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Discharged Load (end of pipe)	11,077	11,439	11,436	11,817	11,786	11,963	12,103	12,237
Delivery Factor	0.31	0.31	0.31	0.04	0.04	0.04	0.04	0.04
Expected Load	3,434	3,546	3,545	473	471	479	484	489
Delivered WLA	5,098	5,098	5,098	658	658	658	658	658
Expected Credits (delivered)	1,664	1,552	1,553	185	187	179	174	169
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	1,664	1,552	1,553	185	187	179	174	169
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	1,664	1,552	1,553	185	187	179	174	169

Owner Bubble: Virginia American Water, Prince William District

The facilities listed below have received an aggregated mass load limit pursuant to 9 VAC 25-820-70, Part 1.B.2., which is also referred to as an “owner bubble”. Accordingly, compliance is determined solely on an aggregate basis rather than by comparison of individual facility loads with respective individual WLAs.

The “Credit Transferred within Bubble” section of each table forecasts the use of Credits within the owner bubble during each Compliance Year, and must necessarily sum to zero. The specific Credit transfers shown in this table are provided for internal planning purposes only and, accordingly, are not binding and may change based on the actual performance of individual facilities within the bubble.

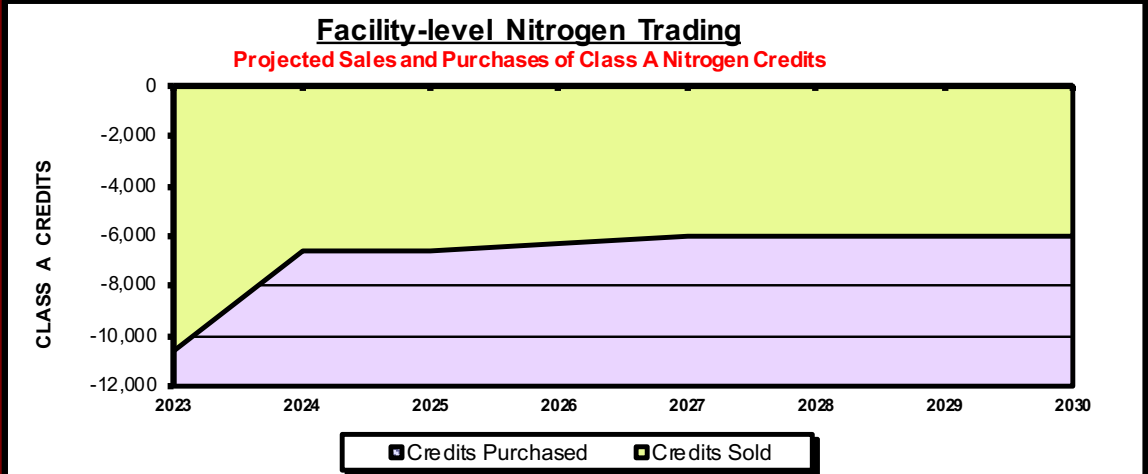
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply with the aggregate Delivered WLA of the bubble.

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
VA Am. Water PW Sec. 1	-	-	-	-	-	-	-	-
VA Am. Water PW Sec. 8	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
VA Am. Water PW Sec. 1	17,665	10,964	10,964	10,507	10,051	10,051	10,051	10,051
VA Am. Water PW Sec. 8	17,665	10,051	10,051	9,137	9,137	9,137	9,137	9,137
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	35,330	21,015	21,015	19,644	19,188	19,188	19,188	19,188
Class A Sales (Purchases)	21,198	12,609	12,609	11,786	11,513	11,513	11,513	11,513
<i>Expected Class B Credits</i>	<i>14,132</i>	<i>8,406</i>	<i>8,406</i>	<i>7,858</i>	<i>7,675</i>	<i>7,675</i>	<i>7,675</i>	<i>7,675</i>
<i>WQIF-Held Credits</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>

PHOSPHORUS Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
VA Am. Water PW Sec. 1	-	-	-	-	-	-	-	-
VA Am. Water PW Sec. 8	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
VA Am. Water PW Sec. 1	1,060	658	658	631	603	603	603	603
VA Am. Water PW Sec. 8	1,060	603	603	548	548	548	548	548
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	2,120	1,261	1,261	1,179	1,151	1,151	1,151	1,151
Class A Sales (Purchases)	1,272	757	757	708	570	570	570	570
<i>Expected Class B Credits</i>	<i>848</i>	<i>504</i>	<i>504</i>	<i>471</i>	<i>581</i>	<i>581</i>	<i>581</i>	<i>581</i>
<i>WQIF-Held Credits</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>

NITROGEN FACILITY SUMMARY

VA Am. Water PW Sec. 1
POTOMAC Trading Basin

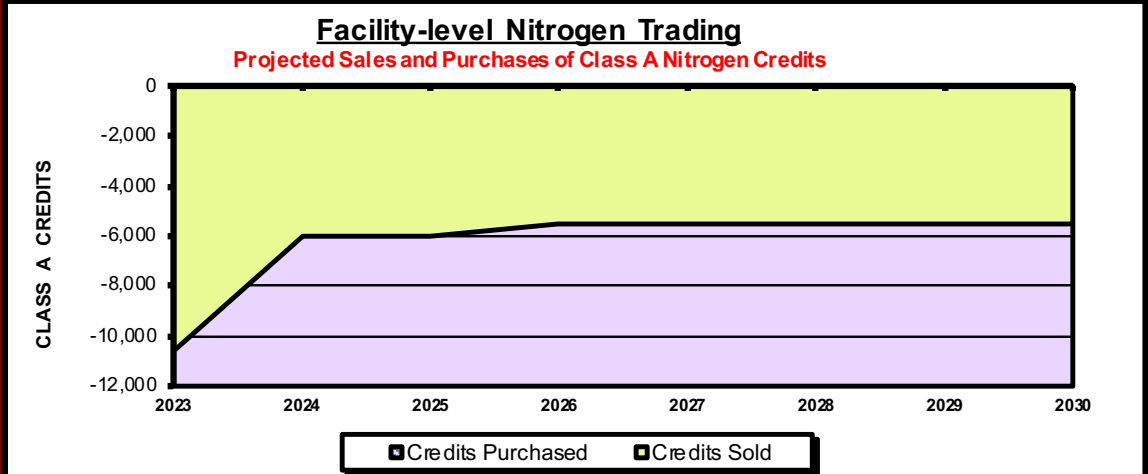


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60
Projected Flow (mgd)	3.20	3.40	3.40	3.45	3.50	3.50	3.50	3.50
Projected Avg. Annual Concentration (mg/L)	2.50	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Discharged Load (end of pipe)	24,364	31,065	31,065	31,522	31,978	31,978	31,978	31,978
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	24,364	31,065	31,065	31,522	31,978	31,978	31,978	31,978
Delivered WLA	42,029	42,029	42,029	42,029	42,029	42,029	42,029	42,029
Expected Credits (delivered)	17,665	10,964	10,964	10,507	10,051	10,051	10,051	10,051
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	17,665	10,964	10,964	10,507	10,051	10,051	10,051	10,051
Class A Credit Sales (Purchases)	10,599	6,578	6,578	6,304	6,031	6,031	6,031	6,031
Expected Class B Credits	7,066	4,386	4,386	4,203	4,020	4,020	4,020	4,020

NITROGEN FACILITY SUMMARY

VA Am. Water PW Sec. 8
POTOMAC Trading Basin



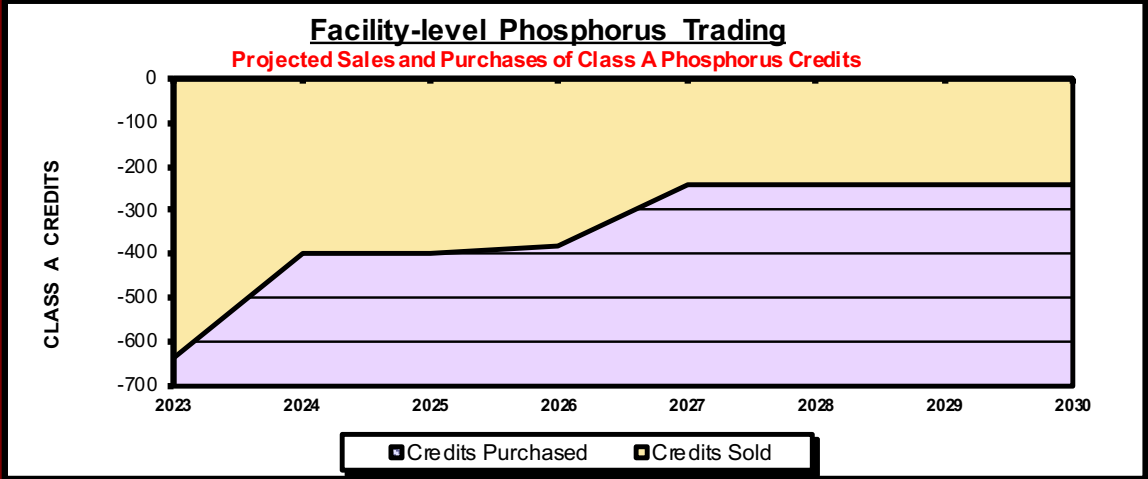
Loading & Credit Summary

Design Flow (mgd)	3.20
Projected Flow (mgd)	3.50
Projected Avg. Annual Concentration (mg/L)	2.50
Discharged Load (end of pipe)	
Delivery Factor	1.00
Expected Load	24,364
Delivered WLA	42,029
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	
Class A Credit Sales (Purchases)	
Expected Class B Credits	

2023	2024	2025	2026	2027	2028	2029	2030
Planning Period					Future Estimates (non-binding)		
4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60
3.20	3.50	3.50	3.60	3.60	3.60	3.60	3.60
2.50	3.00	3.00	3.00	3.00	3.00	3.00	3.00
24,364	31,978	31,978	32,892	32,892	32,892	32,892	32,892
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
24,364	31,978	31,978	32,892	32,892	32,892	32,892	32,892
42,029	42,029	42,029	42,029	42,029	42,029	42,029	42,029
17,665	10,051	10,051	9,137	9,137	9,137	9,137	9,137
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
17,665	10,051	10,051	9,137	9,137	9,137	9,137	9,137
10,599	6,031	6,031	5,482	5,482	5,482	5,482	5,482
7,066	4,020	4,020	3,655	3,655	3,655	3,655	3,655

PHOSPHORUS FACILITY SUMMARY

VA Am. Water PW Sec. 1
POTOMAC Trading Basin

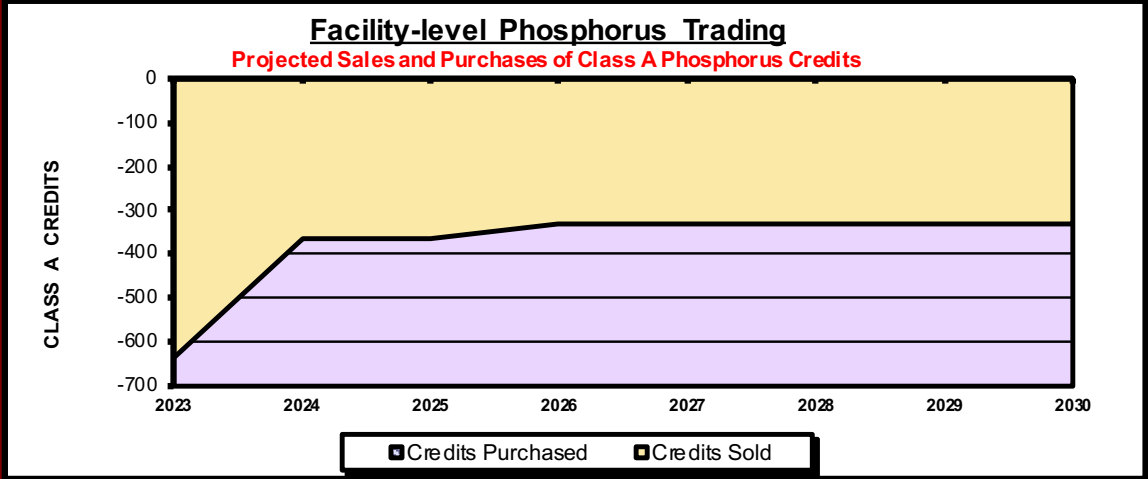


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60
Projected Flow (mgd)	3.20	3.40	3.40	3.45	3.50	3.50	3.50	3.50
Projected Avg. Annual Concentration (mg/L)	0.15	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Discharged Load (end of pipe)	1,462	1,864	1,864	1,891	1,919	1,919	1,919	1,919
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	1,462	1,864	1,864	1,891	1,919	1,919	1,919	1,919
Delivered WLA	2,522	2,522	2,522	2,522	2,522	2,522	2,522	2,522
Expected Credits (delivered)	1,060	658	658	631	603	603	603	603
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	1,060	658	658	631	603	603	603	603
Class A Credit Sales (Purchases)	636	395	395	379	241	241	241	241
Expected Class B Credits	424	263	263	252	362	362	362	362

PHOSPHORUS FACILITY SUMMARY

VA Am. Water PW Sec. 8
POTOMAC Trading Basin

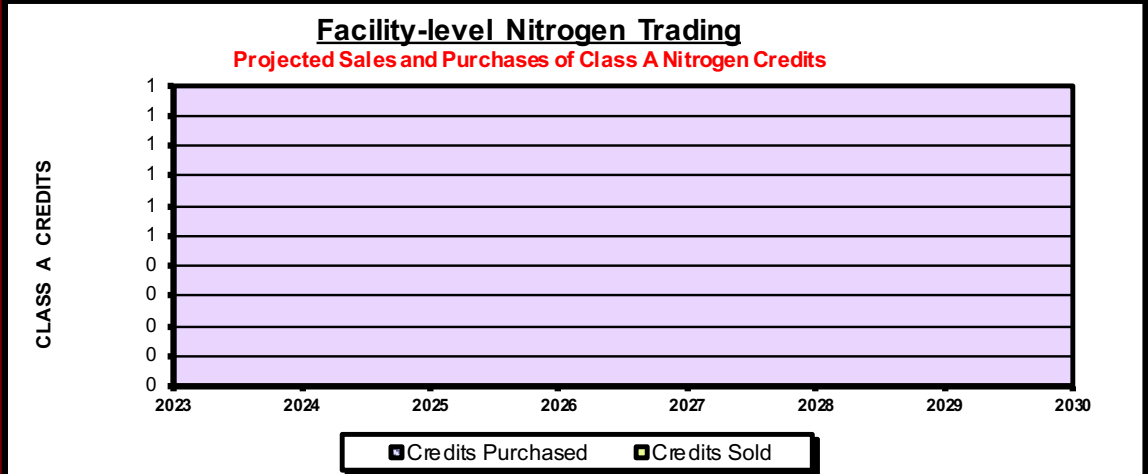


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60
Projected Flow (mgd)	3.20	3.50	3.50	3.60	3.60	3.60	3.60	3.60
Projected Avg. Annual Concentration (mg/L)	0.15	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Discharged Load (end of pipe)	1,462	1,919	1,919	1,974	1,974	1,974	1,974	1,974
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	1,462	1,919	1,919	1,974	1,974	1,974	1,974	1,974
Delivered WLA	2,522	2,522	2,522	2,522	2,522	2,522	2,522	2,522
Expected Credits (delivered)	1,060	603	603	548	548	548	548	548
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	1,060	603	603	548	548	548	548	548
Class A Credit Sales (Purchases)	636	362	362	329	329	329	329	329
Expected Class B Credits	424	241	241	219	219	219	219	219

NITROGEN FACILITY SUMMARY

Waynesboro
 POTOMAC Trading Basin

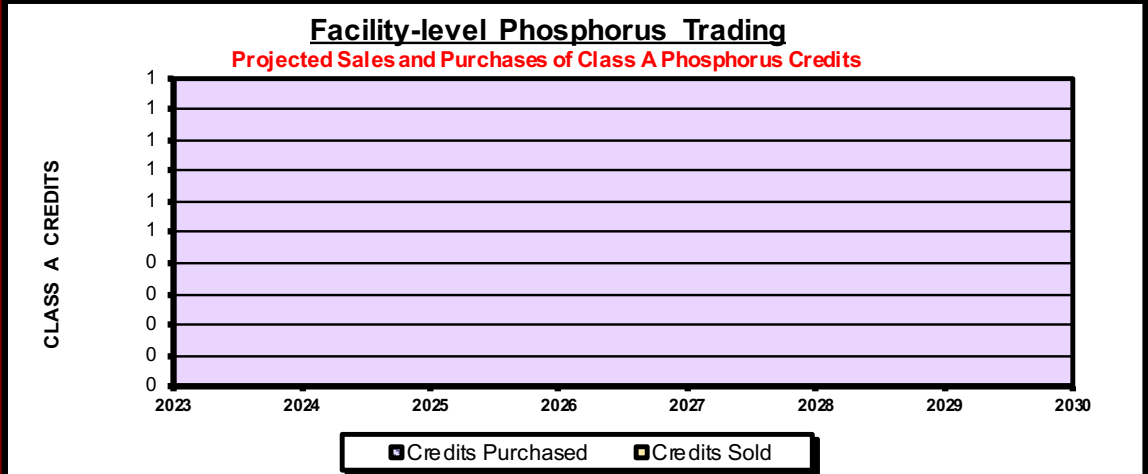


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Projected Flow (mgd)	4.00	4.00	4.00	4.10	4.10	4.10	4.10	4.10
Projected Avg. Annual Concentration (mg/L)	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Discharged Load (end of pipe)	30,456	30,456	30,456	31,217	31,217	31,217	31,217	31,217
Delivery Factor	0.08	0.08	0.08	0.63	0.63	0.63	0.63	0.63
Expected Load	2,436	2,436	2,436	19,667	19,667	19,667	19,667	19,667
Delivered WLA	3,898	3,898	3,898	30,699	30,699	30,699	30,699	30,699
Expected Credits (delivered)	1,462	1,462	1,462	11,032	11,032	11,032	11,032	11,032
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	1,462	1,462	1,462	11,032	11,032	11,032	11,032	11,032
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	1,462	1,462	1,462	11,032	11,032	11,032	11,032	11,032

PHOSPHORUS FACILITY SUMMARY

Waynesboro
POTOMAC Trading Basin



Loading & Credit Summary

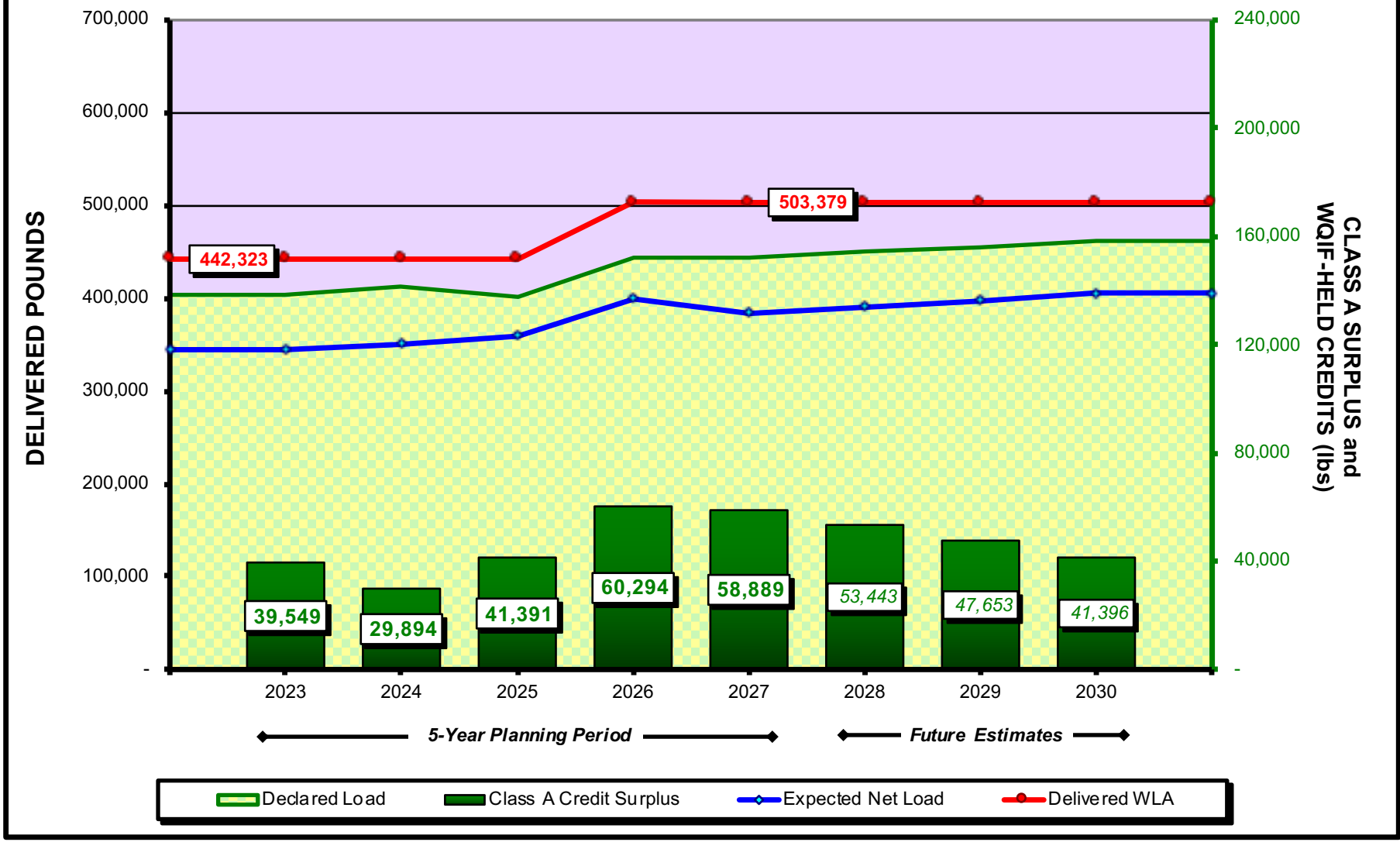
	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Projected Flow (mgd)	4.00	4.00	4.00	4.10	4.10	4.10	4.10	4.10
Projected Avg. Annual Concentration (mg/L)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Discharged Load (end of pipe)	3,046	3,046	3,046	3,122	3,122	3,122	3,122	3,122
Delivery Factor	0.47	0.47	0.47	0.84	0.84	0.84	0.84	0.84
Expected Load	1,431	1,431	1,431	2,622	2,622	2,622	2,622	2,622
Delivered WLA	1,718	1,718	1,718	3,070	3,070	3,070	3,070	3,070
Expected Credits (delivered)	287	287	287	448	448	448	448	448
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	287	287	287	448	448	448	448	448
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	287	287	287	448	448	448	448	448

SECTION 3

Rappahannock River Basin Exchange Compliance Plan



Nitrogen Compliance: Rappahannock Basin



RAPPAHANNOCK Basin: Nitrogen Credit Ledger											
Compliance Year:	2023	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)				
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits		Class A Sales	Class A* Purchases	Class B Sales**
								PRICE:	\$ 1.02	\$ 4.04	\$ 0.10
The Exchange (group)	442,323	342,216	100,107	-	(978)	(1,523)	97,606		54,981	(15,432)	58,057
American Water-Fort AP Hill	6,457	7,127	(670)	-	-	-	(670)		-	(670)	-
Aqua Virginia-Pres. Lakes	1,994	1,267	727	-	-	-	727		700	-	27
Culpeper (Town)	35,816	25,966	9,850	-	-	-	9,850		-	-	9,850
FCWSA-Marshall	1,481	2,129	(648)	648	-	-	-		-	-	-
FCWSA-Remington	11,938	8,476	3,462	(648)	-	-	2,814		-	-	2,814
Fredericksburg	54,820	58,520	(3,700)	-	-	-	(3,700)		-	(3,700)	-
Greene Co-Rapidan	1,535	1,266	269	-	-	-	269		269	-	-
HRSU-Urbanna	1,218	2,900	(1,682)	-	-	-	(1,682)		-	(1,682)	-
KGCSA-Hopyard Farms	6,091	1,462	4,629	(487)	-	(1,523)	2,619		2,500	-	119
KGCSA-Oakland Park	1,706	2,193	(487)	487	-	-	-		-	-	-
Kilmarnock	6,091	3,198	2,893	-	-	-	2,893		2,200	-	693
Omega Protein	21,113	12,182	8,931	-	-	-	8,931		8,000	-	931
Orange (Town)	7,675	2,910	4,765	-	-	-	4,765		4,765	-	-
Reedville S.D.	2,436	2,415	21	-	-	-	21		-	-	21
RSA-Wilderness Shores	6,853	3,865	2,988	-	-	-	2,988		-	-	2,988
Spotsy Co-FMC	48,737	57,744	(9,007)	9,007	-	-	-		-	(9,380)	9,380
Spotsy Co-Massaponax	114,505	88,321	26,184	(9,007)	-	-	17,177		-	-	17,177
Stafford Co-L. Falls Run	97,458	48,729	48,729	-	(978)	-	47,751		36,547	-	11,204
Tappahannock	9,746	8,040	1,706	-	-	-	1,706		-	-	1,706
Warsaw	3,655	3,046	609	-	-	-	609		-	-	609
Westmoreland Co-Montross	998	460	538	-	-	-	538		-	-	538
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
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	-	-	-	-	-	-	-		-	-	-

* For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.

** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.

RAPPAHANNOCK Basin: Nitrogen Credit Ledger

RappaHanNOCK Basin: Nitrogen Credit Ledger											
Compliance Year:	2024	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)				
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits		Class A Sales	Class A* Purchases	Class B Sales**
								PRICE:	\$ 1.58	\$ 4.13	\$ 0.15
The Exchange (group)	442,323	348,857	93,466	-	(978)	(1,523)	90,965		52,103	(22,209)	61,071
American Water-Fort AP Hill	6,457	8,223	(1,766)	-	-	-	(1,766)		-	(1,766)	-
Aqua Virginia-Pres. Lakes	1,994	1,267	727	-	-	-	727		700	-	27
Culpeper (Town)	35,816	26,862	8,954	-	-	-	8,954		-	-	8,954
FCWSA-Marshall	1,481	2,222	(741)	741	-	-	-		-	-	-
FCWSA-Remington	11,938	8,596	3,342	(741)	-	-	2,601		-	-	2,601
Fredericksburg	54,820	59,096	(4,276)	-	-	-	(4,276)		-	(4,276)	-
Greene Co-Rapidan	1,535	1,337	198	-	-	-	198		198	-	-
HRSD-Urbanna	1,218	2,888	(1,670)	-	-	-	(1,670)		-	(1,670)	-
KGCSA-Hopyard Farms	6,091	1,096	4,995	(121)	-	(1,523)	3,351		3,351	-	-
KGCSA-Oakland Park	1,706	1,827	(121)	121	-	-	-		-	-	-
Kilmarnock	6,091	3,959	2,132	-	-	-	2,132		2,132	-	-
Omega Protein	21,113	12,182	8,931	-	-	-	8,931		8,831	-	100
Orange (Town)	7,675	2,910	4,765	-	-	-	4,765		4,765	-	-
Reedville S.D.	2,436	2,415	21	-	-	-	21		-	-	21
RSA-Wilderness Shores	6,853	3,947	2,906	-	-	-	2,906		-	-	2,906
Spotsy Co-FMC	48,737	59,449	(10,712)	10,712	-	-	-		-	(14,497)	14,497
Spotsy Co-Massaponax	114,505	91,001	23,504	(10,712)	-	-	12,792		-	-	12,792
Stafford Co-L. Falls Run	97,458	48,034	49,424	-	(978)	-	48,446		32,126	-	16,320
Tappahannock	9,746	8,040	1,706	-	-	-	1,706		-	-	1,706
Warsaw	3,655	3,046	609	-	-	-	609		-	-	609
Westmoreland Co-Montross	998	460	538	-	-	-	538		-	-	538
-	-	-	-	-	-	-	-		-	-	-
-	-	-	-	-	-	-	-		-	-	-
-	-	-	-	-	-	-	-		-	-	-
-	-	-	-	-	-	-	-		-	-	-
-	-	-	-	-	-	-	-		-	-	-
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* For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.

** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.

RAPPAHANNOCK Basin: Nitrogen Credit Ledger											
Compliance Year:	2025	Credit Forecasts		Preliminary Use of Credits				Credit Exchange (Pounds)			
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits		Class A Sales	Class A* Purchases	Class B Sales**
								PRICE:	\$ 0.47	\$ 4.21	\$ 0.06
The Exchange (group)	442,323	357,091	85,232	-	(978)	(1,523)	82,731		47,290	(5,899)	41,340
American Water-Fort AP Hill	6,457	6,441	16	-	-	-	16		16	-	-
Aqua Virginia-Pres. Lakes	1,994	1,218	776	-	-	-	776		750	-	26
Culpeper (Town)	35,816	26,862	8,954	-	-	-	8,954		-	-	8,954
FCWSA-Marshall	1,481	2,315	(834)	834	-	-	-		-	-	-
FCWSA-Remington	11,938	8,715	3,223	(834)	-	-	2,389		-	-	2,389
Fredericksburg	54,820	59,096	(4,276)	-	-	-	(4,276)		-	(4,276)	-
Greene Co-Rapidan	1,535	1,407	128	-	-	-	128		128	-	-
HRSD-Urbanna	1,218	2,841	(1,623)	-	-	-	(1,623)		-	(1,623)	-
KGCSA-Hopyard Farms	6,091	419	5,672	-	-	(1,523)	4,149		4,149	-	-
KGCSA-Oakland Park	1,706	553	1,153	-	-	-	1,153		1,153	-	-
Kilmarnock	6,091	3,959	2,132	-	-	-	2,132		2,132	-	-
Omega Protein	21,113	18,273	2,840	-	-	-	2,840		2,840	-	-
Orange (Town)	7,675	2,910	4,765	-	-	-	4,765		4,765	-	-
Reedville S.D.	2,436	2,415	21	-	-	-	21		-	-	21
RSA-Wilderness Shores	6,853	3,947	2,906	-	-	-	2,906		-	-	2,906
Spotsy Co-FMC	48,737	61,155	(12,418)	12,418	-	-	-		-	-	-
Spotsy Co-Massaponax	114,505	93,681	20,824	(12,418)	-	-	8,406		-	-	8,406
Stafford Co-L. Falls Run	97,458	49,216	48,242	-	(978)	-	47,264		31,357	-	15,907
Tappahannock	9,746	8,162	1,584	-	-	-	1,584		-	-	1,584
Warsaw	3,655	3,046	609	-	-	-	609		-	-	609
Westmoreland Co-Montross	998	460	538	-	-	-	538		-	-	538
-	-	-	-	-	-	-	-		-	-	-
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* For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.
** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.

RAPPAHANNOCK Basin: Nitrogen Credit Ledger

Compliance Year:	2026	Credit Forecasts		Preliminary Use of Credits				Credit Exchange (Pounds)			
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits	PRICE:	Class A Sales	Class A* Purchases	Class B Sales**
								\$ 0.30	\$ 4.26	\$ 0.05	
The Exchange (group)	503,279	397,484	105,795	-	(978)	(1,523)	103,294		65,508	(5,214)	43,000
American Water-Fort AP Hill	6,457	6,441	16	-	-	-	16		16	-	-
Aqua Virginia-Pres. Lakes	1,994	1,218	776	-	-	-	776		750	-	26
Culpeper (Town)	46,049	34,537	11,512	-	-	-	11,512		-	-	11,512
FCWSA-Marshall	2,963	4,814	(1,851)	1,851	-	-	-		-	-	-
FCWSA-Remington	21,684	16,046	5,638	(1,851)	-	-	3,787		-	-	3,787
Fredericksburg	54,820	60,034	(5,214)	-	-	-	(5,214)		-	(5,214)	-
Greene Co-Rapidan	7,309	7,035	274	-	-	-	274		274	-	-
HRSD-Urbanna	1,218	-	1,218	-	-	-	1,218		1,218	-	-
KGCSA-Hopyard Farms	6,091	428	5,663	-	-	(1,523)	4,140		4,140	-	-
KGCSA-Oakland Park	1,706	691	1,015	-	-	-	1,015		1,015	-	-
Kilmarnock	6,091	3,807	2,284	-	-	-	2,284		2,284	-	-
Omega Protein	21,113	19,492	1,621	-	-	-	1,621		1,621	-	-
Orange (Town)	36,547	13,857	22,690	-	-	-	22,690		22,690	-	-
Reedville S.D.	2,436	2,415	21	-	-	-	21		-	-	21
RSA-Wilderness Shores	11,116	6,536	4,580	-	-	-	4,580		-	-	4,580
Spotsy Co-FMC	48,737	63,104	(14,367)	14,367	-	-	-		-	-	-
Spotsy Co-Massaponax	114,505	95,021	19,484	(14,367)	-	-	5,117		-	-	5,117
Stafford Co-L. Falls Run	97,458	49,947	47,511	-	(978)	-	46,533		31,500	-	15,033
Tappahannock	9,746	8,162	1,584	-	-	-	1,584		-	-	1,584
Warsaw	3,655	3,046	609	-	-	-	609		-	-	609
Westmoreland Co-Montross	1,584	853	731	-	-	-	731		-	-	731
-	-	-	-	-	-	-	-		-	-	-
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* For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.
** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.

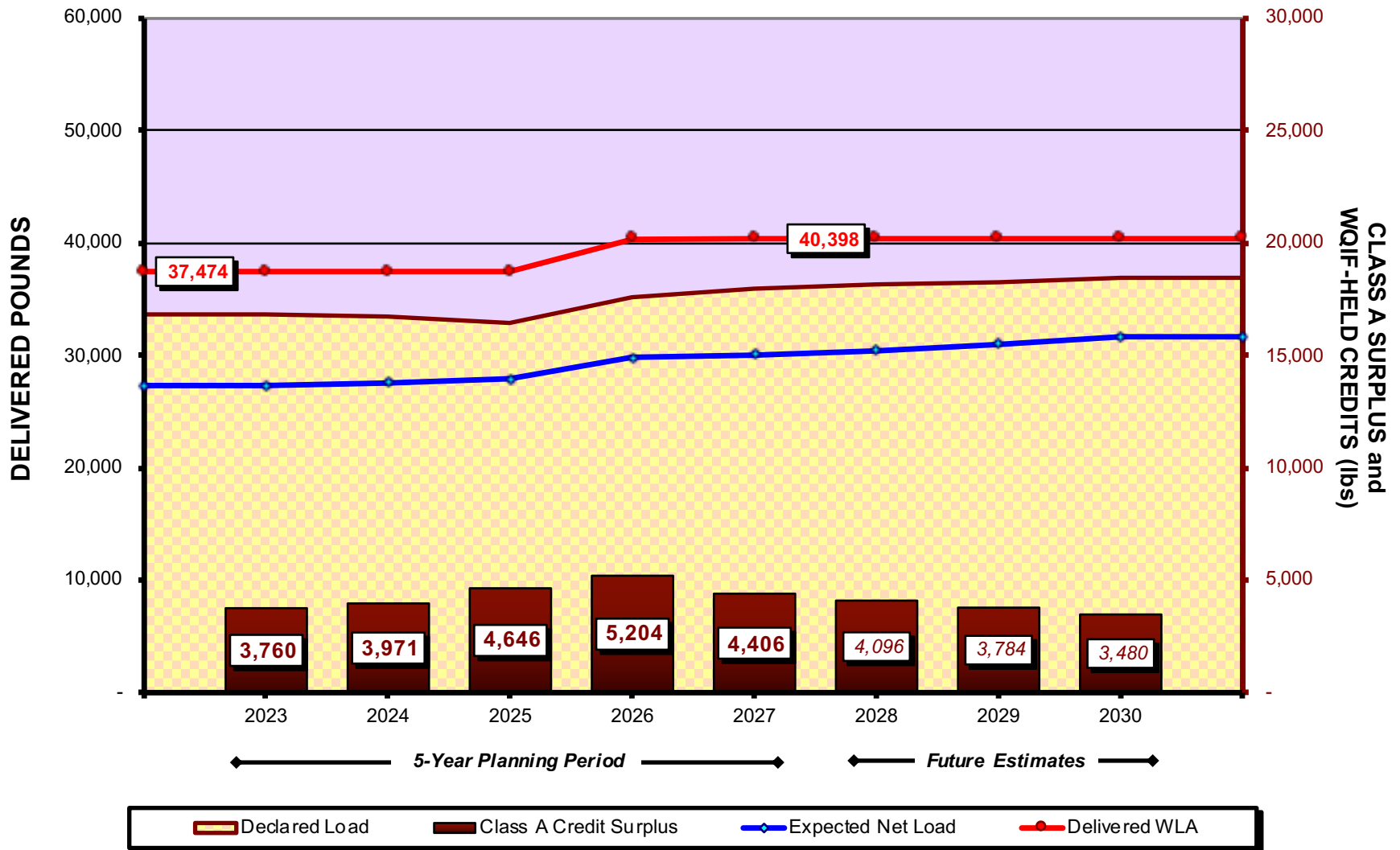
RAPPAHANNOCK Basin: Nitrogen Credit Ledger

Compliance Year:	2027	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)				
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits		Class A Sales	Class A* Purchases	Class B Sales**
								PRICE:	\$ -	\$ 4.62	\$ -
The Exchange (group)	503,379	382,364	121,015	-	(978)	(1,523)	118,514		58,950	(61)	59,625
American Water-Fort AP Hill	6,457	6,441	16	-	-	-	16		16	-	-
Aqua Virginia-Pres. Lakes	1,994	1,218	776	-	-	-	776		-	-	776
Culpeper (Town)	46,049	46,049	-	-	-	-	-		-	-	-
FCWSA-Marshall	2,963	5,000	(2,037)	2,037	-	-	-		-	-	-
FCWSA-Remington	21,684	16,263	5,421	(2,037)	-	-	3,384		-	-	3,384
Fredericksburg	54,820	28,141	26,679	-	-	-	26,679		-	-	26,679
Greene Co-Rapidan	7,309	7,370	(61)	-	-	-	(61)		-	(61)	-
HRSD-Urbanna	1,218	-	1,218	-	-	-	1,218		1,218	-	-
KGCSA-Hopyard Farms	6,091	428	5,663	-	-	(1,523)	4,140		-	-	4,140
KGCSA-Oakland Park	1,706	493	1,213	-	-	-	1,213		1,213	-	-
Kilmarnock	6,091	4,264	1,827	-	-	-	1,827		-	-	1,827
Omega Protein	21,213	20,253	960	-	-	-	960		960	-	-
Orange (Town)	36,547	11,878	24,669	-	-	-	24,669		24,669	-	-
Reedville S.D.	2,436	2,415	21	-	-	-	21		-	-	21
RSA-Wilderness Shores	11,116	6,536	4,580	-	-	-	4,580		-	-	4,580
Spotsy Co-FMC	48,737	65,053	(16,316)	16,316	-	-	-		-	-	-
Spotsy Co-Massaponax	114,505	97,823	16,682	(16,316)	-	-	366		-	-	366
Stafford Co-L. Falls Run	97,458	50,678	46,780	-	(978)	-	45,802		30,874	-	14,928
Tappahannock	9,746	8,162	1,584	-	-	-	1,584		-	-	1,584
Warsaw	3,655	3,046	609	-	-	-	609		-	-	609
Westmoreland Co-Montross	1,584	853	731	-	-	-	731		-	-	731
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* For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.

** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.

Phosphorus Compliance: Rappahannock Basin



RAPPAHANNOCK Basin: Phosphorus Credit Ledger

Compliance Year:	2023	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)				
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits		Class A Sales	Class A* Purchases	Class B Sales**
								PRICE:	\$ 1.87	\$ 6.08	\$ 0.18
The Exchange (group)	37,474	27,015	10,459	-	(199)	(114)	10,146		5,725	(1,965)	6,386
American Water-Fort AP Hill	484	384	100	-	-	-	100		-	-	100
Aqua Virginia-Pres. Lakes	267	127	140	-	-	-	140		140	-	-
Culpeper (Town)	4,112	2,650	1,462	-	-	-	1,462		-	-	1,462
FCWSA-Marshall	439	315	124	-	-	-	124		-	-	124
FCWSA-Remington	1,370	973	397	-	-	-	397		-	-	397
Fredericksburg	4,112	3,994	118	-	-	-	118		-	-	118
Greene Co-Rapidan	411	1,645	(1,234)	-	-	-	(1,234)		-	(1,234)	-
HRSD-Urbanna	91	822	(731)	-	-	-	(731)		-	(731)	-
KGCSA-Hopyard Farms	457	219	238	(91)	-	(114)	33		-	-	33
KGCSA-Oakland Park	128	219	(91)	91	-	-	-		-	-	-
Kilmarnock	457	320	137	-	-	-	137		75	-	62
Omega Protein	1,571	487	1,084	-	-	-	1,084		500	-	584
Orange (Town)	2,056	742	1,314	-	-	-	1,314		1,314	-	-
Reedville S.D.	183	119	64	-	-	-	64		-	-	64
RSA-Wilderness Shores	857	644	213	-	-	-	213		-	-	213
Spotsy Co-FMC	3,655	2,165	1,490	-	-	-	1,490		430	-	1,060
Spotsy Co-Massaponax	8,405	6,624	1,781	-	-	-	1,781		525	-	1,256
Stafford Co-L. Falls Run	7,309	3,655	3,654	-	(199)	-	3,455		2,741	-	714
Tappahannock	731	603	128	-	-	-	128		-	-	128
Warsaw	274	228	46	-	-	-	46		-	-	46
Westmoreland Co-Montross	105	80	25	-	-	-	25		-	-	25
-	-	-	-	-	-	-	-		-	-	-
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* For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.

** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.

RAPPAHANNOCK Basin: Phosphorus Credit Ledger											
Compliance Year:	2024	Credit Forecasts		Preliminary Use of Credits				Credit Exchange (Pounds)			
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits		Class A Sales	Class A* Purchases	Class B Sales**
								PRICE:	\$ 1.90	\$ 6.22	\$ 0.21
The Exchange (group)	37,474	27,303	10,171	-	(199)	(114)	9,858		6,023	(2,052)	5,887
American Water-Fort AP Hill	484	384	100	-	-	-	100		-	-	100
Aqua Virginia-Pres. Lakes	267	127	140	-	-	-	140		140	-	-
Culpeper (Town)	4,112	2,741	1,371	-	-	-	1,371		-	-	1,371
FCWSA-Marshall	439	329	110	-	-	-	110		-	-	110
FCWSA-Remington	1,370	987	383	-	-	-	383		-	-	383
Fredericksburg	4,112	4,034	78	-	-	-	78		-	-	78
Greene Co-Rapidan	411	1,736	(1,325)	-	-	-	(1,325)		-	(1,325)	-
HRSD-Urbanna	91	818	(727)	-	-	-	(727)		-	(727)	-
KGCSA-Hopyard Farms	457	183	274	(24)	-	(114)	136		136	-	-
KGCSA-Oakland Park	128	152	(24)	24	-	-	-		-	-	-
Kilmarnock	457	238	219	-	-	-	219		219	-	-
Omega Protein	1,571	487	1,084	-	-	-	1,084		1,000	-	84
Orange (Town)	2,056	742	1,314	-	-	-	1,314		1,314	-	-
Reedville S.D.	183	119	64	-	-	-	64		-	-	64
RSA-Wilderness Shores	857	658	199	-	-	-	199		-	-	199
Spotsy Co-FMC	3,655	2,229	1,426	-	-	-	1,426		390	-	1,036
Spotsy Co-Massaponax	8,405	6,825	1,580	-	-	-	1,580		415	-	1,165
Stafford Co-L. Falls Run	7,309	3,603	3,706	-	(199)	-	3,507		2,409	-	1,098
Tappahannock	731	603	128	-	-	-	128		-	-	128
Warsaw	274	228	46	-	-	-	46		-	-	46
Westmoreland Co-Montross	105	80	25	-	-	-	25		-	-	25
-	-	-	-	-	-	-	-		-	-	-
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* For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.

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RAPPAHANNOCK Basin: Phosphorus Credit Ledger

Compliance Year:	2025	Credit Forecasts		Preliminary Use of Credits				Credit Exchange (Pounds)			
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits		Class A Sales	Class A* Purchases	Class B Sales**
								PRICE:	\$ 1.79	\$ 6.34	\$ 0.27
The Exchange (group)	37,474	27,604	9,870	-	(199)	(114)	9,557		6,776	(2,130)	4,911
American Water-Fort AP Hill	484	384	100	-	-	-	100		-	-	100
Aqua Virginia-Pres. Lakes	267	122	145	-	-	-	145		140	-	5
Culpeper (Town)	4,112	2,741	1,371	-	-	-	1,371		-	-	1,371
FCWSA-Marshall	439	343	96	-	-	-	96		-	-	96
FCWSA-Remington	1,370	1,000	370	-	-	-	370		-	-	370
Fredericksburg	4,112	4,034	78	-	-	-	78		-	-	78
Greene Co-Rapidan	411	1,827	(1,416)	-	-	-	(1,416)		-	(1,416)	-
HRSD-Urbanna	91	805	(714)	-	-	-	(714)		-	(714)	-
KGCSA-Hopyard Farms	457	74	383	-	-	(114)	269		269	-	-
KGCSA-Oakland Park	128	39	89	-	-	-	89		89	-	-
Kilmarnock	457	238	219	-	-	-	219		219	-	-
Omega Protein	1,571	548	1,023	-	-	-	1,023		1,023	-	-
Orange (Town)	2,056	742	1,314	-	-	-	1,314		1,314	-	-
Reedville S.D.	183	119	64	-	-	-	64		-	-	64
RSA-Wilderness Shores	857	658	199	-	-	-	199		-	-	199
Spotsy Co-FMC	3,655	2,293	1,362	-	-	-	1,362		681	-	681
Spotsy Co-Massaponax	8,405	7,026	1,379	-	-	-	1,379		689	-	690
Stafford Co-L. Falls Run	7,309	3,691	3,618	-	(199)	-	3,419		2,352	-	1,067
Tappahannock	731	612	119	-	-	-	119		-	-	119
Warsaw	274	228	46	-	-	-	46		-	-	46
Westmoreland Co-Montross	105	80	25	-	-	-	25		-	-	25
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
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	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
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	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-

* For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.

** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.

RAPPAHANNOCK Basin: Phosphorus Credit Ledger											
Compliance Year:	2026	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)				
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits		Class A Sales	Class A* Purchases	Class B Sales**
								PRICE:	\$ 1.60	\$ 6.41	\$ 0.24
The Exchange (group)	40,378	29,527	10,851	-	(199)	(114)	10,538		7,214	(2,010)	5,334
American Water-Fort AP Hill	484	384	100	-	-	-	100		-	-	100
Aqua Virginia-Pres. Lakes	267	122	145	-	-	-	145		140	-	5
Culpeper (Town)	5,483	3,655	1,828	-	-	-	1,828		-	-	1,828
FCWSA-Marshall	550	447	103	-	-	-	103		-	-	103
FCWSA-Remington	1,717	1,271	446	-	-	-	446		-	-	446
Fredericksburg	4,112	4,034	78	-	-	-	78		-	-	78
Greene Co-Rapidan	548	2,558	(2,010)	-	-	-	(2,010)		-	(2,010)	-
HRSD-Urbanna	91	-	91	-	-	-	91		91	-	-
KGCSA-Hopyard Farms	457	76	381	-	-	(114)	267		267	-	-
KGCSA-Oakland Park	128	49	79	-	-	-	79		79	-	-
Kilmarnock	457	228	229	-	-	-	229		229	-	-
Omega Protein	1,571	548	1,023	-	-	-	1,023		1,023	-	-
Orange (Town)	2,741	990	1,751	-	-	-	1,751		1,751	-	-
Reedville S.D.	183	119	64	-	-	-	64		-	-	64
RSA-Wilderness Shores	1,096	860	236	-	-	-	236		-	-	236
Spotsy Co-FMC	3,655	2,366	1,289	-	-	-	1,289		644	-	645
Spotsy Co-Massaponax	8,405	7,127	1,278	-	-	-	1,278		639	-	639
Stafford Co-L. Falls Run	7,309	3,746	3,563	-	(199)	-	3,364		2,351	-	1,013
Tappahannock	731	612	119	-	-	-	119		-	-	119
Warsaw	274	228	46	-	-	-	46		-	-	46
Westmoreland Co-Montross	119	107	12	-	-	-	12		-	-	12
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
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	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-

* For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.
 ** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.

RAPPAHANNOCK Basin: Phosphorus Credit Ledger

Compliance Year:	2027	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)				
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits		Class A Sales	Class A* Purchases	Class B Sales**
								PRICE:	\$ 2.03	\$ 6.94	\$ 0.25
The Exchange (group)	40,398	29,789	10,609	-	(199)	(114)	10,296		6,538	(2,132)	5,890
American Water-Fort AP Hill	484	384	100	-	-	-	100		-	-	100
Aqua Virginia-Pres. Lakes	267	122	145	-	-	-	145		-	-	145
Culpeper (Town)	5,483	5,482	1	-	-	-	1		-	-	1
FCWSA-Marshall	550	464	86	-	-	-	86		-	-	86
FCWSA-Remington	1,717	1,288	429	-	-	-	429		-	-	429
Fredericksburg	4,112	2,064	2,048	-	-	-	2,048		-	-	2,048
Greene Co-Rapidan	548	2,680	(2,132)	-	-	-	(2,132)		-	(2,132)	-
HRSD-Urbanna	91	-	91	-	-	-	91		91	-	-
KGCSA-Hopyard Farms	457	76	381	-	-	(114)	267		-	-	267
KGCSA-Oakland Park	128	38	90	-	-	-	90		90	-	-
Kilmarnock	457	256	201	-	-	-	201		-	-	201
Omega Protein	1,591	521	1,070	-	-	-	1,070		1,070	-	-
Orange (Town)	2,741	911	1,830	-	-	-	1,830		1,830	-	-
Reedville S.D.	183	119	64	-	-	-	64		-	-	64
RSA-Wilderness Shores	1,096	860	236	-	-	-	236		-	-	236
Spotsy Co-FMC	3,655	2,439	1,216	-	-	-	1,216		608	-	608
Spotsy Co-Massaponax	8,405	7,337	1,068	-	-	-	1,068		534	-	534
Stafford Co-L. Falls Run	7,309	3,801	3,508	-	(199)	-	3,309		2,315	-	994
Tappahannock	731	612	119	-	-	-	119		-	-	119
Warsaw	274	228	46	-	-	-	46		-	-	46
Westmoreland Co-Montross	119	107	12	-	-	-	12		-	-	12
-	-	-	-	-	-	-	-		-	-	-
-	-	-	-	-	-	-	-		-	-	-
-	-	-	-	-	-	-	-		-	-	-
-	-	-	-	-	-	-	-		-	-	-
-	-	-	-	-	-	-	-		-	-	-
-	-	-	-	-	-	-	-		-	-	-
-	-	-	-	-	-	-	-		-	-	-
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-	-	-	-	-	-	-	-		-	-	-
-	-	-	-	-	-	-	-		-	-	-
-	-	-	-	-	-	-	-		-	-	-

* For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.
 ** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.

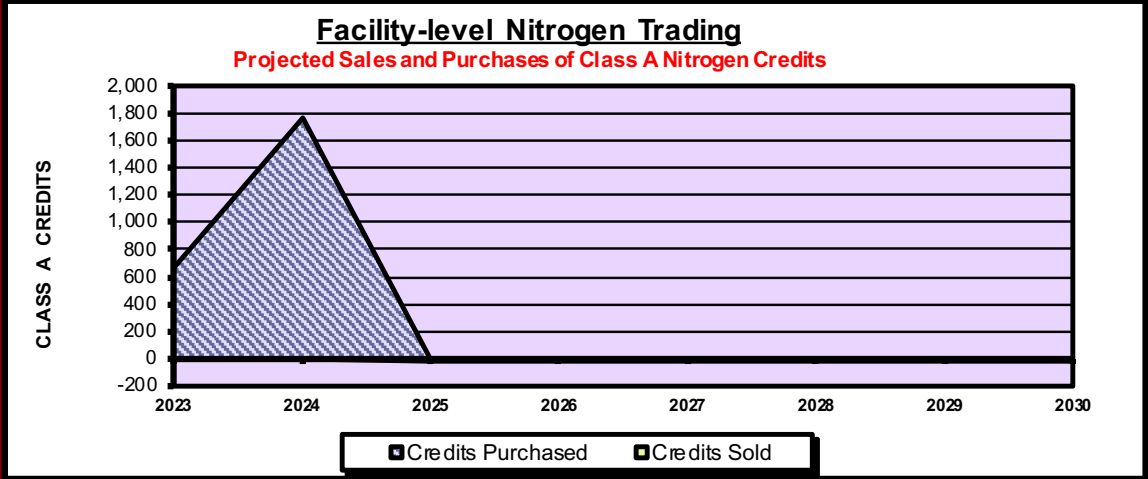
Rappahannock River Basin

Supplemental Information for Individual Facilities



NITROGEN FACILITY SUMMARY

American Water-Fort AP Hill
RAPPAHANNOCK Trading Basin

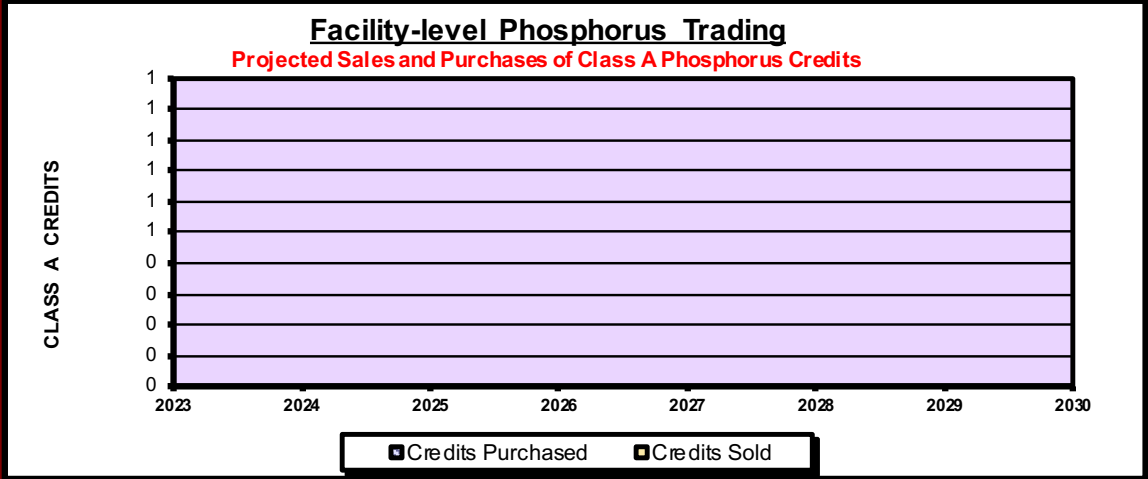


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53
Projected Flow (mgd)	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Projected Avg. Annual Concentration (mg/L)	26.00	30.00	23.50	23.50	23.50	23.50	23.50	23.50
Discharged Load (end of pipe)	7,127	8,223	6,441	6,441	6,441	6,441	6,441	6,441
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	7,127	8,223	6,441	6,441	6,441	6,441	6,441	6,441
Delivered WLA	6,457	6,457	6,457	6,457	6,457	6,457	6,457	6,457
Expected Credits (delivered)	(670)	(1,766)	16	16	16	16	16	16
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	(670)	(1,766)	16	16	16	16	16	16
Class A Credit Sales (Purchases)	(670)	(1,766)	16	16	16	16	16	16
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

American Water-Fort AP Hill
RAPPAHANNOCK Trading Basin

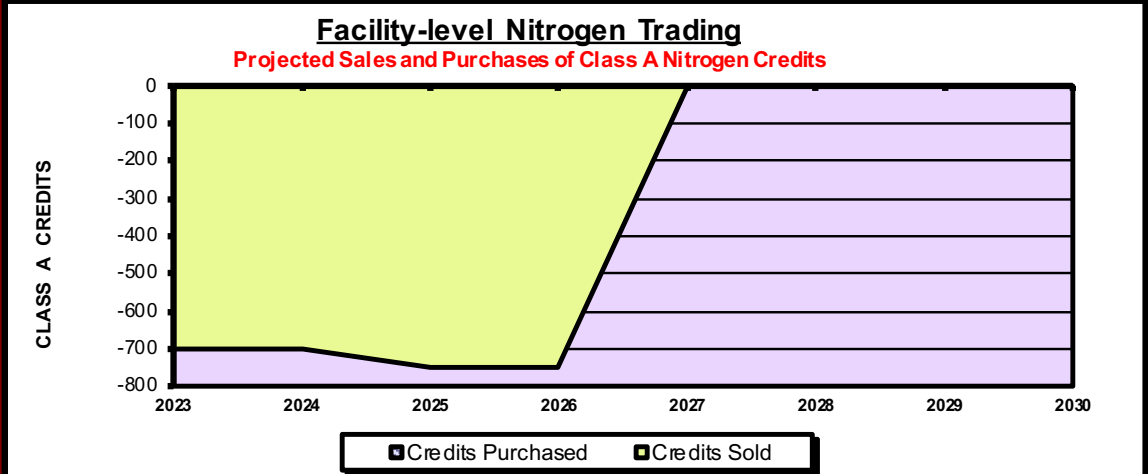


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53
Projected Flow (mgd)	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Projected Avg. Annual Concentration (mg/L)	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
Discharged Load (end of pipe)	384	384	384	384	384	384	384	384
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	384	384	384	384	384	384	384	384
Delivered WLA	484	484	484	484	484	484	484	484
Expected Credits (delivered)	100	100	100	100	100	100	100	100
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	100	100	100	100	100	100	100	100
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	100	100	100	100	100	100	100	100

NITROGEN FACILITY SUMMARY

Aqua Virginia-Pres. Lakes
RAPPAHANNOCK Trading Basin



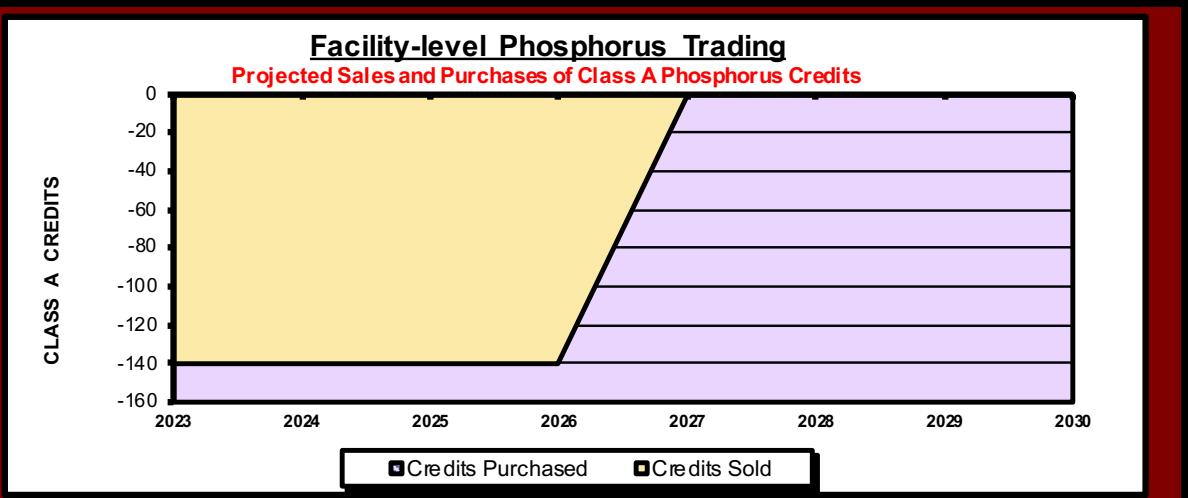
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Projected Flow (mgd)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Projected Avg. Annual Concentration (mg/L)	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Discharged Load (end of pipe)	1,267	1,267	1,218	1,218	1,218	1,218	1,218	1,218
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	1,267	1,267	1,218	1,218	1,218	1,218	1,218	1,218
Delivered WLA	1,994	1,994	1,994	1,994	1,994	1,994	1,994	1,994
Expected Credits (delivered)	727	727	776	776	776	776	776	776
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	727	727	776	776	776	776	776	776
Class A Credit Sales (Purchases)	700	700	750	750	0	0	0	0
Expected Class B Credits	27	27	26	26	776	776	776	776

PHOSPHORUS FACILITY SUMMARY

Aqua Virginia-Pres. Lakes
RAPPAHANNOCK Trading Basin



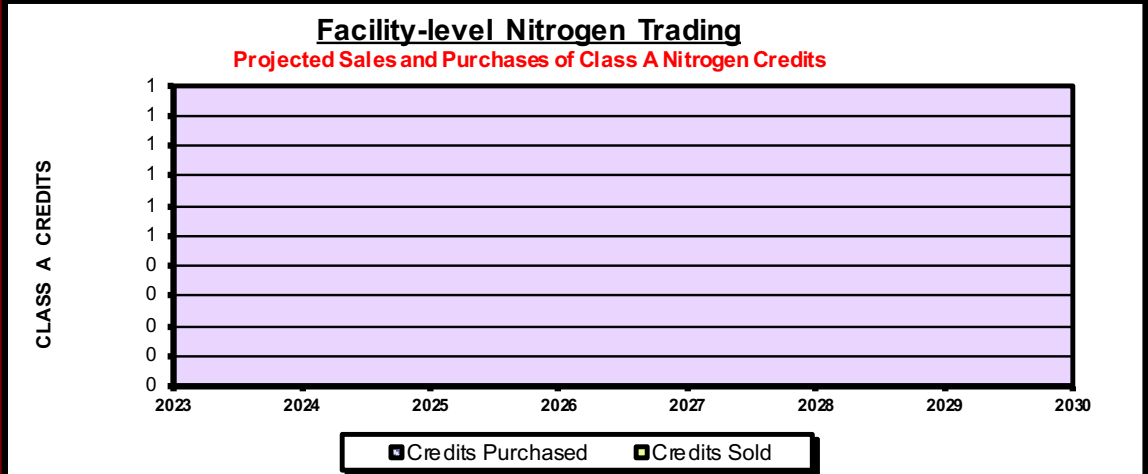
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

2023	2024	2025	2026	2027	2028	2029	2030	
<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>			
0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	
0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	
127	127	122	122	122	122	122	122	
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
127	127	122	122	122	122	122	122	
267	267	267	267	267	267	267	267	
140	140	145	145	145	145	145	145	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
140	140	145	145	145	145	145	145	
140	140	140	140	0	0	0	0	
0	0	5	5	145	145	145	145	

NITROGEN FACILITY SUMMARY

Culpeper (Town)
RAPPAHANNOCK Trading Basin

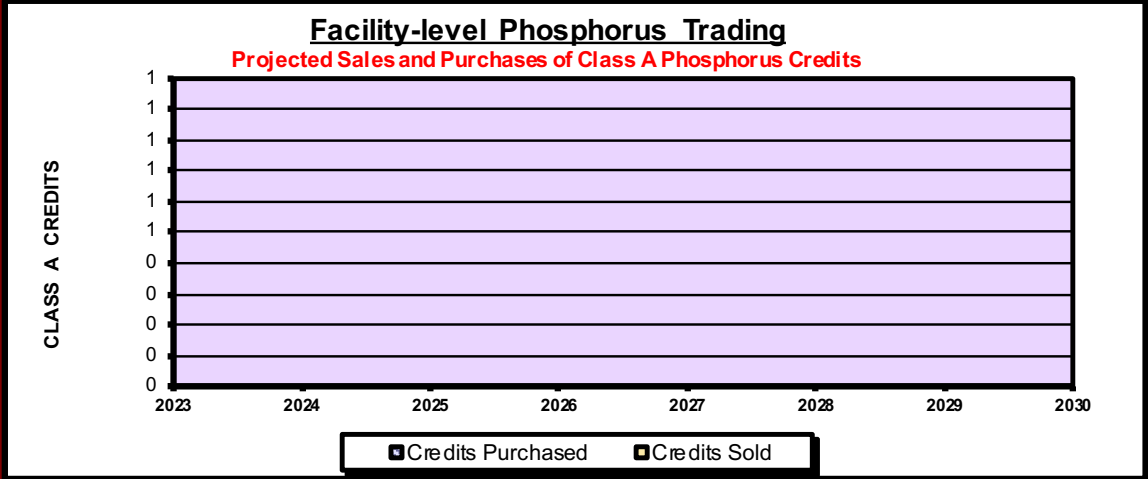


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Projected Flow (mgd)	5.80	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Projected Avg. Annual Concentration (mg/L)	3.00	3.00	3.00	3.00	4.00	4.00	4.00	4.00
Discharged Load (end of pipe)	52,993	54,820	54,820	54,820	73,093	73,093	73,093	73,093
Delivery Factor	0.49	0.49	0.49	0.63	0.63	0.63	0.63	0.63
Expected Load	25,966	26,862	26,862	34,537	46,049	46,049	46,049	46,049
Delivered WLA	35,816	35,816	35,816	46,049	46,049	46,049	46,049	46,049
Expected Credits (delivered)	9,850	8,954	8,954	11,512	0	0	0	0
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	9,850	8,954	8,954	11,512	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	9,850	8,954	8,954	11,512	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Culpeper (Town)
RAPPAHANNOCK Trading Basin



Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Projected Flow (mgd)	5.80	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Projected Avg. Annual Concentration (mg/L)	0.20	0.20	0.20	0.20	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	3,533	3,655	3,655	3,655	5,482	5,482	5,482	5,482
Delivery Factor	0.75	0.75	0.75	1.00	1.00	1.00	1.00	1.00
Expected Load	2,650	2,741	2,741	3,655	5,482	5,482	5,482	5,482
Delivered WLA	4,112	4,112	4,112	5,483	5,483	5,483	5,483	5,483
Expected Credits (delivered)	1,462	1,371	1,371	1,828	1	1	1	1
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	1,462	1,371	1,371	1,828	1	1	1	1
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	1,462	1,371	1,371	1,828	1	1	1	1

Owner Bubble: Fauquier County Water and Sanitation Authority

The facilities listed below have received an aggregated mass load limit pursuant to 9 VAC 25-820-70, Part 1.B.2., which is also referred to as an “owner bubble”. Accordingly, compliance is determined solely on an aggregate basis rather than by comparison of individual facility loads with respective individual WLAs.

The “Credit Transferred within Bubble” section of each table forecasts the use of Credits within the owner bubble during each Compliance Year, and must necessarily sum to zero. The specific Credit transfers shown in this table are provided for internal planning purposes only and, accordingly, are not binding and may change based on the actual performance of individual facilities within the bubble.

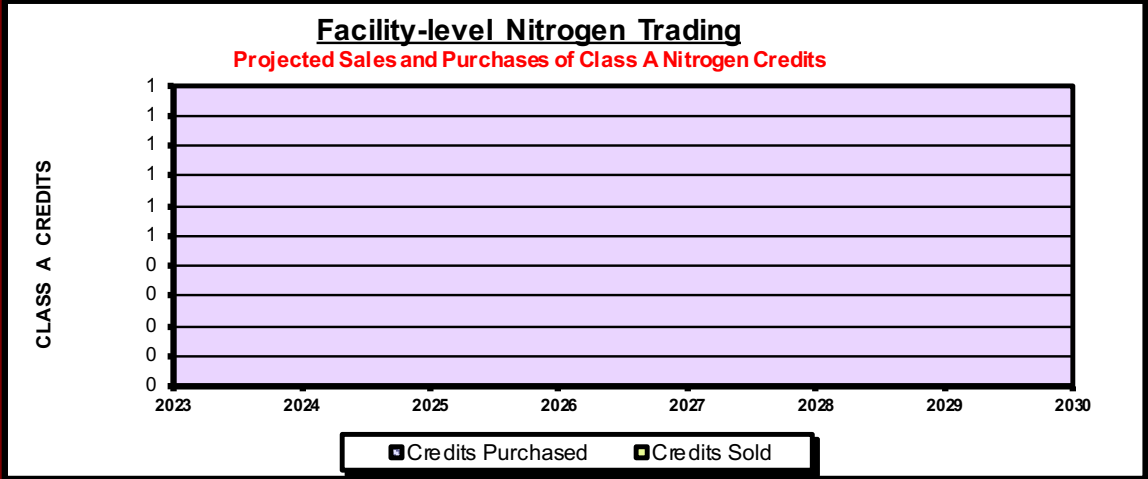
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply with the aggregate Delivered WLA of the bubble.

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
Marshall	648	741	834	1,851	2,037	2,222	2,407	2,592
Remington	(648)	(741)	(834)	(1,851)	(2,037)	(2,222)	(2,407)	(2,592)
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Marshall	-	-	-	-	-	-	-	-
Remington	2,814	2,601	2,389	3,787	3,384	2,982	2,363	1,961
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	2,814	2,601	2,389	3,787	3,384	2,982	2,363	1,961
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
<i>Expected Class B Credits</i>	<i>2,814</i>	<i>2,601</i>	<i>2,389</i>	<i>3,787</i>	<i>3,384</i>	<i>2,982</i>	<i>2,363</i>	<i>1,961</i>
<i>WQIF-Held Credits</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>

PHOSPHORUS Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
Marshall	-	-	-	-	-	-	-	-
Remington	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Marshall	124	110	96	103	86	69	52	35
Remington	397	383	370	446	429	412	377	360
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	521	493	466	549	515	481	429	395
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
<i>Expected Class B Credits</i>	<i>521</i>	<i>493</i>	<i>466</i>	<i>549</i>	<i>515</i>	<i>481</i>	<i>429</i>	<i>395</i>
<i>WQIF-Held Credits</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>

NITROGEN FACILITY SUMMARY

FCWSA-Marshall
RAPPAHANNOCK Trading Basin

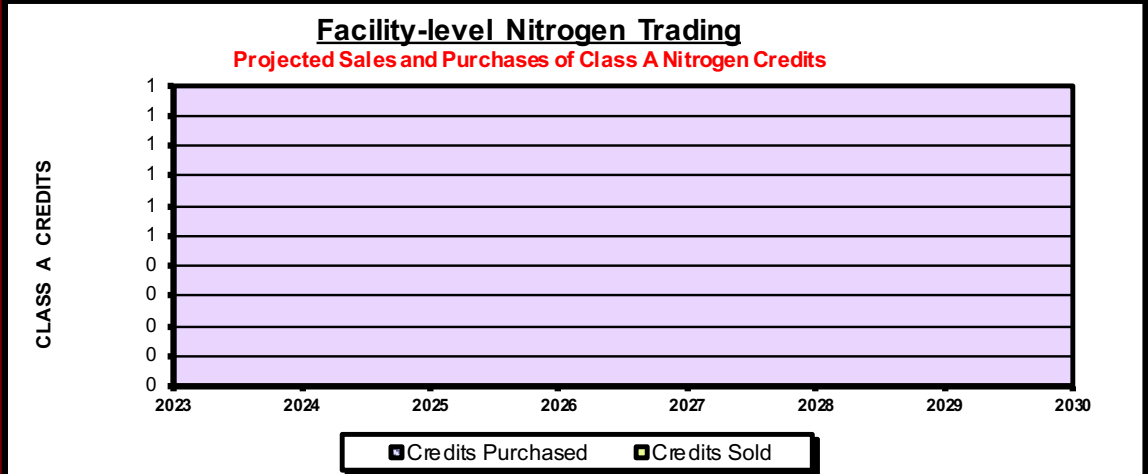


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64
Projected Flow (mgd)	0.46	0.48	0.50	0.52	0.54	0.56	0.58	0.60
Projected Avg. Annual Concentration (mg/L)	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Discharged Load (end of pipe)	11,208	11,695	12,182	12,670	13,157	13,644	14,131	14,619
Delivery Factor	0.19	0.19	0.19	0.38	0.38	0.38	0.38	0.38
Expected Load	2,129	2,222	2,315	4,814	5,000	5,185	5,370	5,555
Delivered WLA	1,481	1,481	1,481	2,963	2,963	2,963	2,963	2,963
Expected Credits (delivered)	(648)	(741)	(834)	(1,851)	(2,037)	(2,222)	(2,407)	(2,592)
Transfers In (Out) within Owner Bubble	648	741	834	1,851	2,037	2,222	2,407	2,592
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

FCWSA-Remington
RAPPAHANNOCK Trading Basin

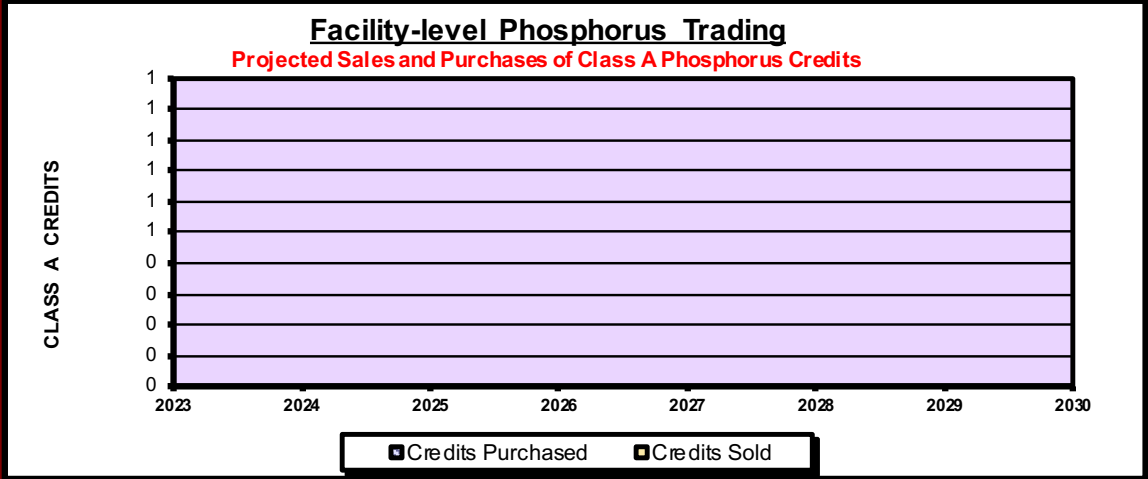


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Projected Flow (mgd)	1.42	1.44	1.46	1.48	1.50	1.52	1.56	1.58
Projected Avg. Annual Concentration (mg/L)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Discharged Load (end of pipe)	17,299	17,542	17,786	18,030	18,273	18,517	19,004	19,248
Delivery Factor	0.49	0.49	0.49	0.89	0.89	0.89	0.89	0.89
Expected Load	8,476	8,596	8,715	16,046	16,263	16,480	16,914	17,131
Delivered WLA	11,938	11,938	11,938	21,684	21,684	21,684	21,684	21,684
Expected Credits (delivered)	3,462	3,342	3,223	5,638	5,421	5,204	4,770	4,553
Transfers In (Out) within Owner Bubble	(648)	(741)	(834)	(1,851)	(2,037)	(2,222)	(2,407)	(2,592)
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	2,814	2,601	2,389	3,787	3,384	2,982	2,363	1,961
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	2,814	2,601	2,389	3,787	3,384	2,982	2,363	1,961

PHOSPHORUS FACILITY SUMMARY

FCWSA-Marshall
RAPPAHANNOCK Trading Basin

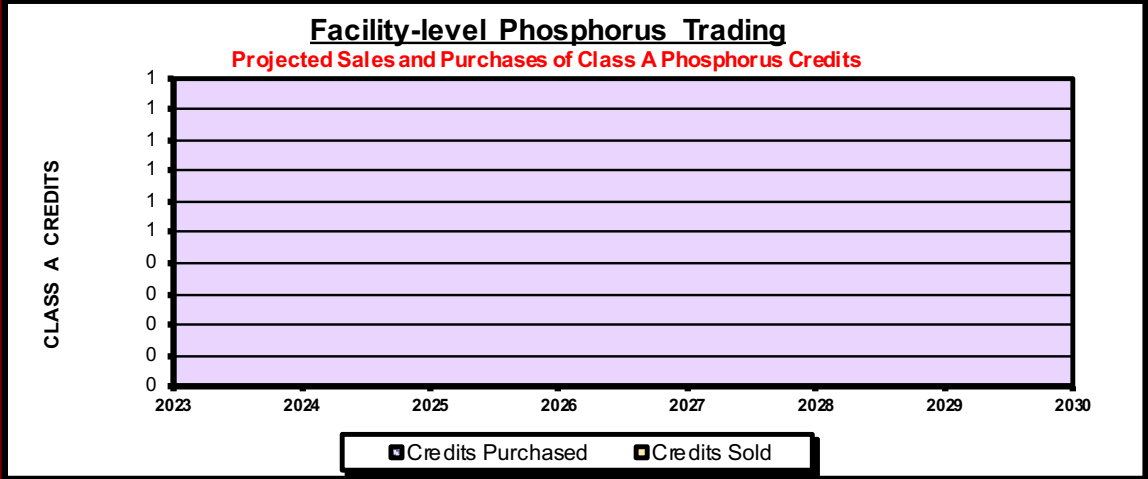


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64
Projected Flow (mgd)	0.46	0.48	0.50	0.52	0.54	0.56	0.58	0.60
Projected Avg. Annual Concentration (mg/L)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	420	439	457	475	493	512	530	548
Delivery Factor	0.75	0.75	0.75	0.94	0.94	0.94	0.94	0.94
Expected Load	315	329	343	447	464	481	498	515
Delivered WLA	439	439	439	550	550	550	550	550
Expected Credits (delivered)	124	110	96	103	86	69	52	35
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	124	110	96	103	86	69	52	35
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	124	110	96	103	86	69	52	35

PHOSPHORUS FACILITY SUMMARY

FCWSA-Remington
RAPPAHANNOCK Trading Basin

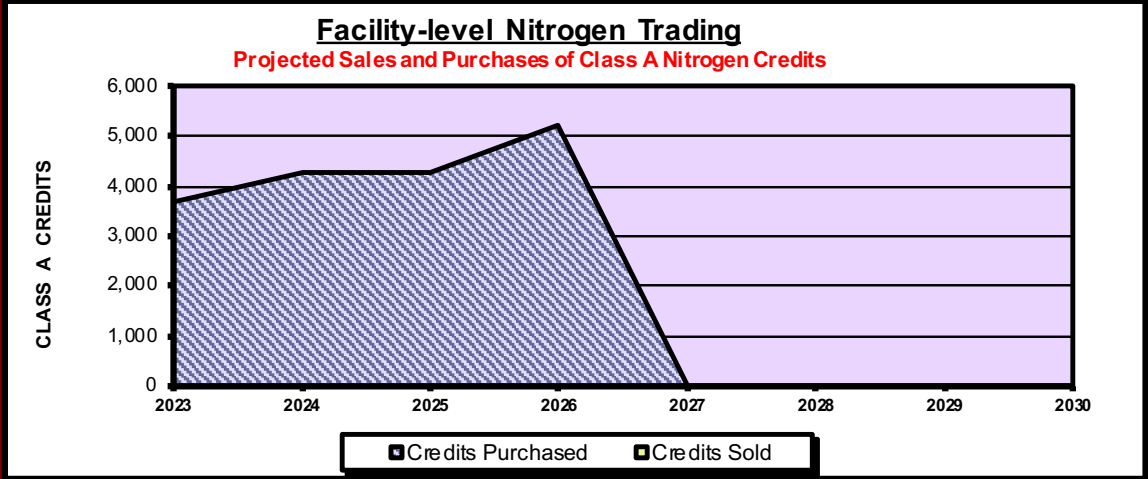


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Projected Flow (mgd)	1.42	1.44	1.46	1.48	1.50	1.52	1.56	1.58
Projected Avg. Annual Concentration (mg/L)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	1,297	1,316	1,334	1,352	1,371	1,389	1,425	1,444
Delivery Factor	0.75	0.75	0.75	0.94	0.94	0.94	0.94	0.94
Expected Load	973	987	1,000	1,271	1,288	1,305	1,340	1,357
Delivered WLA	1,370	1,370	1,370	1,717	1,717	1,717	1,717	1,717
Expected Credits (delivered)	397	383	370	446	429	412	377	360
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	397	383	370	446	429	412	377	360
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	397	383	370	446	429	412	377	360

NITROGEN FACILITY SUMMARY

Fredericksburg
RAPPAHANNOCK Trading Basin

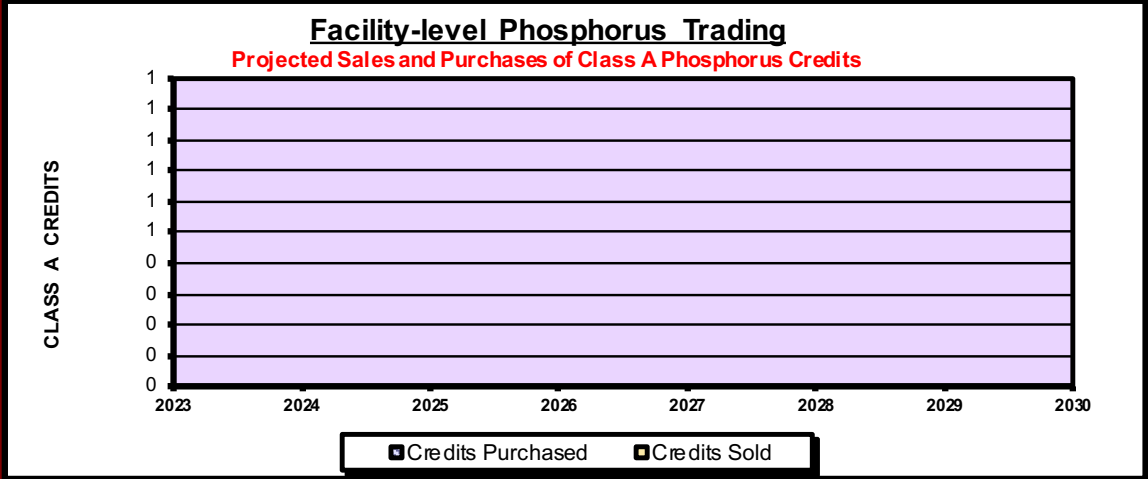


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Projected Flow (mgd)	3.05	3.08	3.08	3.08	3.08	3.10	3.12	3.14
Projected Avg. Annual Concentration (mg/L)	6.30	6.30	6.30	6.40	3.00	3.00	3.00	3.00
Discharged Load (end of pipe)	58,520	59,096	59,096	60,034	28,141	28,324	28,506	28,689
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	58,520	59,096	59,096	60,034	28,141	28,324	28,506	28,689
Delivered WLA	54,820	54,820	54,820	54,820	54,820	54,820	54,820	54,820
Expected Credits (delivered)	(3,700)	(4,276)	(4,276)	(5,214)	26,679	26,496	26,314	26,131
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	(3,700)	(4,276)	(4,276)	(5,214)	26,679	26,496	26,314	26,131
Class A Credit Sales (Purchases)	(3,700)	(4,276)	(4,276)	(5,214)	0	0	0	0
Expected Class B Credits	0	0	0	0	26,679	26,496	26,314	26,131

PHOSPHORUS FACILITY SUMMARY

Fredericksburg
RAPPAHANNOCK Trading Basin

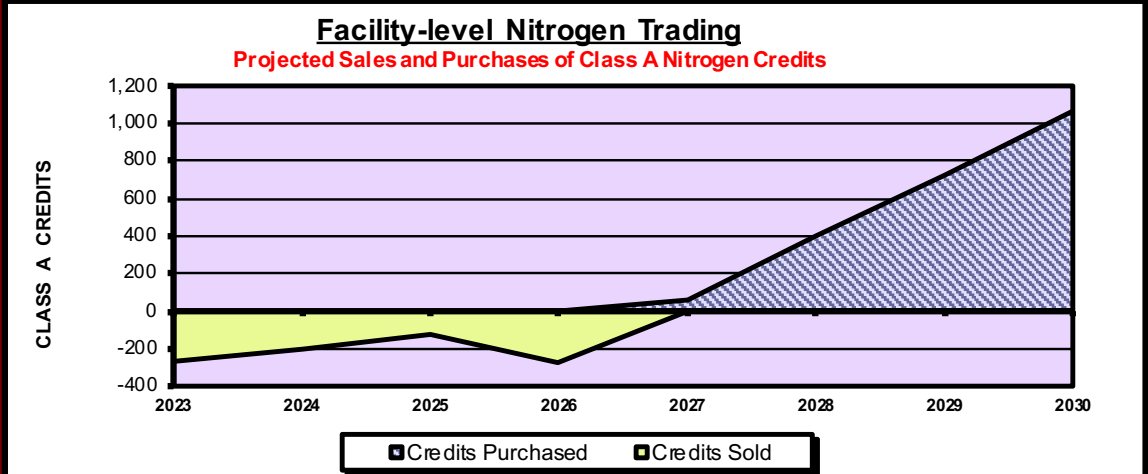


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Projected Flow (mgd)	3.05	3.08	3.08	3.08	3.08	3.10	3.12	3.14
Projected Avg. Annual Concentration (mg/L)	0.43	0.43	0.43	0.43	0.22	0.22	0.22	0.22
Discharged Load (end of pipe)	3,994	4,034	4,034	4,034	2,064	2,077	2,090	2,104
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	3,994	4,034	4,034	4,034	2,064	2,077	2,090	2,104
Delivered WLA	4,112	4,112	4,112	4,112	4,112	4,112	4,112	4,112
Expected Credits (delivered)	118	78	78	78	2,048	2,035	2,022	2,008
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	118	78	78	78	2,048	2,035	2,022	2,008
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	118	78	78	78	2,048	2,035	2,022	2,008

NITROGEN FACILITY SUMMARY

Greene Co-Rapidan
RAPPAHANNOCK Trading Basin



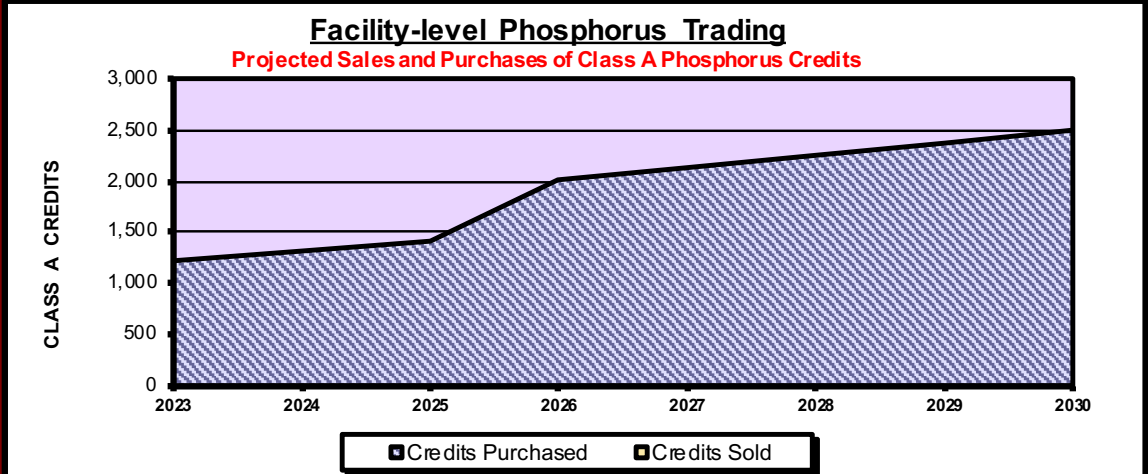
Loading & Credit Summary

Design Flow (mgd)	0.60
Projected Flow (mgd)	0.18
Projected Avg. Annual Concentration (mg/L)	11.00
Discharged Load (end of pipe)	
Delivery Factor	0.21
Expected Load	1,266
Delivered WLA	1,535
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	
Class A Credit Sales (Purchases)	
Expected Class B Credits	

2023	2024	2025	2026	2027	2028	2029	2030	
Planning Period					Future Estimates (non-binding)			
0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	
0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	
11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	
6,030	6,365	6,700	7,035	7,370	7,705	8,040	8,375	
0.21	0.21	0.21	1.00	1.00	1.00	1.00	1.00	
1,266	1,337	1,407	7,035	7,370	7,705	8,040	8,375	
1,535	1,535	1,535	7,309	7,309	7,309	7,309	7,309	
269	198	128	274	(61)	(396)	(731)	(1,066)	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
269	198	128	274	(61)	(396)	(731)	(1,066)	
269	198	128	274	(61)	(396)	(731)	(1,066)	
0	0	0	0	0	0	0	0	

PHOSPHORUS FACILITY SUMMARY

Greene Co-Rapidan
RAPPAHANNOCK Trading Basin

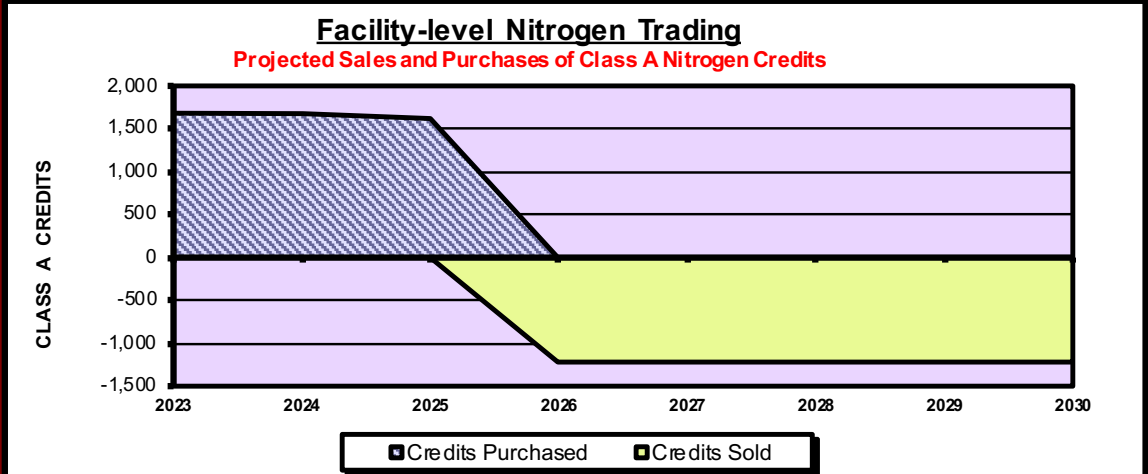


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Projected Flow (mgd)	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25
Projected Avg. Annual Concentration (mg/L)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Discharged Load (end of pipe)	2,193	2,315	2,436	2,558	2,680	2,802	2,924	3,046
Delivery Factor	0.75	0.75	0.75	1.00	1.00	1.00	1.00	1.00
Expected Load	1,645	1,736	1,827	2,558	2,680	2,802	2,924	3,046
Delivered WLA	411	411	411	548	548	548	548	548
Expected Credits (delivered)	(1,234)	(1,325)	(1,416)	(2,010)	(2,132)	(2,254)	(2,376)	(2,498)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	(1,234)	(1,325)	(1,416)	(2,010)	(2,132)	(2,254)	(2,376)	(2,498)
Class A Credit Sales (Purchases)	(1,234)	(1,325)	(1,416)	(2,010)	(2,132)	(2,254)	(2,376)	(2,498)
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

HRSD-Urbanna
RAPPAHANNOCK Trading Basin

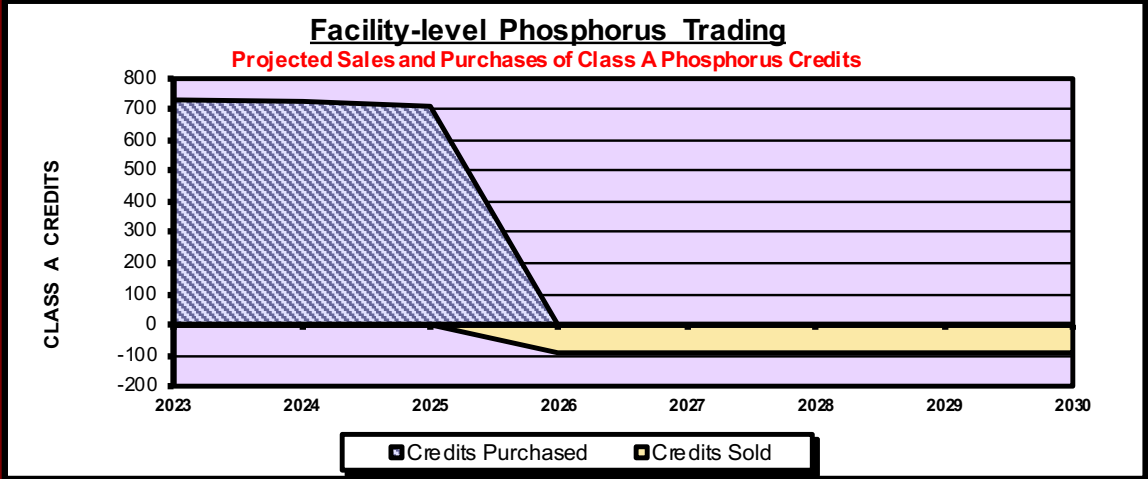


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Projected Flow (mgd)	0.05	0.05	0.05	-	-	-	-	-
Projected Avg. Annual Concentration (mg/L)	18.00	18.00	18.00	-	-	-	-	-
Discharged Load (end of pipe)	2,900	2,888	2,841	0	0	0	0	0
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	2,900	2,888	2,841	0	0	0	0	0
Delivered WLA	1,218	1,218	1,218	1,218	1,218	1,218	1,218	1,218
Expected Credits (delivered)	(1,682)	(1,670)	(1,623)	1,218	1,218	1,218	1,218	1,218
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	(1,682)	(1,670)	(1,623)	1,218	1,218	1,218	1,218	1,218
Class A Credit Sales (Purchases)	(1,682)	(1,670)	(1,623)	1,218	1,218	1,218	1,218	1,218
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

HRSD-Urbanna
RAPPAHANNOCK Trading Basin



Loading & Credit Summary

Design Flow (mgd)	0.10
Projected Flow (mgd)	0.05
Projected Avg. Annual Concentration (mg/L)	5.10
Discharged Load (end of pipe)	822
Delivery Factor	1.00
Expected Load	822
Delivered WLA	91
Expected Credits (delivered)	(731)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(731)
Class A Credit Sales (Purchases)	(731)
Expected Class B Credits	0

2023	2024	2025	2026	2027	2028	2029	2030
<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
0.05	0.05	0.05	-	-	-	-	-
5.10	5.10	5.10	-	-	-	-	-
822	818	805	0	0	0	0	0
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
822	818	805	0	0	0	0	0
91	91	91	91	91	91	91	91
(731)	(727)	(714)	91	91	91	91	91
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
(731)	(727)	(714)	91	91	91	91	91
(731)	(727)	(714)	91	91	91	91	91
0	0	0	0	0	0	0	0

Owner Bubble: King George County SA (Rappahannock)

The facilities listed below have received an aggregated mass load limit pursuant to 9 VAC 25-820-70, Part 1.B.2., which is also referred to as an “owner bubble”. Accordingly, compliance is determined solely on an aggregate basis rather than by comparison of individual facility loads with respective individual WLAs.

The “Credit Transferred within Bubble” section of each table forecasts the use of Credits within the owner bubble during each Compliance Year, and must necessarily sum to zero. The specific Credit transfers shown in this table are provided for internal planning purposes only and, accordingly, are not binding and may change based on the actual performance of individual facilities within the bubble.

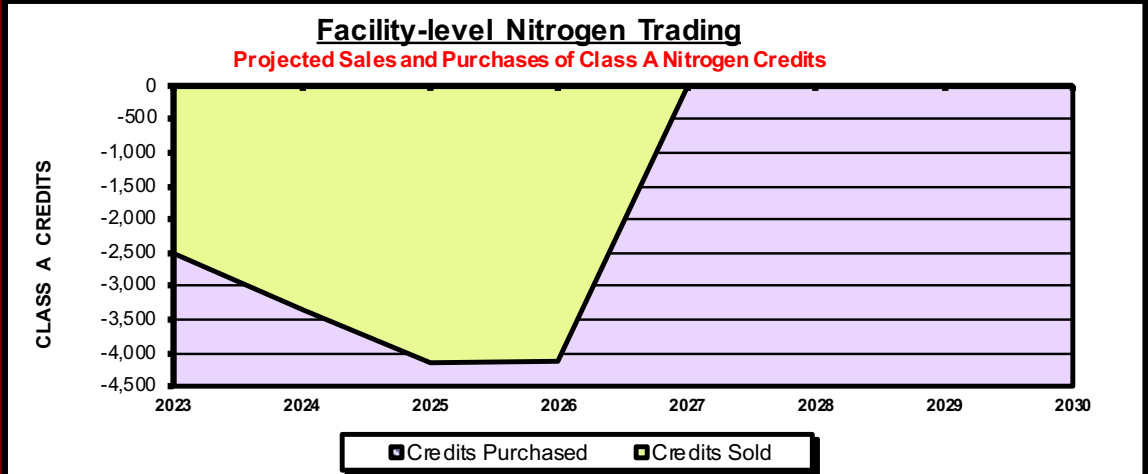
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply with the aggregate Delivered WLA of the bubble.

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
Hopyard Farms	(487)	(121)	-	-	-	-	-	-
Oakland Park	487	121	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Hopyard Farms	2,619	3,351	4,149	4,140	4,140	4,055	3,712	3,712
Oakland Park	-	-	1,153	1,015	1,213	1,213	1,114	1,114
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	2,619	3,351	5,302	5,155	5,353	5,268	4,826	4,826
Class A Sales (Purchases)	2,500	3,351	5,302	5,155	1,213	1,213	1,114	1,114
<i>Expected Class B Credits</i>	119	0	0	0	4,140	4,055	3,712	3,712
<i>WQIF-Held Credits</i>	1,523	1,523	1,523	1,523	1,523	1,523	1,523	1,523

PHOSPHORUS Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
Hopyard Farms	(91)	(24)	-	-	-	-	-	-
Oakland Park	91	24	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Hopyard Farms	33	136	269	267	267	252	191	191
Oakland Park	-	-	89	79	90	90	82	82
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	33	136	358	346	357	342	273	273
Class A Sales (Purchases)	0	136	358	346	90	90	82	82
<i>Expected Class B Credits</i>	33	0	0	0	267	252	191	191
<i>WQIF-Held Credits</i>	114	114	114	114	114	114	114	114

NITROGEN FACILITY SUMMARY

KGCSA-Hopyard Farms
RAPPAHANNOCK Trading Basin

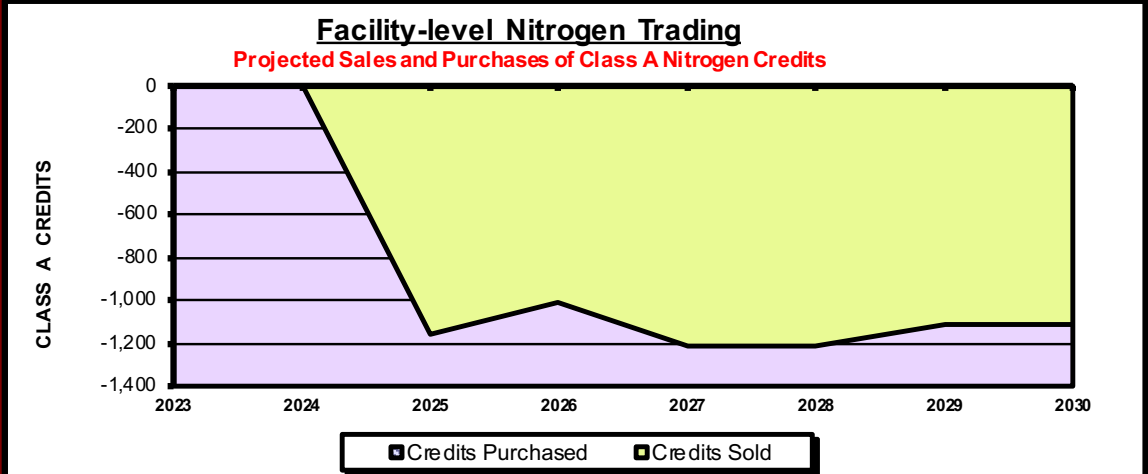


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Projected Flow (mgd)	0.08	0.06	0.05	0.05	0.05	0.06	0.10	0.10
Projected Avg. Annual Concentration (mg/L)	6.00	6.00	2.81	2.81	2.81	2.81	2.81	2.81
Discharged Load (end of pipe)	1,462	1,096	419	428	428	513	856	856
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	1,462	1,096	419	428	428	513	856	856
Delivered WLA	6,091	6,091	6,091	6,091	6,091	6,091	6,091	6,091
Expected Credits (delivered)	4,629	4,995	5,672	5,663	5,663	5,578	5,235	5,235
Transfers In (Out) within Owner Bubble	(487)	(121)	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	(1,523)	(1,523)	(1,523)	(1,523)	(1,523)	(1,523)	(1,523)	(1,523)
Expected Net Credits	2,619	3,351	4,149	4,140	4,140	4,055	3,712	3,712
Class A Credit Sales (Purchases)	2,500	3,351	4,149	4,140	0	0	0	0
Expected Class B Credits	119	0	0	0	4,140	4,055	3,712	3,712

NITROGEN FACILITY SUMMARY

KGCSA-Oakland Park
RAPPAHANNOCK Trading Basin



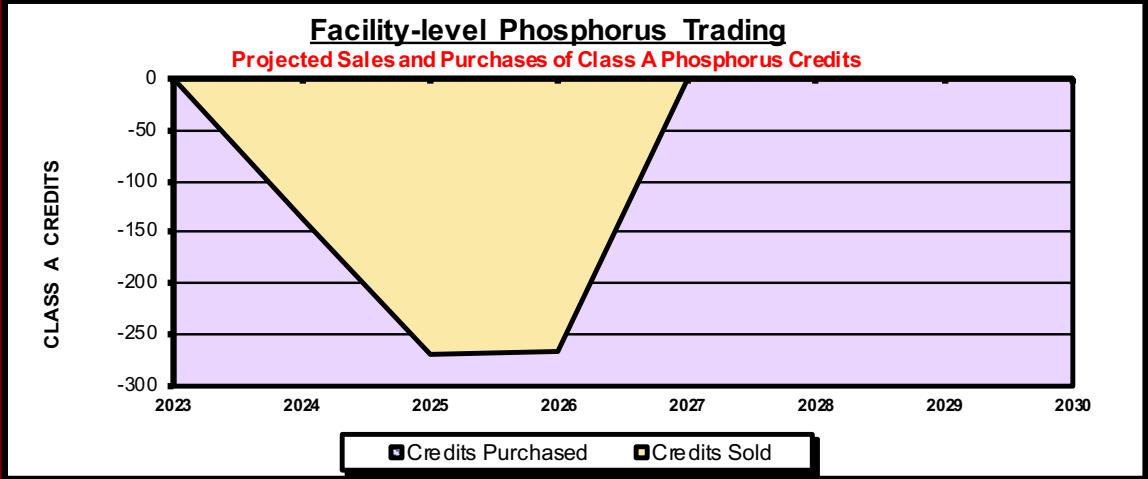
Loading & Credit Summary

Design Flow (mgd)	0.14
Projected Flow (mgd)	0.06
Projected Avg. Annual Concentration (mg/L)	12.00
Discharged Load (end of pipe)	
Delivery Factor	1.00
Expected Load	2,193
Delivered WLA	1,706
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	487
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	0
Class A Credit Sales (Purchases)	0
Expected Class B Credits	0

2023	2024	2025	2026	2027	2028	2029	2030
Planning Period					Future Estimates (non-binding)		
0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
0.06	0.05	0.04	0.05	0.05	0.05	0.06	0.06
12.00	12.00	4.54	4.54	3.24	3.24	3.24	3.24
2,193	1,827	553	691	493	493	592	592
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2,193	1,827	553	691	493	493	592	592
1,706	1,706	1,706	1,706	1,706	1,706	1,706	1,706
(487)	(121)	1,153	1,015	1,213	1,213	1,114	1,114
487	121	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	1,153	1,015	1,213	1,213	1,114	1,114
0	0	1,153	1,015	1,213	1,213	1,114	1,114
0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

KGCSA-Hopyard Farms
RAPPAHANNOCK Trading Basin

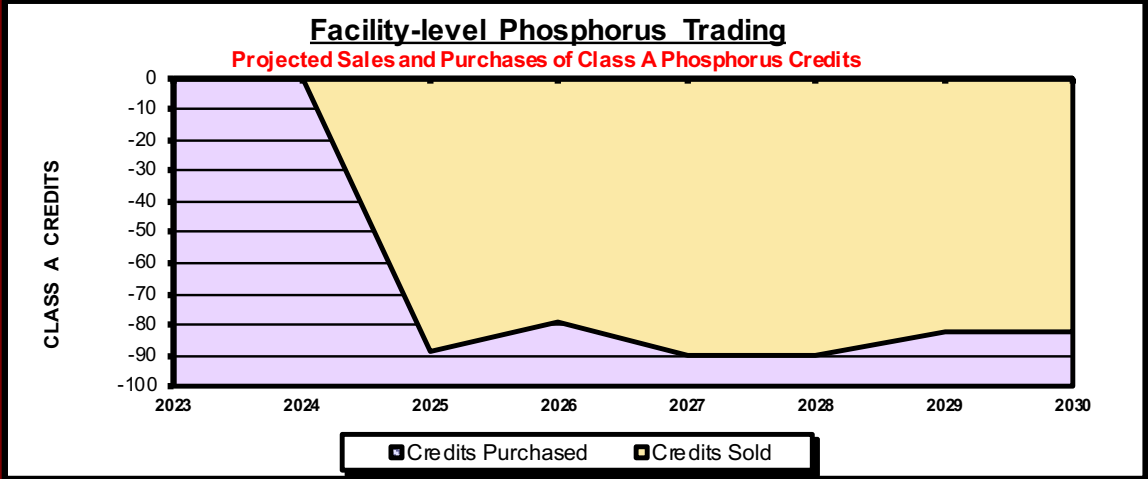


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Projected Flow (mgd)	0.08	0.06	0.05	0.05	0.05	0.06	0.10	0.10
Projected Avg. Annual Concentration (mg/L)	0.90	1.00	0.50	0.50	0.50	0.50	0.50	0.50
Discharged Load (end of pipe)	219	183	74	76	76	91	152	152
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	219	183	74	76	76	91	152	152
Delivered WLA	457	457	457	457	457	457	457	457
Expected Credits (delivered)	238	274	383	381	381	366	305	305
Transfers In (Out) within Owner Bubble	(91)	(24)	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	(114)	(114)	(114)	(114)	(114)	(114)	(114)	(114)
Expected Net Credits	33	136	269	267	267	252	191	191
Class A Credit Sales (Purchases)	0	136	269	267	0	0	0	0
Expected Class B Credits	33	0	0	0	267	252	191	191

PHOSPHORUS FACILITY SUMMARY

KGCSA-Oakland Park
RAPPAHANNOCK Trading Basin

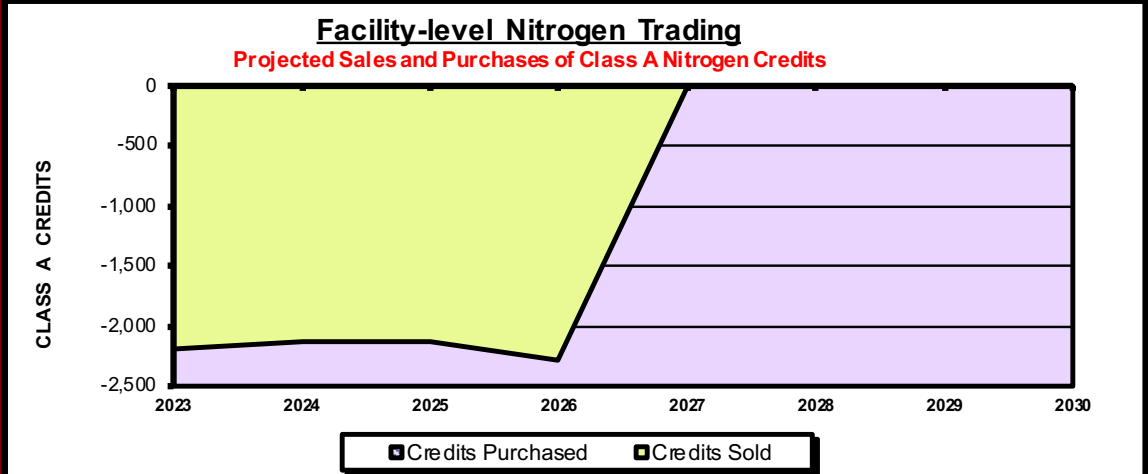


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Projected Flow (mgd)	0.06	0.05	0.04	0.05	0.05	0.05	0.06	0.06
Projected Avg. Annual Concentration (mg/L)	1.20	1.00	0.32	0.32	0.25	0.25	0.25	0.25
Discharged Load (end of pipe)	219	152	39	49	38	38	46	46
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	219	152	39	49	38	38	46	46
Delivered WLA	128	128	128	128	128	128	128	128
Expected Credits (delivered)	(91)	(24)	89	79	90	90	82	82
Transfers In (Out) within Owner Bubble	91	24	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	89	79	90	90	82	82
Class A Credit Sales (Purchases)	0	0	89	79	90	90	82	82
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

Kilmarnock
RAPPAHANNOCK Trading Basin



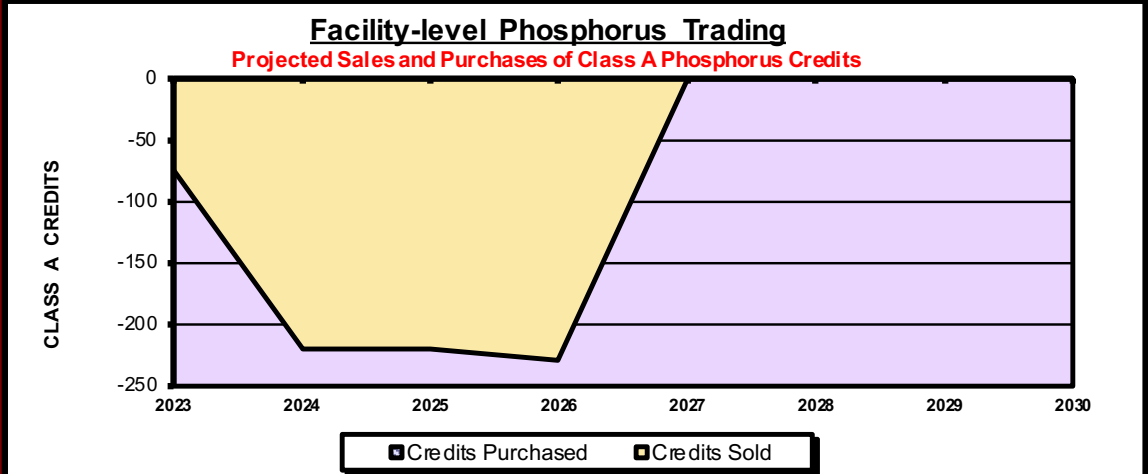
Loading & Credit Summary

Design Flow (mgd)	0.50
Projected Flow (mgd)	0.35
Projected Avg. Annual Concentration (mg/L)	3.00
Discharged Load (end of pipe)	
Delivery Factor	1.00
Expected Load	3,198
Delivered WLA	6,091
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	2,893
Class A Credit Sales (Purchases)	2,200
Expected Class B Credits	693

2023	2024	2025	2026	2027	2028	2029	2030
<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
0.35	0.26	0.26	0.25	0.28	0.30	0.30	0.33
3.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
3,198	3,959	3,959	3,807	4,264	4,568	4,568	5,025
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3,198	3,959	3,959	3,807	4,264	4,568	4,568	5,025
6,091	6,091	6,091	6,091	6,091	6,091	6,091	6,091
2,893	2,132	2,132	2,284	1,827	1,523	1,523	1,066
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
2,893	2,132	2,132	2,284	1,827	1,523	1,523	1,066
2,200	2,132	2,132	2,284	0	0	0	0
693	0	0	0	1,827	1,523	1,523	1,066

PHOSPHORUS FACILITY SUMMARY

Kilmarnock
RAPPAHANNOCK Trading Basin

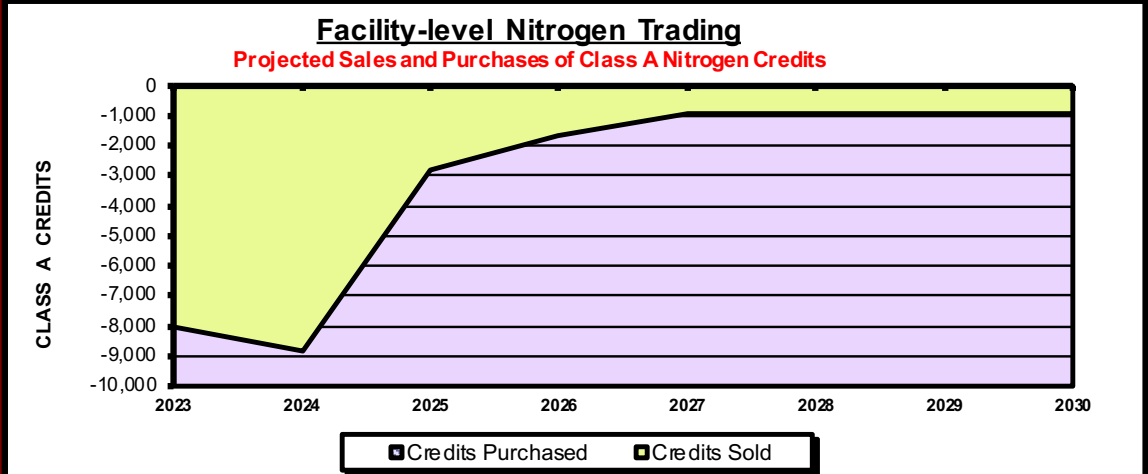


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Projected Flow (mgd)	0.35	0.26	0.26	0.25	0.28	0.30	0.30	0.33
Projected Avg. Annual Concentration (mg/L)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	320	238	238	228	256	274	274	302
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	320	238	238	228	256	274	274	302
Delivered WLA	457	457	457	457	457	457	457	457
Expected Credits (delivered)	137	219	219	229	201	183	183	155
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	137	219	219	229	201	183	183	155
Class A Credit Sales (Purchases)	75	219	219	229	0	0	0	0
Expected Class B Credits	62	0	0	0	201	183	183	155

NITROGEN FACILITY SUMMARY

Omega Protein
RAPPAHANNOCK Trading Basin



Loading & Credit Summary

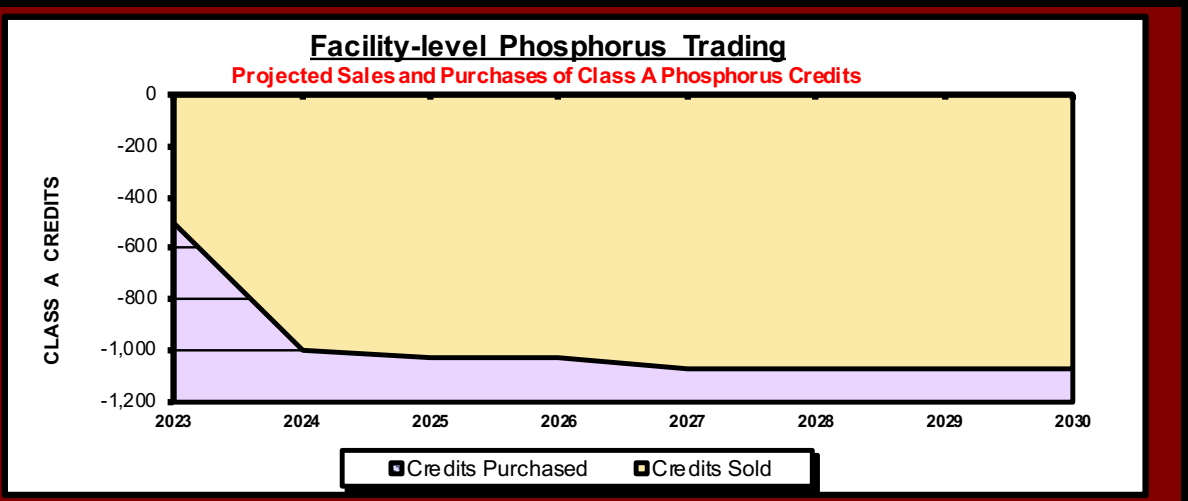
Design Flow (mgd)	3.21
Projected Flow (mgd)	0.20
Projected Avg. Annual Concentration (mg/L)	20.00
Discharged Load (end of pipe)	12,182
Delivery Factor	1.00
Expected Load	12,182
Delivered WLA*	21,113
Expected Credits (delivered)	8,931
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	8,931
Class A Credit Sales (Purchases)	8,000
Expected Class B Credits	931

2023	2024	2025	2026	2027	2028	2029	2030
Planning Period					Future Estimates (non-binding)		
3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21
0.20	0.20	0.20	0.20	0.19	0.19	0.19	0.19
20.00	20.00	30.00	32.00	35.00	35.00	35.00	35.00
12,182	12,182	18,273	19,492	20,253	20,253	20,253	20,253
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
12,182	12,182	18,273	19,492	20,253	20,253	20,253	20,253
21,113	21,113	21,113	21,113	21,213	21,213	21,213	21,213
8,931	8,931	2,840	1,621	960	960	960	960
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
8,931	8,931	2,840	1,621	960	960	960	960
8,000	8,831	2,840	1,621	960	960	960	960
931	100	0	0	0	0	0	0

* Reflects 100 pound WLA transfer through 2026 to the Children's Bible Ministries of Virginia, Inc.

PHOSPHORUS FACILITY SUMMARY

Omega Protein
RAPPAHANNOCK Trading Basin



Loading & Credit Summary

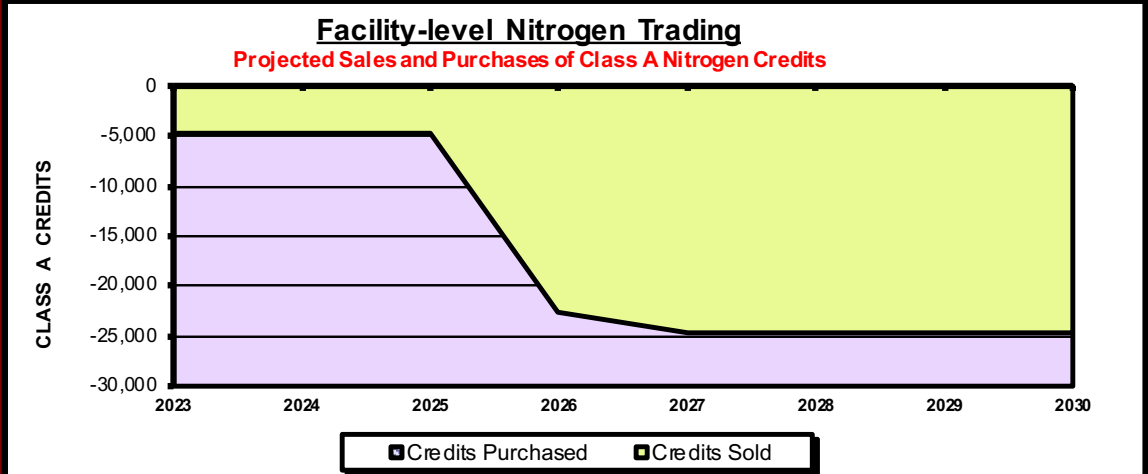
Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA*
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

2023	2024	2025	2026	2027	2028	2029	2030	
Planning Period					Future Estimates (non-binding)			
3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	
0.20	0.20	0.20	0.20	0.19	0.19	0.19	0.19	
0.80	0.80	0.90	0.90	0.90	0.90	0.90	0.90	
487	487	548	548	521	521	521	521	
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
487	487	548	548	521	521	521	521	
1,571	1,571	1,571	1,571	1,591	1,591	1,591	1,591	
1,084	1,084	1,023	1,023	1,070	1,070	1,070	1,070	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
1,084	1,084	1,023	1,023	1,070	1,070	1,070	1,070	
500	1,000	1,023	1,023	1,070	1,070	1,070	1,070	
584	84	0	0	0	0	0	0	

* Reflects 20 pound WLA transfer through 2026 to the Children's Bible Ministries of Virginia, Inc.

NITROGEN FACILITY SUMMARY

Orange (Town)
RAPPAHANNOCK Trading Basin

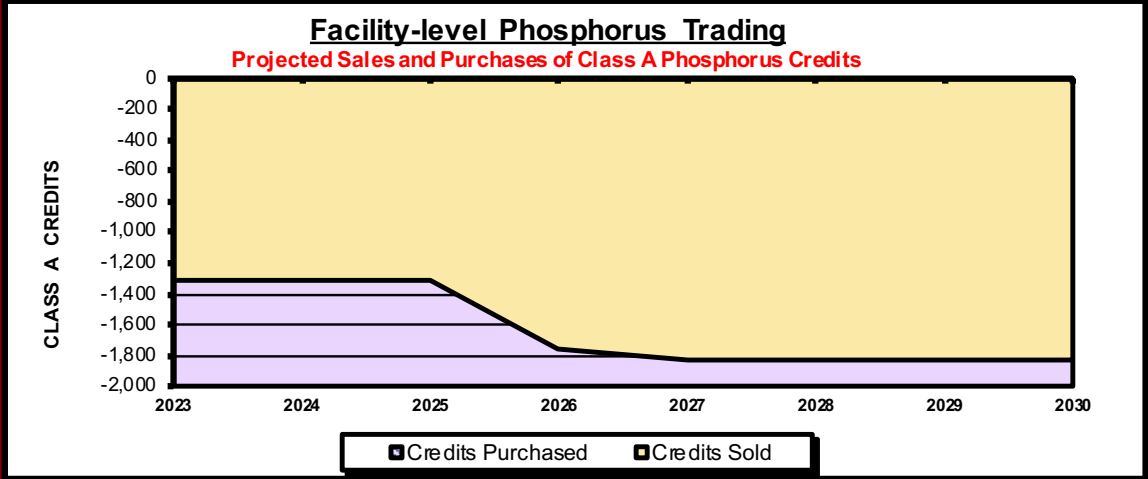


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Projected Flow (mgd)	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Projected Avg. Annual Concentration (mg/L)	3.50	3.50	3.50	3.50	3.00	3.00	3.00	3.00
Discharged Load (end of pipe)	13,857	13,857	13,857	13,857	11,878	11,878	11,878	11,878
Delivery Factor	0.21	0.21	0.21	1.00	1.00	1.00	1.00	1.00
Expected Load	2,910	2,910	2,910	13,857	11,878	11,878	11,878	11,878
Delivered WLA	7,675	7,675	7,675	36,547	36,547	36,547	36,547	36,547
Expected Credits (delivered)	4,765	4,765	4,765	22,690	24,669	24,669	24,669	24,669
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	4,765	4,765	4,765	22,690	24,669	24,669	24,669	24,669
Class A Credit Sales (Purchases)	4,765	4,765	4,765	22,690	24,669	24,669	24,669	24,669
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Orange (Town)
RAPPAHANNOCK Trading Basin

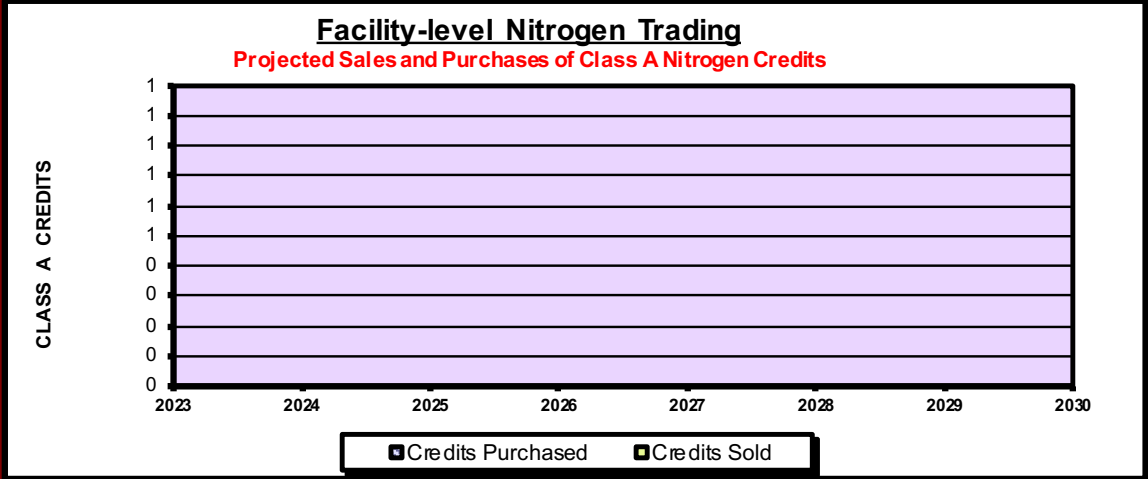


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Projected Flow (mgd)	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Projected Avg. Annual Concentration (mg/L)	0.25	0.25	0.25	0.25	0.23	0.23	0.23	0.23
Discharged Load (end of pipe)	990	990	990	990	911	911	911	911
Delivery Factor	0.75	0.75	0.75	1.00	1.00	1.00	1.00	1.00
Expected Load	742	742	742	990	911	911	911	911
Delivered WLA	2,056	2,056	2,056	2,741	2,741	2,741	2,741	2,741
Expected Credits (delivered)	1,314	1,314	1,314	1,751	1,830	1,830	1,830	1,830
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	1,314	1,314	1,314	1,751	1,830	1,830	1,830	1,830
Class A Credit Sales (Purchases)	1,314	1,314	1,314	1,751	1,830	1,830	1,830	1,830
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

Reedville S.D.
RAPPAHANNOCK Trading Basin

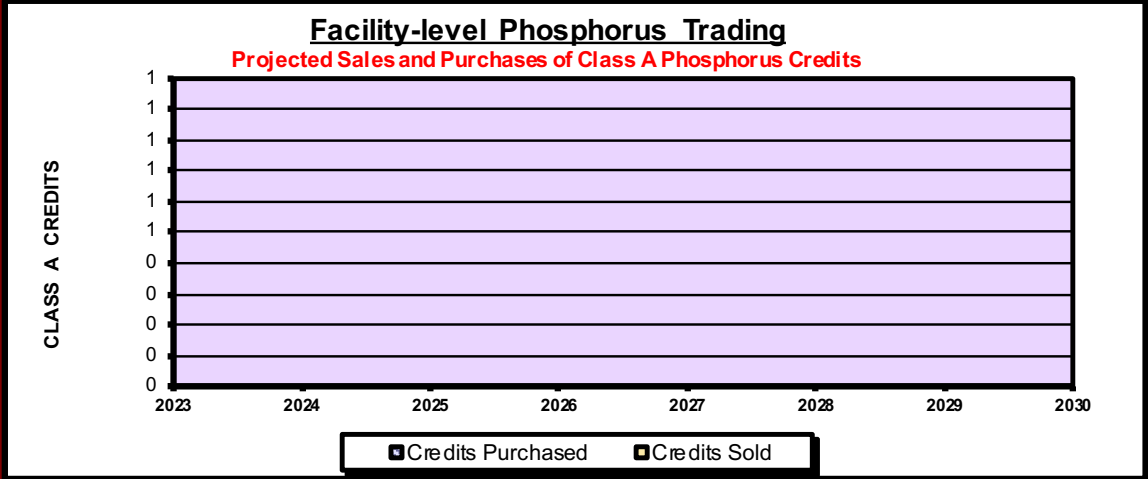


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Projected Flow (mgd)	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Projected Avg. Annual Concentration (mg/L)	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10
Discharged Load (end of pipe)	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	2,415	2,415	2,415	2,415	2,415	2,415	2,415	2,415
Delivered WLA	2,436	2,436	2,436	2,436	2,436	2,436	2,436	2,436
Expected Credits (delivered)	21	21	21	21	21	21	21	21
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	21	21	21	21	21	21	21	21
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	21	21	21	21	21	21	21	21

PHOSPHORUS FACILITY SUMMARY

Reedville S.D.
RAPPAHANNOCK Trading Basin



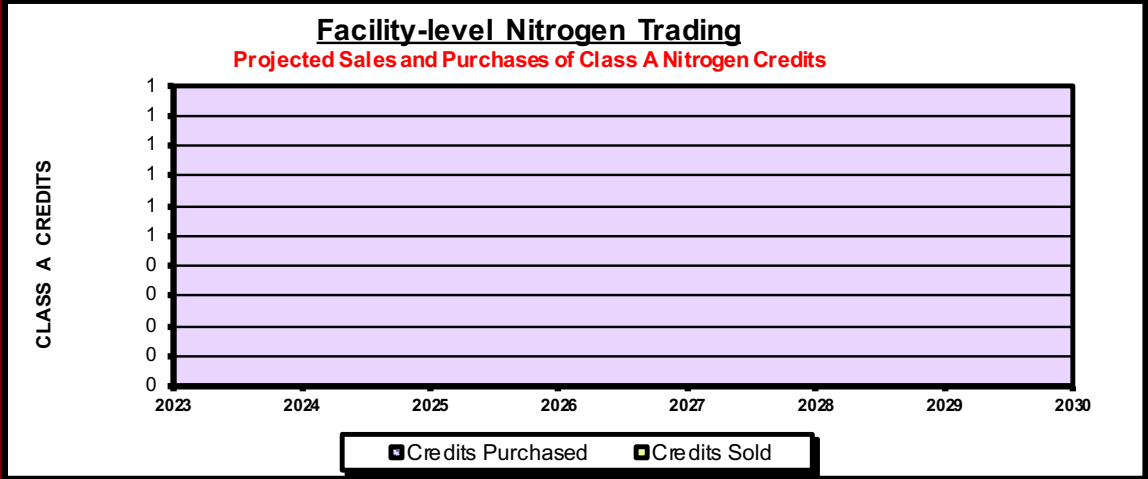
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

2023	2024	2025	2026	2027	2028	2029	2030
<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
119	119	119	119	119	119	119	119
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
119	119	119	119	119	119	119	119
183	183	183	183	183	183	183	183
64	64	64	64	64	64	64	64
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
64	64	64	64	64	64	64	64
0	0	0	0	0	0	0	0
64	64	64	64	64	64	64	64

NITROGEN FACILITY SUMMARY

RSA-Wilderness Shores
RAPPAHANNOCK Trading Basin



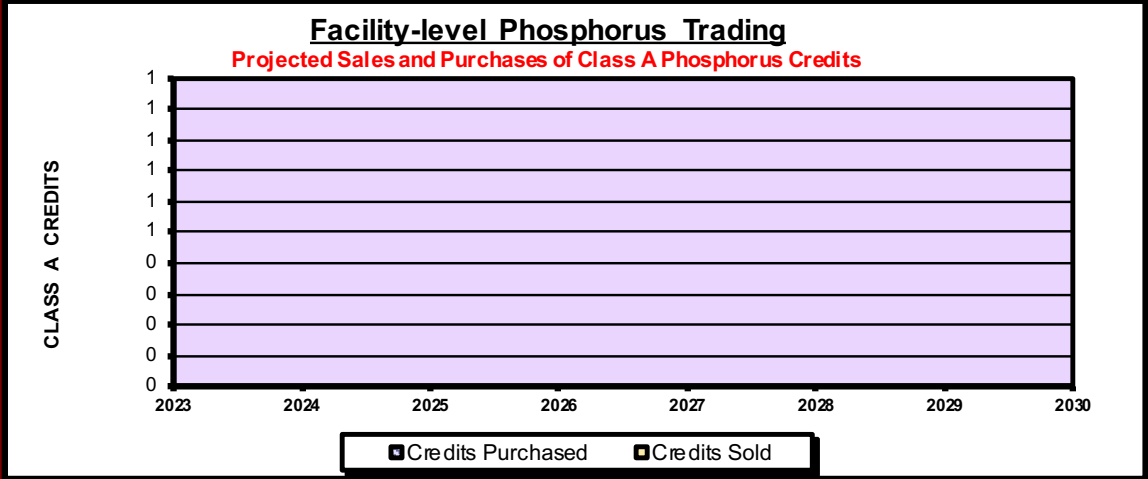
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

2023	2024	2025	2026	2027	2028	2029	2030	
<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>			
2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
0.94	0.96	0.96	0.98	0.98	0.98	1.00	1.00	
3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	
8,588	8,771	8,771	8,954	8,954	8,954	9,137	9,137	
0.45	0.45	0.45	0.73	0.73	0.73	0.73	0.73	
3,865	3,947	3,947	6,536	6,536	6,536	6,670	6,670	
6,853	6,853	6,853	11,116	11,116	11,116	11,116	11,116	
2,988	2,906	2,906	4,580	4,580	4,580	4,446	4,446	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
2,988	2,906	2,906	4,580	4,580	4,580	4,446	4,446	
0	0	0	0	0	0	0	0	
2,988	2,906	2,906	4,580	4,580	4,580	4,446	4,446	

PHOSPHORUS FACILITY SUMMARY

RSA-Wilderness Shores
RAPPAHANNOCK Trading Basin



Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Projected Flow (mgd)	0.94	0.96	0.96	0.98	0.98	0.98	1.00	1.00
Projected Avg. Annual Concentration (mg/L)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	859	877	877	895	895	895	914	914
Delivery Factor	0.75	0.75	0.75	0.96	0.96	0.96	0.96	0.96
Expected Load	644	658	658	860	860	860	877	877
Delivered WLA	857	857	857	1,096	1,096	1,096	1,096	1,096
Expected Credits (delivered)	213	199	199	236	236	236	219	219
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	213	199	199	236	236	236	219	219
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	213	199	199	236	236	236	219	219

Owner Bubble: Spotsylvania County

The facilities listed below have received an aggregated mass load limit pursuant to 9 VAC 25-820-70, Part 1.B.2., which is also referred to as an “owner bubble”. Accordingly, compliance is determined solely on an aggregate basis rather than by comparison of individual facility loads with respective individual WLAs.

The “Credit Transferred within Bubble” section of each table forecasts the use of Credits within the owner bubble during each Compliance Year, and must necessarily sum to zero. The specific Credit transfers shown in this table are provided for internal planning purposes only and, accordingly, are not binding and may change based on the actual performance of individual facilities within the bubble.

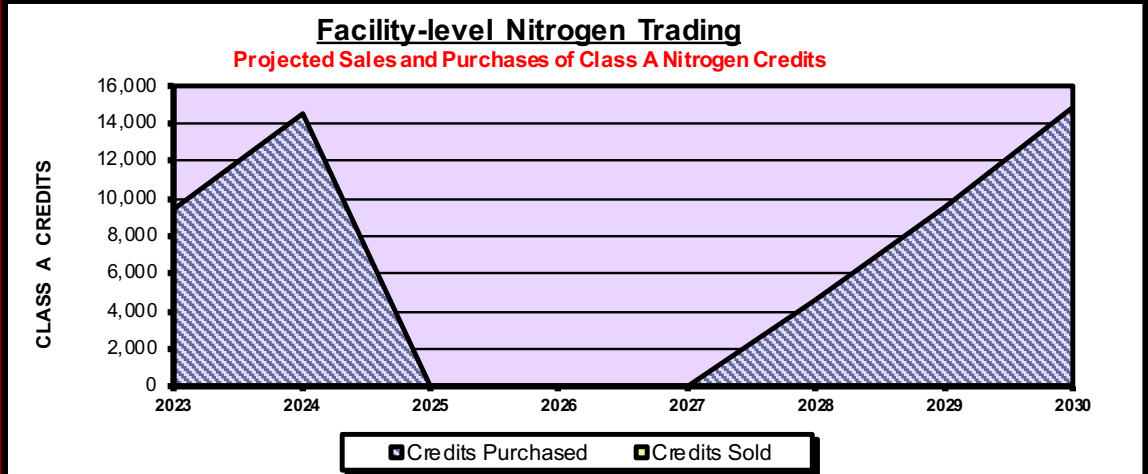
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply with the aggregate Delivered WLA of the bubble.

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
FMC	9,007	10,712	12,418	14,367	16,316	13,636	10,712	7,545
Massaponax	(9,007)	(10,712)	(12,418)	(14,367)	(16,316)	(13,636)	(10,712)	(7,545)
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
FMC	-	-	-	-	-	(4,629)	(9,502)	(14,862)
Massaponax	17,177	12,792	8,406	5,117	366	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	17,177	12,792	8,406	5,117	366	(4,629)	(9,502)	(14,862)
Class A Sales (Purchases)	(9,380)	(14,497)	0	0	0	(4,629)	(9,502)	(14,862)
<i>Expected Class B Credits</i>	26,557	27,289	8,406	5,117	366	0	0	0
<i>WQIF-Held Credits</i>	0	0	0	0	0	0	0	0

PHOSPHORUS Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
FMC	-	-	-	-	-	-	(120)	(311)
Massaponax	-	-	-	-	-	-	120	311
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
FMC	1,490	1,426	1,362	1,289	1,216	1,142	949	676
Massaponax	1,781	1,580	1,379	1,278	1,068	840	741	694
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	3,271	3,006	2,741	2,567	2,284	1,982	1,690	1,370
Class A Sales (Purchases)	955	805	1,370	1,283	1,142	991	844	684
<i>Expected Class B Credits</i>	2,316	2,201	1,371	1,284	1,142	991	846	686
<i>WQIF-Held Credits</i>	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

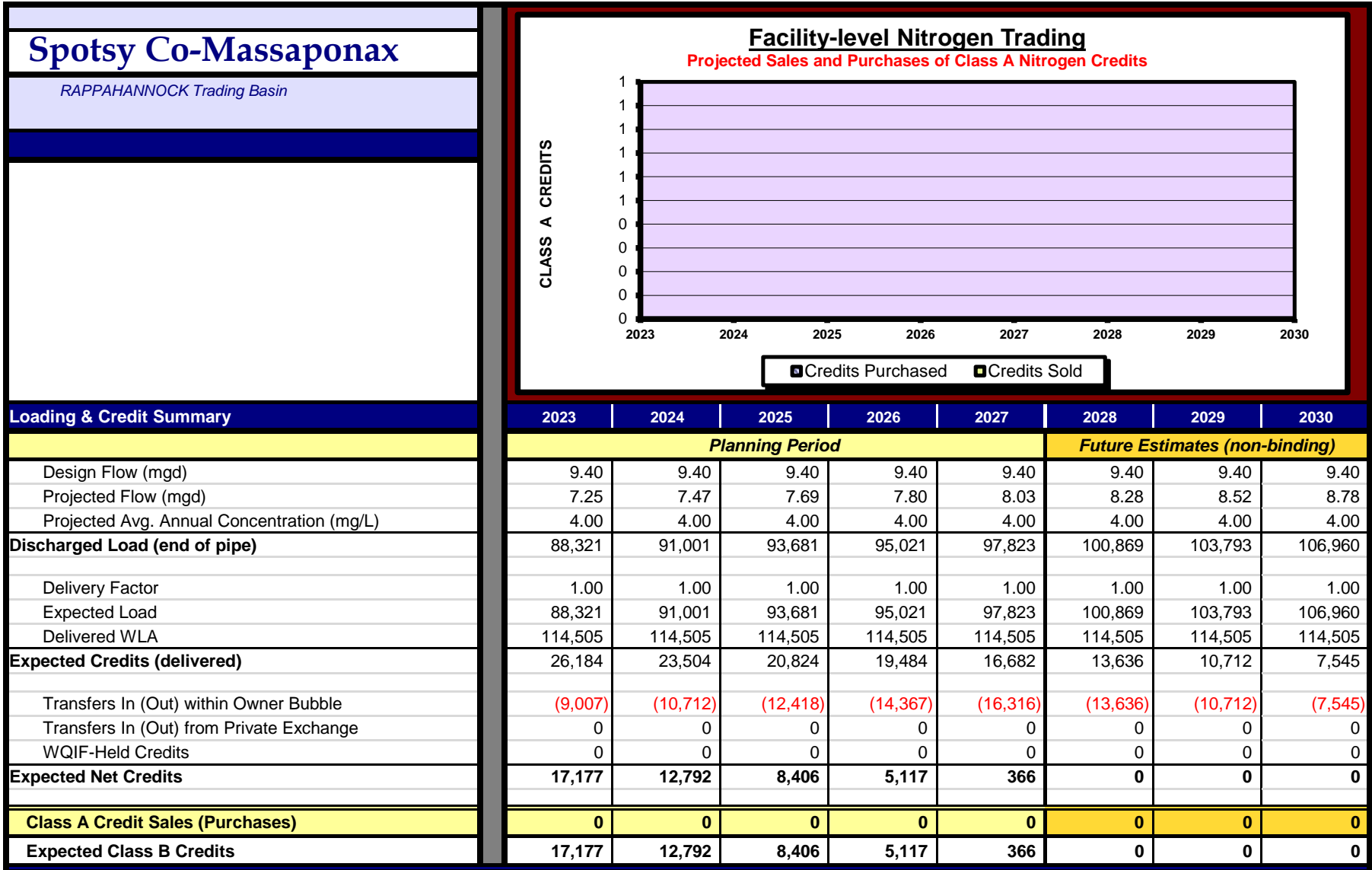
Spotsy Co-FMC
RAPPAHANNOCK Trading Basin



Loading & Credit Summary

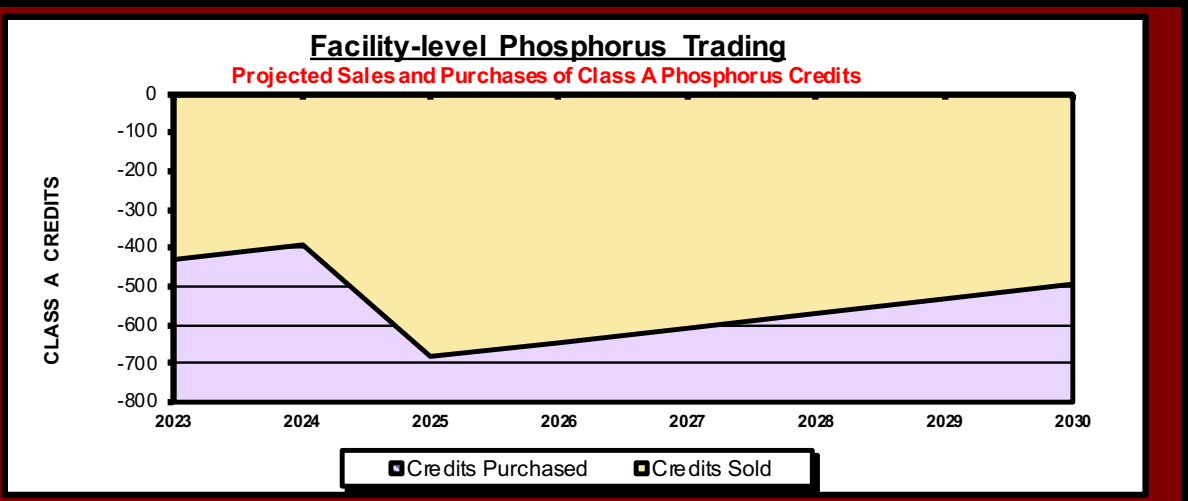
	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Projected Flow (mgd)	2.37	2.44	2.51	2.59	2.67	2.75	2.83	2.92
Projected Avg. Annual Concentration (mg/L)	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Discharged Load (end of pipe)	57,744	59,449	61,155	63,104	65,053	67,002	68,951	71,144
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	57,744	59,449	61,155	63,104	65,053	67,002	68,951	71,144
Delivered WLA	48,737	48,737	48,737	48,737	48,737	48,737	48,737	48,737
Expected Credits (delivered)	(9,007)	(10,712)	(12,418)	(14,367)	(16,316)	(18,265)	(20,214)	(22,407)
Transfers In (Out) within Owner Bubble	9,007	10,712	12,418	14,367	16,316	13,636	10,712	7,545
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	(4,629)	(9,502)	(14,862)
Class A Credit Sales (Purchases)	(9,380)	(14,497)	0	0	0	(4,629)	(9,502)	(14,862)
Expected Class B Credits	9,380	14,497	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY



PHOSPHORUS FACILITY SUMMARY

Spotsy Co-FMC
RAPPAHANNOCK Trading Basin

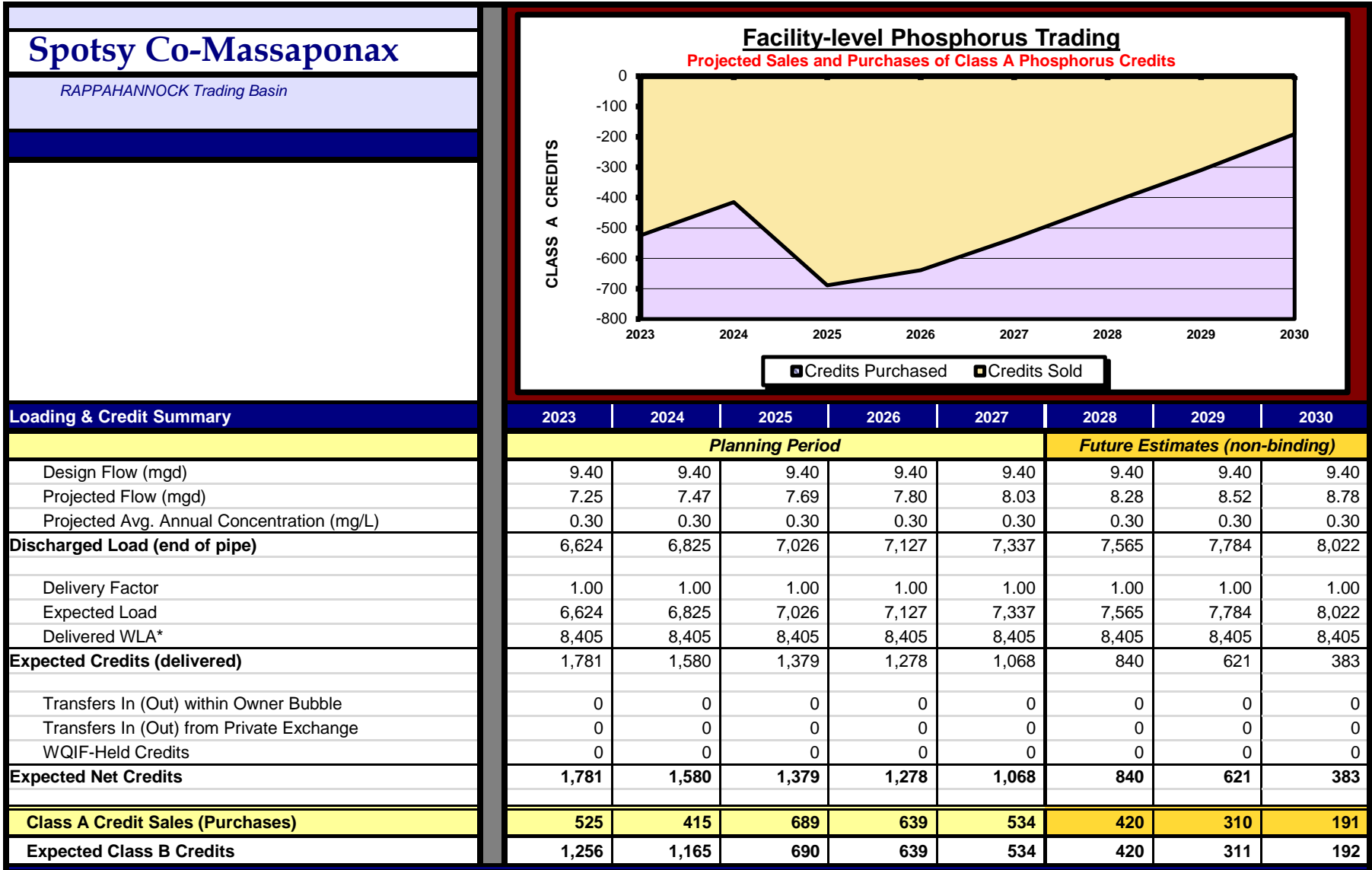


Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

2023	2024	2025	2026	2027	2028	2029	2030	
Planning Period					Future Estimates (non-binding)			
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
2.37	2.44	2.51	2.59	2.67	2.75	2.83	2.92	
0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	
2,165	2,229	2,293	2,366	2,439	2,513	2,586	2,668	
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
2,165	2,229	2,293	2,366	2,439	2,513	2,586	2,668	
3,655	3,655	3,655	3,655	3,655	3,655	3,655	3,655	
1,490	1,426	1,362	1,289	1,216	1,142	1,069	987	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
1,490	1,426	1,362	1,289	1,216	1,142	1,069	987	
430	390	681	644	608	571	534	493	
1,060	1,036	681	645	608	571	535	494	

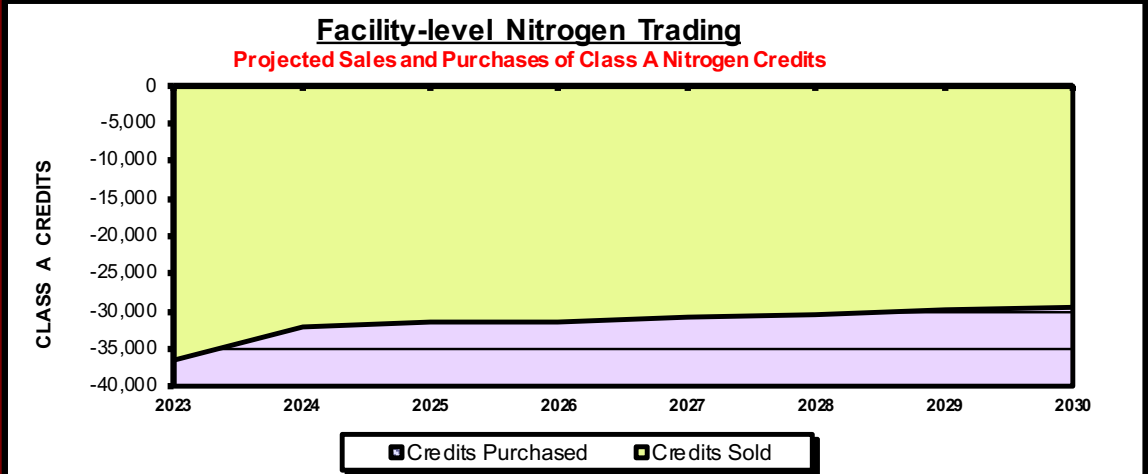
PHOSPHORUS FACILITY SUMMARY



* Reflects allocation transfer to Rush River WWTP of 183 discharged pounds of TP

NITROGEN FACILITY SUMMARY

Stafford Co-L. Falls Run
RAPPAHANNOCK Trading Basin



Loading & Credit Summary

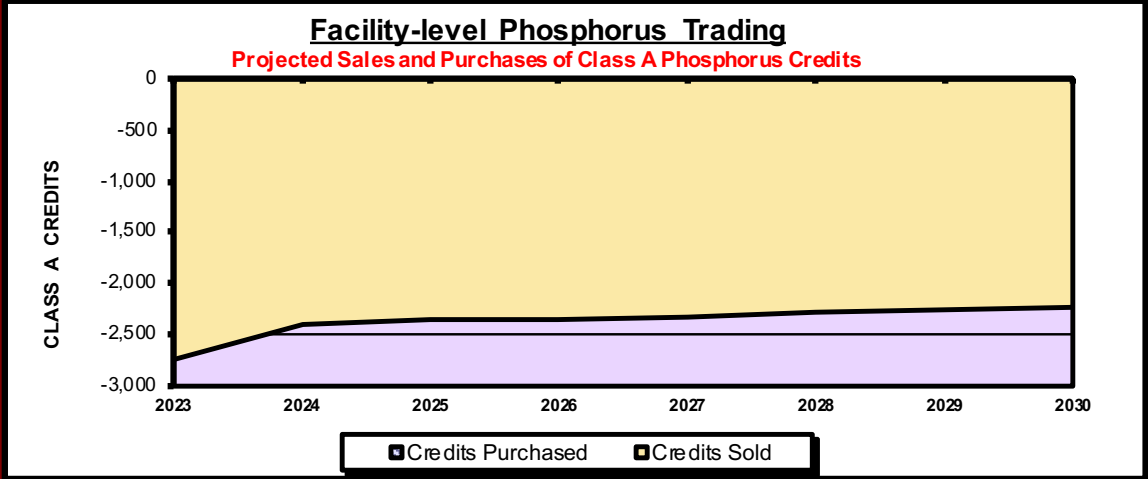
Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange*
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Projected Flow (mgd)	4.00	3.94	4.04	4.10	4.16	4.22	4.28	4.35
Projected Avg. Annual Concentration (mg/L)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Discharged Load (end of pipe)	48,729	48,034	49,216	49,947	50,678	51,409	52,140	52,993
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	48,729	48,034	49,216	49,947	50,678	51,409	52,140	52,993
Delivered WLA	97,458	97,458	97,458	97,458	97,458	97,458	97,458	97,458
Expected Credits (delivered)	48,729	49,424	48,242	47,511	46,780	46,049	45,318	44,465
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange*	(978)	(978)	(978)	(978)	(978)	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	47,751	48,446	47,264	46,533	45,802	46,049	45,318	44,465
Class A Credit Sales (Purchases)	36,547	32,126	31,357	31,500	30,874	30,392	29,909	29,347
Expected Class B Credits	11,204	16,320	15,907	15,033	14,928	15,657	15,409	15,118

* Reflects private exchange, from 2023 through 2027, with the City of Fredericksburg to meet the City's MS4 requirements

PHOSPHORUS FACILITY SUMMARY

Stafford Co-L. Falls Run
RAPPAHANNOCK Trading Basin



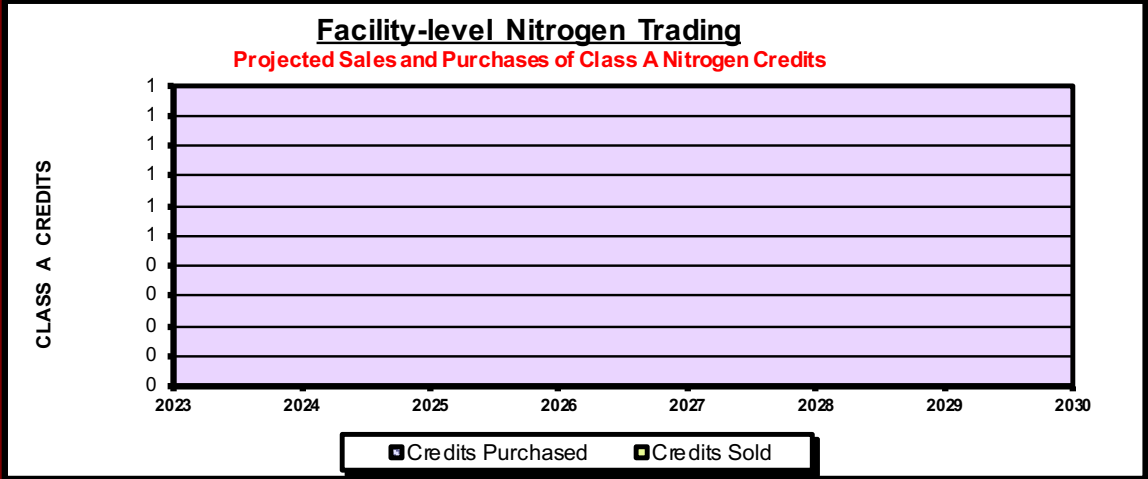
Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Projected Flow (mgd)	4.00	3.94	4.04	4.10	4.16	4.22	4.28	4.35
Projected Avg. Annual Concentration (mg/L)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	3,655	3,603	3,691	3,746	3,801	3,856	3,910	3,974
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	3,655	3,603	3,691	3,746	3,801	3,856	3,910	3,974
Delivered WLA	7,309	7,309	7,309	7,309	7,309	7,309	7,309	7,309
Expected Credits (delivered)	3,654	3,706	3,618	3,563	3,508	3,453	3,399	3,335
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange*	(199)	(199)	(199)	(199)	(199)	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	3,455	3,507	3,419	3,364	3,309	3,453	3,399	3,335
Class A Credit Sales (Purchases)	2,741	2,409	2,352	2,351	2,315	2,278	2,243	2,221
Expected Class B Credits	714	1,098	1,067	1,013	994	1,175	1,156	1,114

* Reflects private exchange, from 2023 through 2027, with the City of Fredericksburg to meet the City's MS4 requirements

NITROGEN FACILITY SUMMARY

Tappahannock
RAPPAHANNOCK Trading Basin

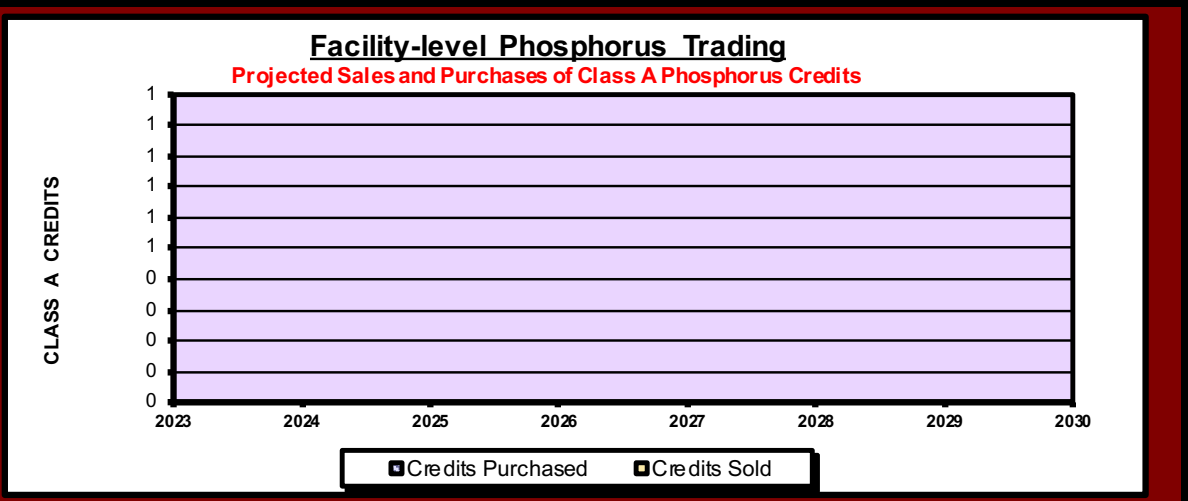


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Projected Flow (mgd)	0.66	0.66	0.67	0.67	0.67	0.67	0.67	0.67
Projected Avg. Annual Concentration (mg/L)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Discharged Load (end of pipe)	8,040	8,040	8,162	8,162	8,162	8,162	8,162	8,162
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	8,040	8,040	8,162	8,162	8,162	8,162	8,162	8,162
Delivered WLA	9,746	9,746	9,746	9,746	9,746	9,746	9,746	9,746
Expected Credits (delivered)	1,706	1,706	1,584	1,584	1,584	1,584	1,584	1,584
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	1,706	1,706	1,584	1,584	1,584	1,584	1,584	1,584
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	1,706	1,706	1,584	1,584	1,584	1,584	1,584	1,584

PHOSPHORUS FACILITY SUMMARY

Tappahannock
RAPPAHANNOCK Trading Basin



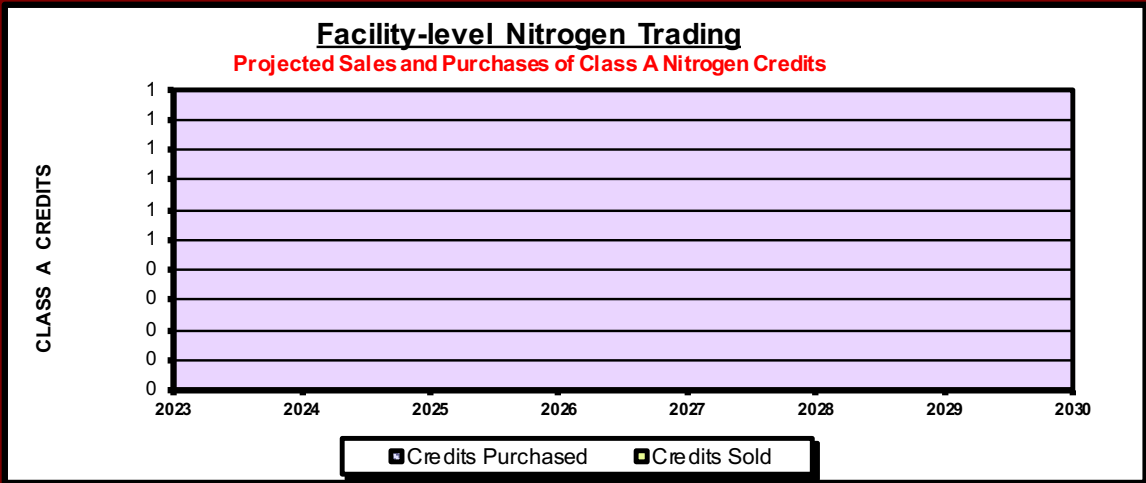
Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Projected Flow (mgd)	0.66	0.66	0.67	0.67	0.67	0.67	0.67	0.67
Projected Avg. Annual Concentration (mg/L)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	603	603	612	612	612	612	612	612
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	603	603	612	612	612	612	612	612
Delivered WLA	731	731	731	731	731	731	731	731
Expected Credits (delivered)	128	128	119	119	119	119	119	119
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	128	128	119	119	119	119	119	119
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	128	128	119	119	119	119	119	119

NITROGEN FACILITY SUMMARY

Warsaw

RAPPAHANNOCK Trading Basin

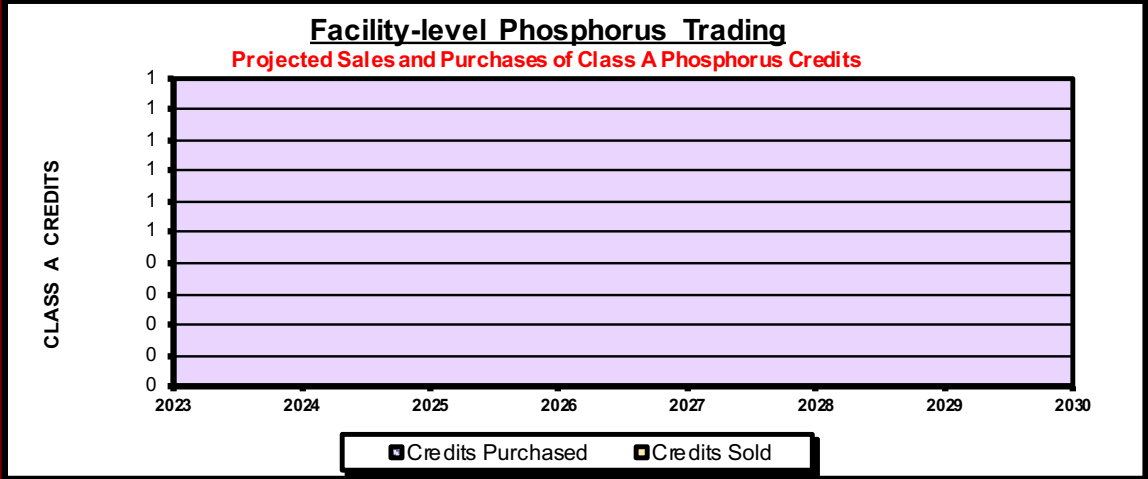


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Projected Flow (mgd)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.26
Projected Avg. Annual Concentration (mg/L)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Discharged Load (end of pipe)	3,046	3,046	3,046	3,046	3,046	3,046	3,046	3,167
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	3,046	3,046	3,046	3,046	3,046	3,046	3,046	3,167
Delivered WLA	3,655	3,655	3,655	3,655	3,655	3,655	3,655	3,655
Expected Credits (delivered)	609	609	609	609	609	609	609	488
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	609	609	609	609	609	609	609	488
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	609	609	609	609	609	609	609	488

PHOSPHORUS FACILITY SUMMARY

Warsaw
RAPPAHANNOCK Trading Basin

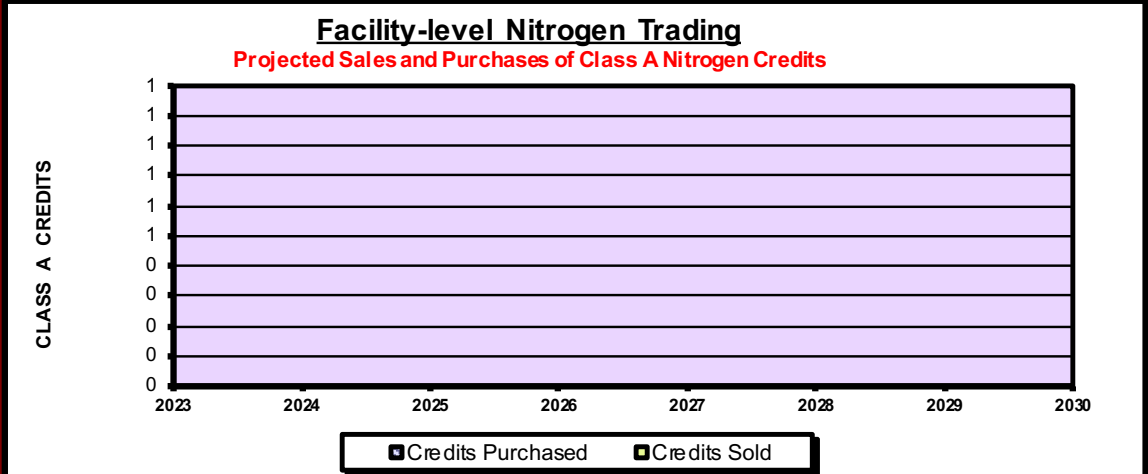


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Projected Flow (mgd)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.26
Projected Avg. Annual Concentration (mg/L)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	228	228	228	228	228	228	228	238
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	228	228	228	228	228	228	228	238
Delivered WLA	274	274	274	274	274	274	274	274
Expected Credits (delivered)	46	46	46	46	46	46	46	36
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	46	46	46	46	46	46	46	36
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	46	46	46	46	46	46	46	36

NITROGEN FACILITY SUMMARY

Westmoreland Co-Montross
RAPPAHANNOCK Trading Basin

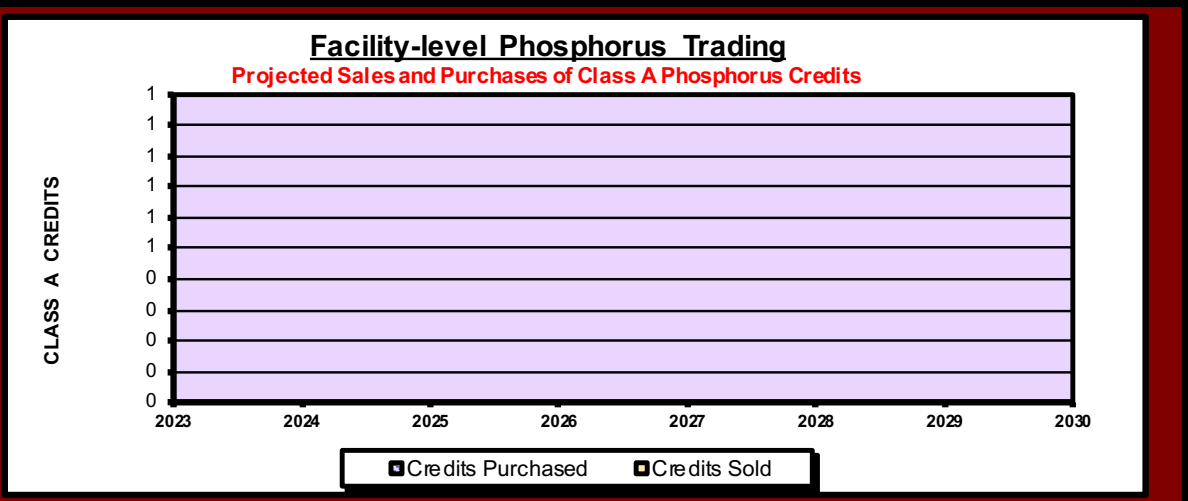


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Projected Flow (mgd)	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07
Projected Avg. Annual Concentration (mg/L)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Discharged Load (end of pipe)	731	731	731	853	853	853	853	853
Delivery Factor	0.63	0.63	0.63	1.00	1.00	1.00	1.00	1.00
Expected Load	460	460	460	853	853	853	853	853
Delivered WLA	998	998	998	1,584	1,584	1,584	1,584	1,584
Expected Credits (delivered)	538	538	538	731	731	731	731	731
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	538	538	538	731	731	731	731	731
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	538	538	538	731	731	731	731	731

PHOSPHORUS FACILITY SUMMARY

Westmoreland Co-Montross
RAPPAHANNOCK Trading Basin



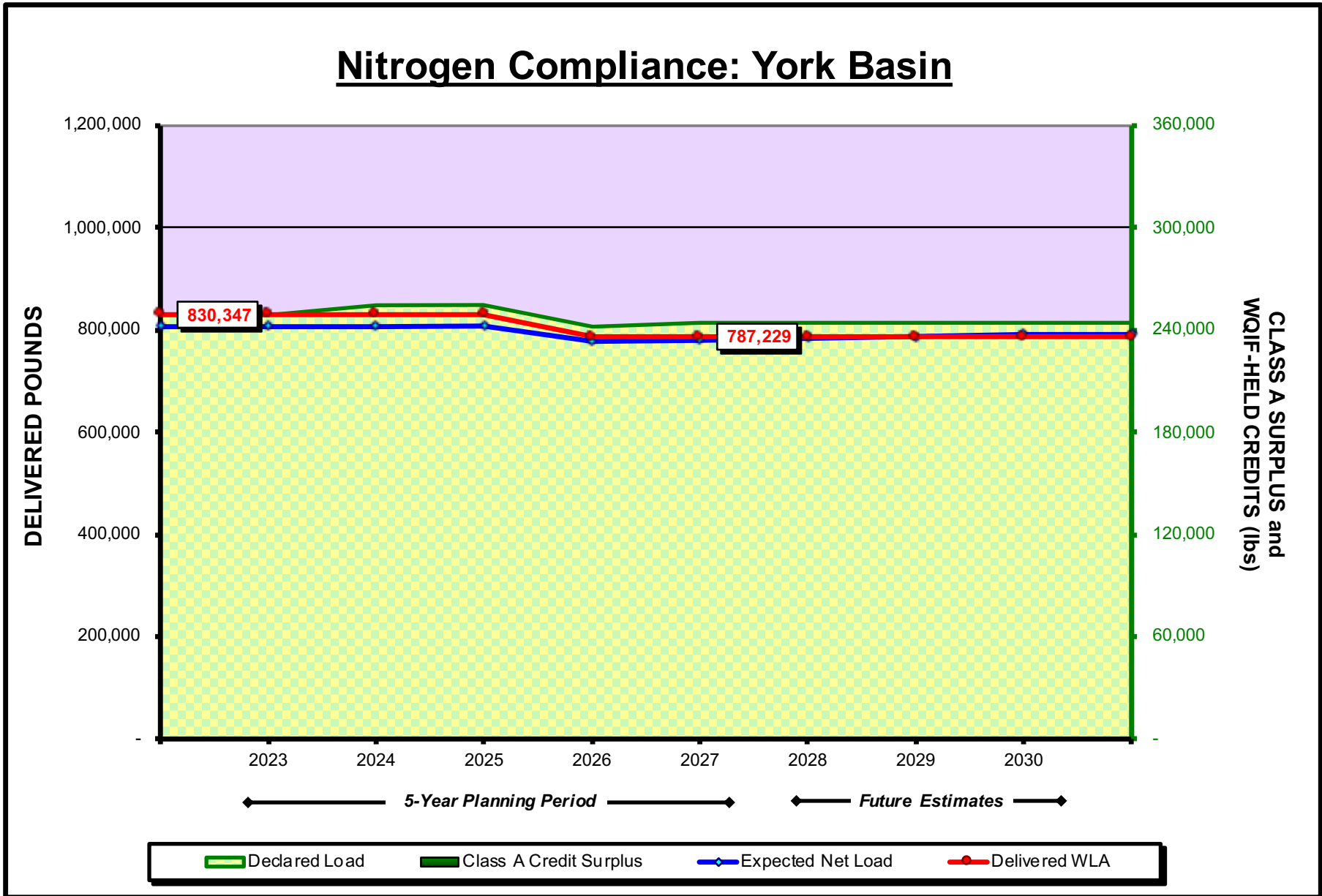
Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Projected Flow (mgd)	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07
Projected Avg. Annual Concentration (mg/L)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Discharged Load (end of pipe)	91	91	91	107	107	107	107	107
Delivery Factor	0.88	0.88	0.88	1.00	1.00	1.00	1.00	1.00
Expected Load	80	80	80	107	107	107	107	107
Delivered WLA	105	105	105	119	119	119	119	119
Expected Credits (delivered)	25	25	25	12	12	12	12	12
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	25	25	25	12	12	12	12	12
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	25	25	25	12	12	12	12	12

SECTION 4

York River Basin Exchange Compliance Plan



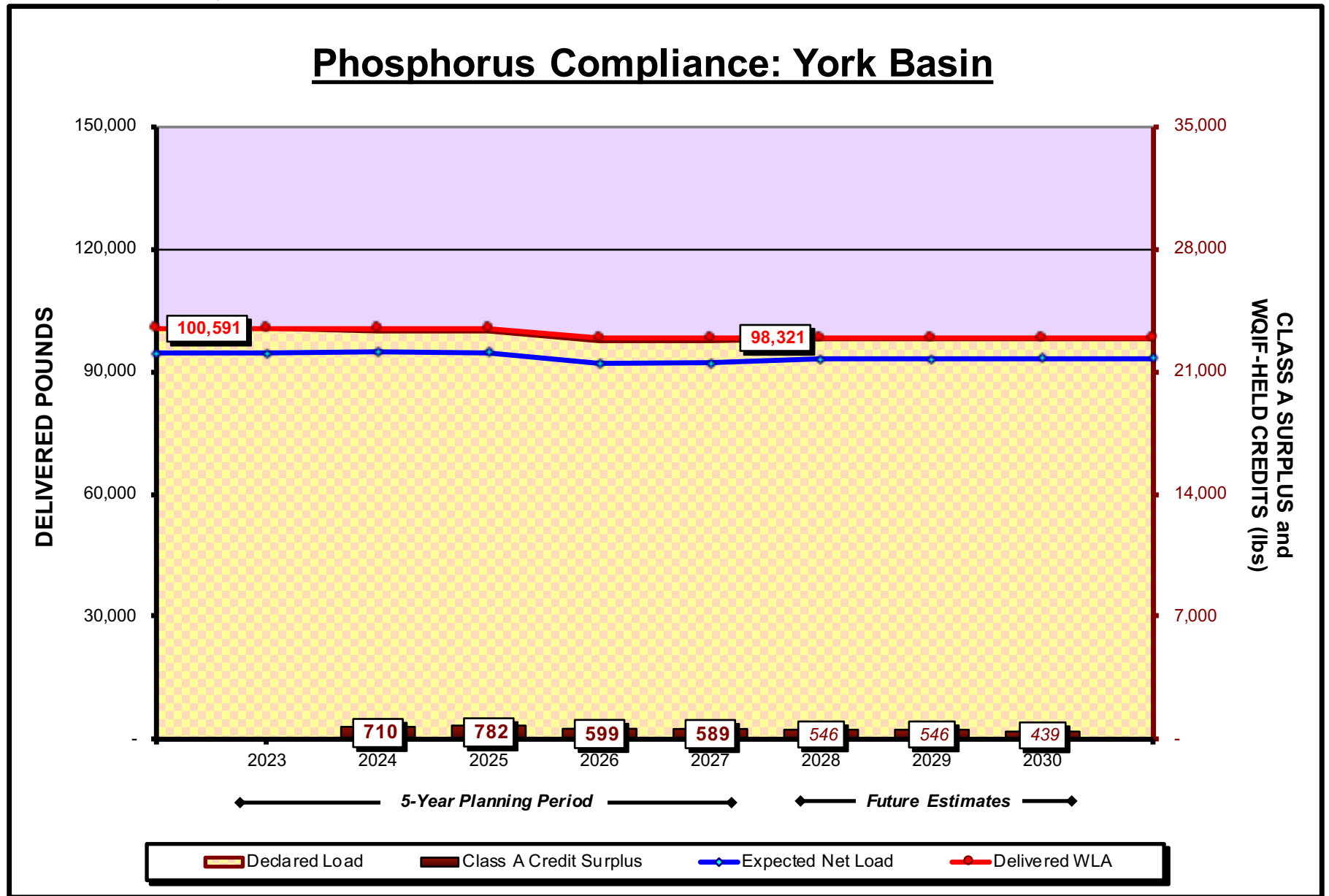


YORK Basin: Nitrogen Credit Ledger

Compliance Year:	2024	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)					
		Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits		Class A Sales	Class A* Purchases
									PRICE:	\$ 6.63	\$ 4.13	\$ 0.41
The Exchange (group)	830,347	752,295	78,052	-	(688)	(55,116)	22,248		22,471	(40,110)	39,887	
Aqua Virginia- Lake Land'Or	3,702	2,415	1,287	-	-	-	1,287		1,200	-	87	
Caroline Co.	5,939	4,810	1,129	-	-	-	1,129		389	-	740	
Cascades-Bear Island	23,664	22,842	822	-	-	-	822		-	-	822	
Hanover Co-Ashland	20,101	28,342	(8,241)	8,241	-	-	-		-	-	-	
Hanover Co-Doswell	9,137	10,100	(963)	963	-	-	-		-	-	-	
Hanover Co-Totopotomoy	182,734	107,204	75,530	(9,204)	(90)	(54,820)	11,416		8,000	-	3,416	
HRSD-King William	1,424	824	600	(600)	-	-	-		-	-	-	
HRSD-West Point	10,964	24,951	(13,987)	13,987	-	-	-		-	-	-	
HRSD-York	275,927	240,955	34,972	(13,387)	(598)	-	20,987		-	-	20,987	
New Kent Co-Parham	36,547	10,050	26,497	-	-	-	26,497		12,882	-	13,615	
RSA-Gordonsville	1,031	515	516	-	-	(296)	220		-	-	220	
WestRock-West Point Mill	259,177	299,287	(40,110)	-	-	-	(40,110)		-	(40,110)	-	
-	-	-	-	-	-	-	-		-	-	-	
-	-	-	-	-	-	-	-		-	-	-	
-	-	-	-	-	-	-	-		-	-	-	
-	-	-	-	-	-	-	-		-	-	-	
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-	-	-	-	-	-	-	-		-	-	-	

* For this Compliance Year, 44% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.

** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.



YORK Basin: Phosphorus Credit Ledger

<i>Compliance Year:</i>	2023	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)				
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits		Class A Sales	Class A* Purchases	Class B Sales**
								PRICE:	\$ 5.47	\$ 6.08	\$ 0.08
The Exchange (group)	100,591	92,676	7,915	-	(209)	(1,585)	6,121		868	(868)	6,121
Aqua Virginia- Lake Land'Or	548	272	276	-	-	-	276		260	-	16
Caroline Co.	438	338	100	-	-	-	100		53	-	47
Cascades-Bear Island	6,651	5,939	712	-	-	-	712		-	(792)	1,504
Hanover Co-Ashland	1,583	4,148	(2,565)	2,565	-	-	-		-	-	-
Hanover Co-Doswell	792	1,073	(281)	281	-	-	-		-	-	-
Hanover Co-Totopotomoy	12,182	7,751	4,431	(2,846)	-	(1,585)	-		-	-	-
HRSD-King William	190	50	140	(140)	-	-	-		-	-	-
HRSD-West Point	731	4,083	(3,352)	3,352	-	-	-		-	-	-
HRSD-York	18,395	13,930	4,465	(3,212)	(209)	-	1,044		-	-	1,044
New Kent Co-Parham	2,436	1,066	1,370	-	-	-	1,370		555	-	815
RSA-Gordonsville	607	683	(76)	-	-	-	(76)		-	(76)	-
WestRock-West Point Mill	56,038	53,343	2,695	-	-	-	2,695		-	-	2,695
-	-	-	-	-	-	-	-		-	-	-
-	-	-	-	-	-	-	-		-	-	-
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** For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.*

*** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.*

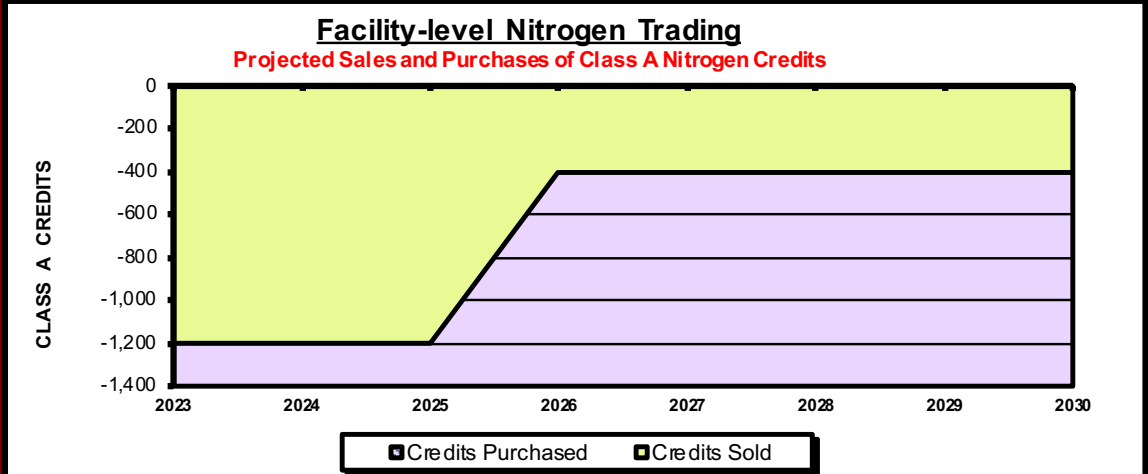
York River Basin

Supplemental Information for Individual Facilities



NITROGEN FACILITY SUMMARY

Aqua Virginia- Lake Land'Or
 YORK Trading Basin

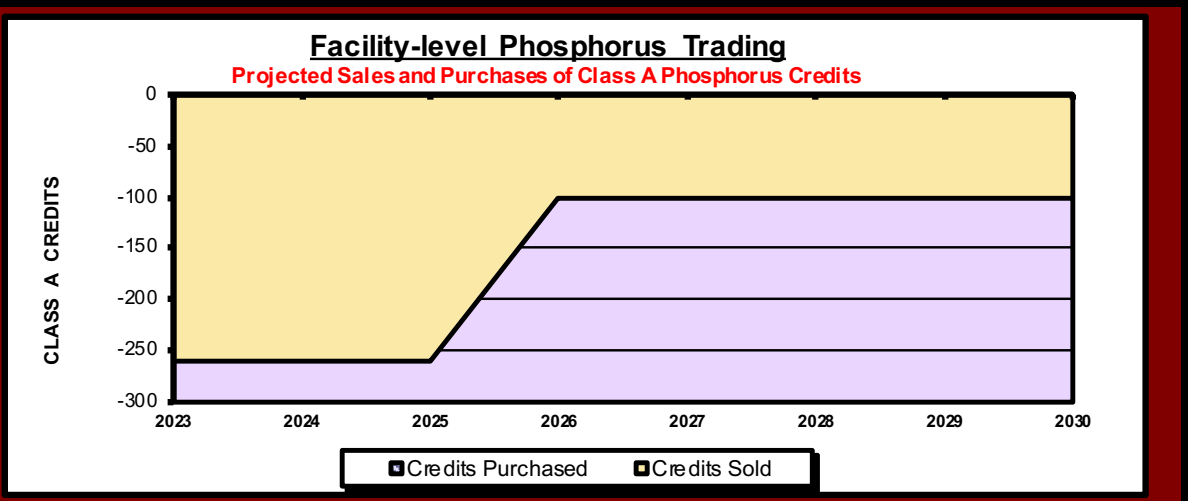


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Projected Flow (mgd)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Projected Avg. Annual Concentration (mg/L)	6.10	6.10	6.30	6.30	6.30	6.30	6.30	6.30
Discharged Load (end of pipe)	3,716	3,716	3,837	3,837	3,837	3,837	3,837	3,837
Delivery Factor	0.65	0.65	0.65	0.30	0.30	0.30	0.30	0.30
Expected Load	2,415	2,415	2,494	1,151	1,151	1,151	1,151	1,151
Delivered WLA	3,702	3,702	3,702	1,709	1,709	1,709	1,709	1,709
Expected Credits (delivered)	1,287	1,287	1,208	558	558	558	558	558
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	1,287	1,287	1,208	558	558	558	558	558
Class A Credit Sales (Purchases)	1,200	1,200	1,200	400	400	400	400	400
Expected Class B Credits	87	87	8	158	158	158	158	158

PHOSPHORUS FACILITY SUMMARY

Aqua Virginia- Lake Land'Or
 YORK Trading Basin



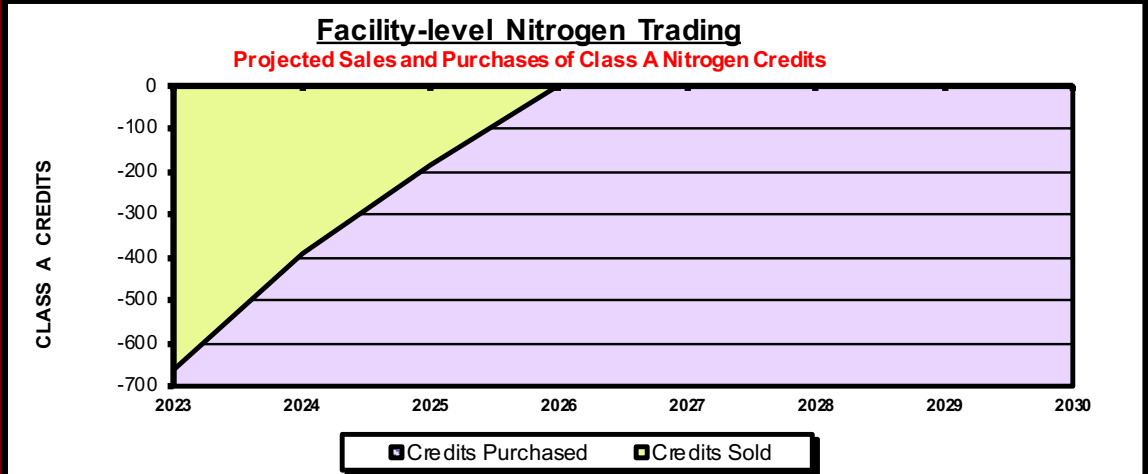
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

2023	2024	2025	2026	2027	2028	2029	2030	
Planning Period					Future Estimates (non-binding)			
0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	
0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	
0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	
378	378	378	378	378	378	378	378	
0.72	0.72	0.72	0.35	0.35	0.35	0.35	0.35	
272	272	272	132	132	132	132	132	
548	548	548	266	266	266	266	266	
276	276	276	134	134	134	134	134	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
276	276	276	134	134	134	134	134	
260	260	260	100	100	100	100	100	
16	16	16	34	34	34	34	34	

NITROGEN FACILITY SUMMARY

Caroline Co.
 YORK Trading Basin

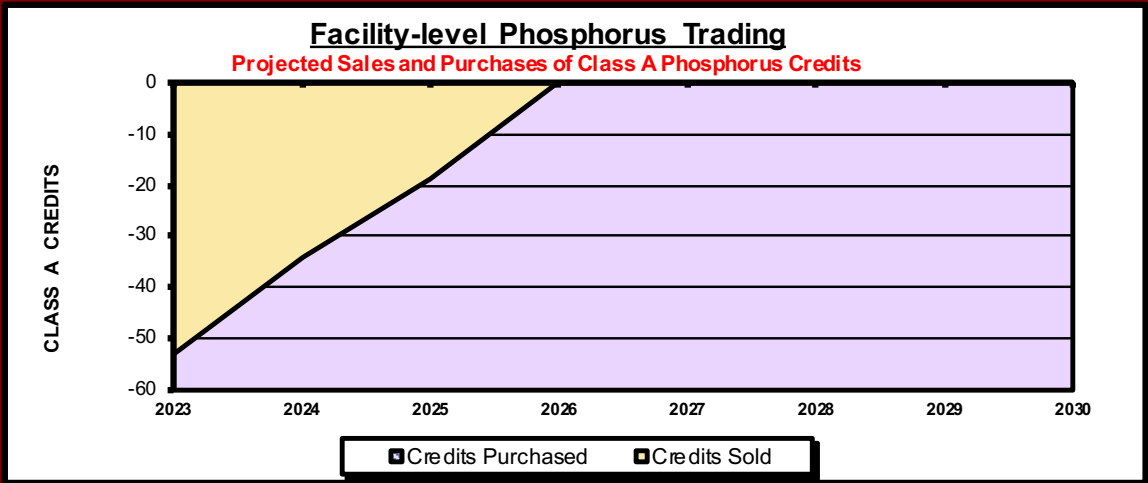


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Projected Flow (mgd)	0.77	0.81	0.84	0.88	0.91	0.94	0.97	1.00
Projected Avg. Annual Concentration (mg/L)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Discharged Load (end of pipe)	7,035	7,401	7,675	8,040	8,314	8,588	8,863	9,137
Delivery Factor	0.65	0.65	0.65	0.34	0.34	0.34	0.34	0.34
Expected Load	4,573	4,810	4,989	2,734	2,827	2,920	3,013	3,106
Delivered WLA	5,939	5,939	5,939	3,107	3,107	3,107	3,107	3,107
Expected Credits (delivered)	1,366	1,129	950	373	280	187	94	1
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	1,366	1,129	950	373	280	187	94	1
Class A Credit Sales (Purchases)	662	389	182	0	0	0	0	0
Expected Class B Credits	704	740	768	373	280	187	94	1

PHOSPHORUS FACILITY SUMMARY

Caroline Co.
 YORK Trading Basin



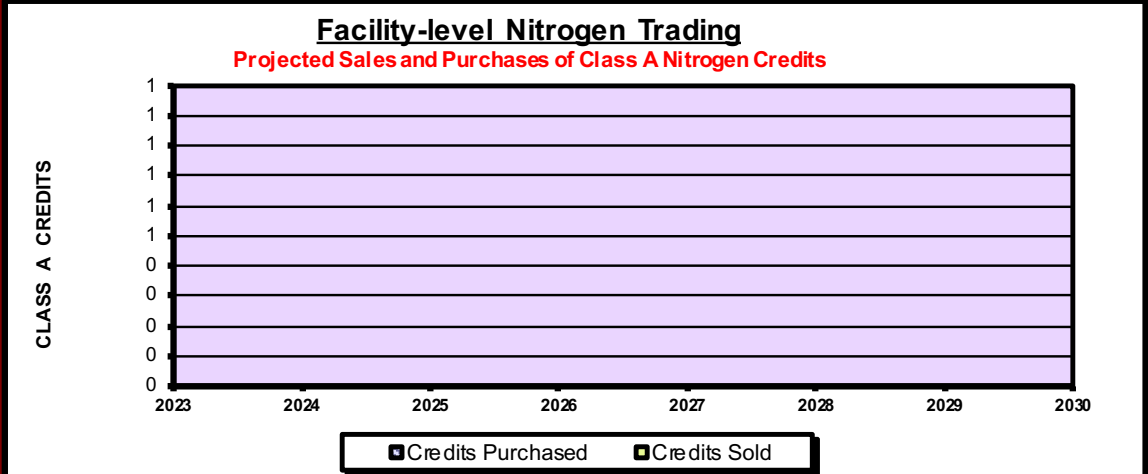
Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Projected Flow (mgd)	0.77	0.81	0.84	0.88	0.91	0.94	0.97	1.00
Projected Avg. Annual Concentration (mg/L)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Discharged Load (end of pipe)	469	493	512	536	554	573	591	609
Delivery Factor	0.72	0.72	0.72	0.35	0.35	0.35	0.35	0.35
Expected Load	338	355	368	188	194	200	207	213
Delivered WLA	438	438	438	213	213	213	213	213
Expected Credits (delivered)	100	83	70	25	19	13	6	0
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	100	83	70	25	19	13	6	0
Class A Credit Sales (Purchases)	53	34	19	0	0	0	0	0
Expected Class B Credits	47	49	51	25	19	13	6	0

NITROGEN FACILITY SUMMARY

Cascades-Bear Island

YORK Trading Basin

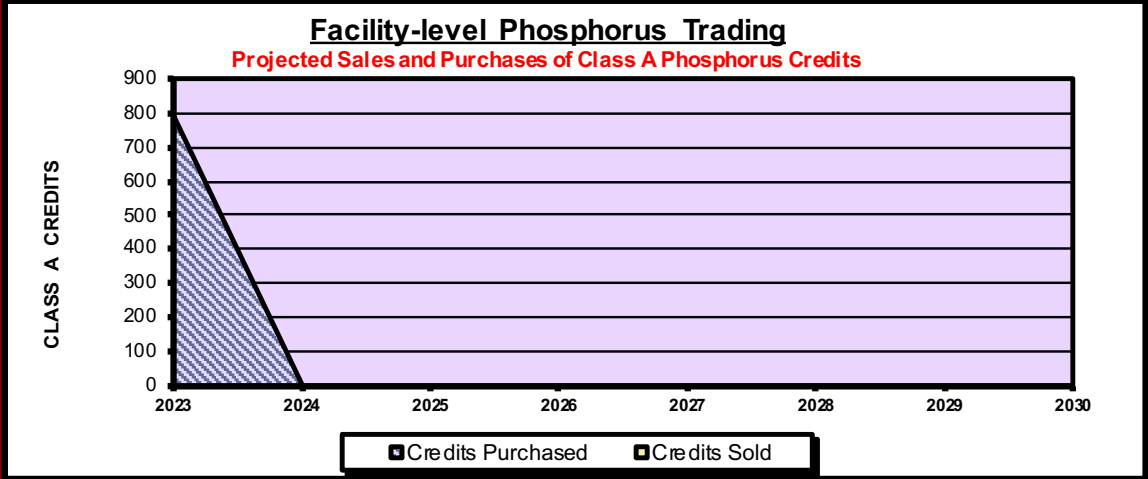


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20
Projected Flow (mgd)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Projected Avg. Annual Concentration (mg/L)	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Discharged Load (end of pipe)	45,683	45,683	45,683	45,683	45,683	45,683	45,683	45,683
Delivery Factor	0.50	0.50	0.50	0.60	0.60	0.60	0.60	0.60
Expected Load	22,842	22,842	22,842	27,410	27,410	27,410	27,410	27,410
Delivered WLA	23,664	23,664	23,664	28,397	28,397	28,397	28,397	28,397
Expected Credits (delivered)	822	822	822	987	987	987	987	987
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	822	822	822	987	987	987	987	987
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	822	822	822	987	987	987	987	987

PHOSPHORUS FACILITY SUMMARY

Cascades-Bear Island
 YORK Trading Basin



Loading & Credit Summary

Design Flow (mgd)	1.50
Projected Flow (mgd)	1.50
Projected Avg. Annual Concentration (mg/L)	2.00
Discharged Load (end of pipe)	
Delivery Factor	0.65
Expected Load	5,939
Delivered WLA	6,651
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	
Class A Credit Sales (Purchases)	(792)
Expected Class B Credits	1,504

2023	2024	2025	2026	2027	2028	2029	2030
Planning Period					Future Estimates (non-binding)		
4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20
1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
9,137	9,137	9,137	9,137	9,137	9,137	9,137	9,137
0.65	0.65	0.65	0.58	0.58	0.58	0.58	0.58
5,939	5,939	5,939	5,299	5,299	5,299	5,299	5,299
6,651	6,651	6,651	5,935	5,935	5,935	5,935	5,935
712	712	712	636	636	636	636	636
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
712	712	712	636	636	636	636	636
(792)	0	0	0	0	0	0	0
1,504	712	712	636	636	636	636	636

Owner Bubble: Hanover County

The facilities listed below have received an aggregated mass load limit pursuant to 9 VAC 25-820-70, Part 1.B.2., which is also referred to as an “owner bubble”. Accordingly, compliance is determined solely on an aggregate basis rather than by comparison of individual facility loads with respective individual WLAs.

The “Credit Transferred within Bubble” section of each table forecasts the use of Credits within the owner bubble during each Compliance Year, and must necessarily sum to zero. The specific Credit transfers shown in this table are provided for internal planning purposes only and, accordingly, are not binding and may change based on the actual performance of individual facilities within the bubble.

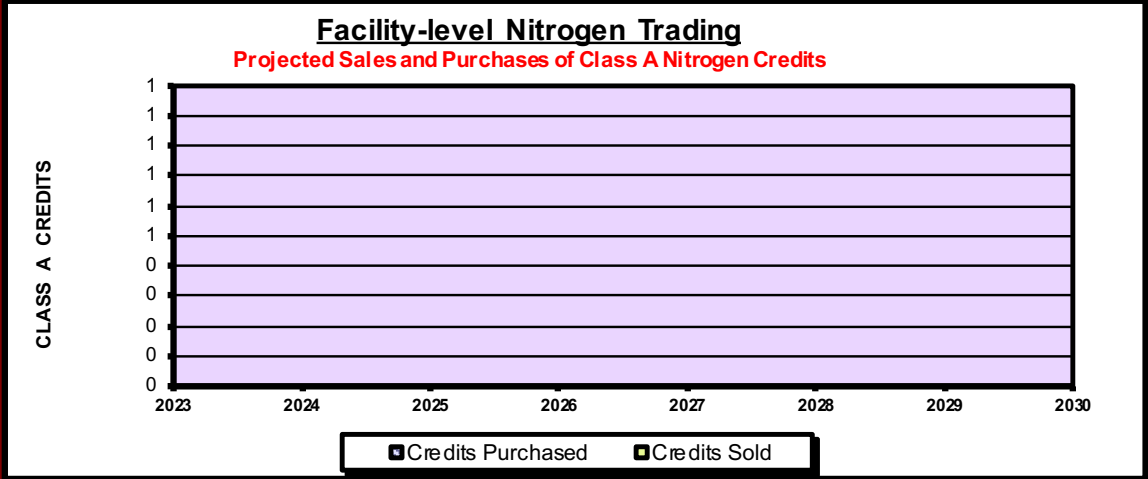
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply with the aggregate Delivered WLA of the bubble.

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
Ashland	6,292	8,241	8,657	9,588	10,086	10,484	10,883	11,281
Doswell	813	963	1,114	(8,385)	-	-	-	-
Totopotomoy	(7,105)	(9,204)	(9,771)	(1,203)	(10,086)	(10,484)	(10,883)	(11,281)
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Ashland	-	-	-	-	-	-	-	-
Doswell	-	-	-	-	8,349	8,313	8,276	8,238
Totopotomoy	8,072	11,506	9,721	17,071	6,970	5,353	3,736	2,120
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Credits	8,072	11,506	9,721	17,071	15,319	13,666	12,012	10,358
Private Exchanges	(90)	(90)	(90)	(90)	(587)	(587)	(587)	(587)
Expected Net Credits	7,982	11,416	9,631	16,981	14,732	13,079	11,425	9,771
Class A Sales (Purchases)	5,000	8,000	7,000	7,000	0	0	0	0
Expected Class B Credits	2,982	3,416	2,631	9,981	14,732	13,079	11,425	9,771
WQIF-Held Credits	54,820	54,820	54,820	54,820	54,820	54,820	54,820	54,820

PHOSPHORUS Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
Ashland	2,565	2,871	2,936	2,219	2,274	2,318	2,361	2,405
Doswell	281	297	313	(420)	(418)	(416)	(414)	(411)
Totopotomoy	(2,846)	(3,168)	(3,249)	(1,799)	(1,856)	(1,902)	(1,947)	(1,994)
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Ashland	-	-	-	-	-	-	-	-
Doswell	-	-	-	-	-	-	-	-
Totopotomoy	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Credits	-	-	-	-	-	-	-	-
Private Exchanges	-	-	-	-	-	-	-	-
Expected Net Credits	-	-	-	-	-	-	-	-
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0
WQIF-Held Credits	1,585	1,644	1,479	2,845	2,704	2,575	2,446	2,315

NITROGEN FACILITY SUMMARY

Hanover Co-Ashland
 YORK Trading Basin

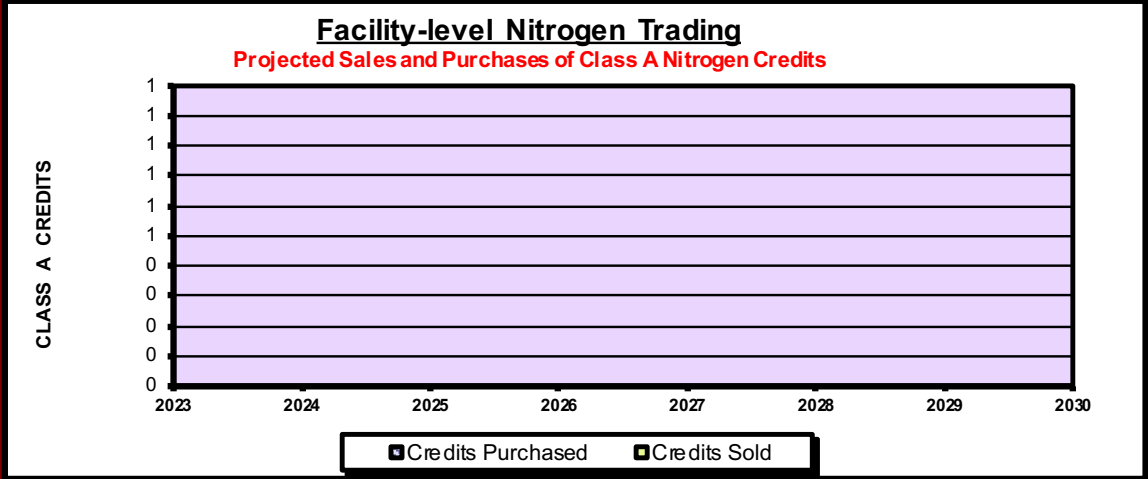


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Projected Flow (mgd)	1.40	1.50	1.52	1.55	1.57	1.59	1.61	1.63
Projected Avg. Annual Concentration (mg/L)	11.28	11.28	11.28	11.28	11.28	11.28	11.28	11.28
Discharged Load (end of pipe)	47,987	51,531	52,287	53,077	53,936	54,623	55,310	55,997
Delivery Factor	0.55	0.55	0.55	0.58	0.58	0.58	0.58	0.58
Expected Load	26,393	28,342	28,758	30,785	31,283	31,681	32,080	32,478
Delivered WLA	20,101	20,101	20,101	21,197	21,197	21,197	21,197	21,197
Expected Credits (delivered)	(6,292)	(8,241)	(8,657)	(9,588)	(10,086)	(10,484)	(10,883)	(11,281)
Transfers In (Out) within Owner Bubble	6,292	8,241	8,657	9,588	10,086	10,484	10,883	11,281
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

Hanover Co-Doswell
 YORK Trading Basin



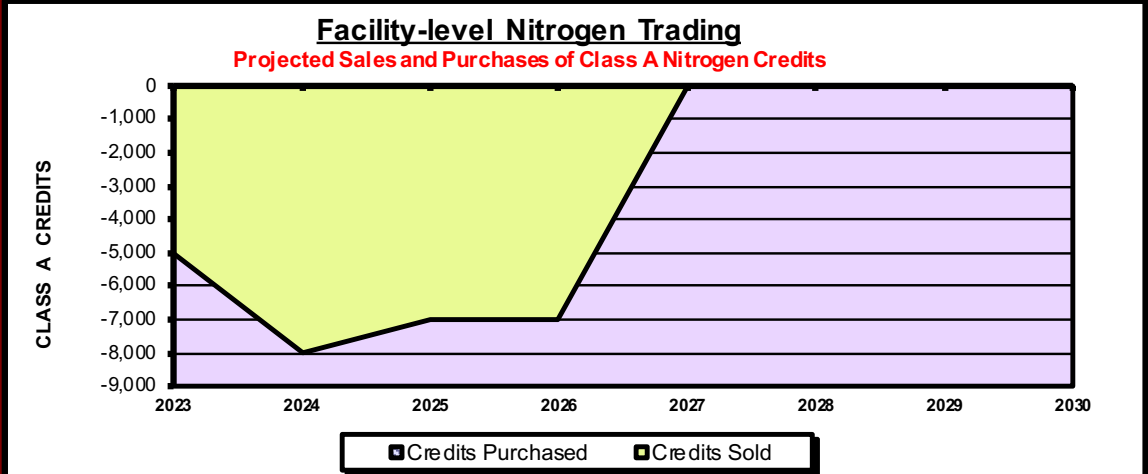
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

2023	2024	2025	2026	2027	2028	2029	2030
<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
0.32	0.32	0.33	0.33	0.34	0.34	0.35	0.35
20.50	20.50	20.50	4.00	4.00	4.00	4.00	4.00
19,901	20,199	20,502	4,060	4,121	4,183	4,246	4,310
0.50	0.50	0.50	0.59	0.59	0.59	0.59	0.59
9,950	10,100	10,251	2,396	2,432	2,468	2,505	2,543
9,137	9,137	9,137	10,781	10,781	10,781	10,781	10,781
(813)	(963)	(1,114)	8,385	8,349	8,313	8,276	8,238
813	963	1,114	(8,385)	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	8,349	8,313	8,276	8,238
0	0	0	0	0	0	0	0
0	0	0	0	8,349	8,313	8,276	8,238

NITROGEN FACILITY SUMMARY

Hanover Co-Totopotomoy
 YORK Trading Basin



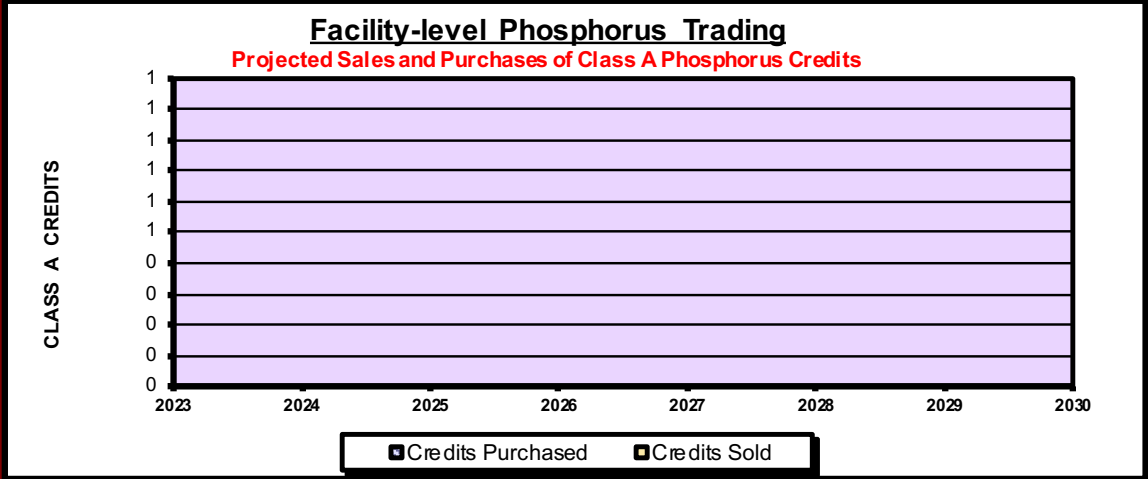
Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Projected Flow (mgd)	4.63	4.40	4.45	4.50	4.55	4.60	4.65	4.70
Projected Avg. Annual Concentration (mg/L)	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Discharged Load (end of pipe)	112,737	107,204	108,422	109,640	110,858	112,077	113,295	114,513
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	112,737	107,204	108,422	109,640	110,858	112,077	113,295	114,513
Delivered WLA	182,734	182,734	182,734	182,734	182,734	182,734	182,734	182,734
Expected Credits (delivered)	69,997	75,530	74,312	73,094	71,876	70,657	69,439	68,221
Transfers In (Out) within Owner Bubble	(7,105)	(9,204)	(9,771)	(1,203)	(10,086)	(10,484)	(10,883)	(11,281)
Transfers In (Out) from Private Exchange*	(90)	(90)	(90)	(90)	(587)	(587)	(587)	(587)
WQIF-Held Credits	(54,820)	(54,820)	(54,820)	(54,820)	(54,820)	(54,820)	(54,820)	(54,820)
Expected Net Credits	7,982	11,416	9,631	16,981	6,383	4,766	3,149	1,533
Class A Credit Sales (Purchases)	5,000	8,000	7,000	7,000	0	0	0	0
Expected Class B Credits	2,982	3,416	2,631	9,981	6,383	4,766	3,149	1,533

* Represents private trade with Hanover County to meet MS4 requirements

PHOSPHORUS FACILITY SUMMARY

Hanover Co-Ashland
 YORK Trading Basin

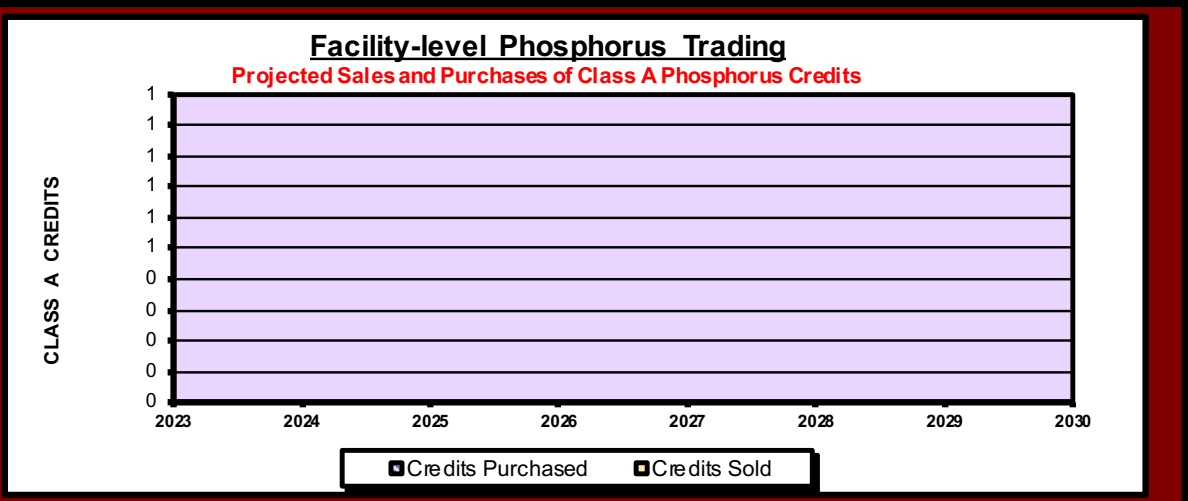


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Projected Flow (mgd)	1.40	1.50	1.52	1.55	1.57	1.59	1.61	1.63
Projected Avg. Annual Concentration (mg/L)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Discharged Load (end of pipe)	6,381	6,853	6,953	7,058	7,172	7,264	7,355	7,446
Delivery Factor	0.65	0.65	0.65	0.48	0.48	0.48	0.48	0.48
Expected Load	4,148	4,454	4,519	3,388	3,443	3,487	3,530	3,574
Delivered WLA	1,583	1,583	1,583	1,169	1,169	1,169	1,169	1,169
Expected Credits (delivered)	(2,565)	(2,871)	(2,936)	(2,219)	(2,274)	(2,318)	(2,361)	(2,405)
Transfers In (Out) within Owner Bubble	2,565	2,871	2,936	2,219	2,274	2,318	2,361	2,405
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Hanover Co-Doswell
 YORK Trading Basin

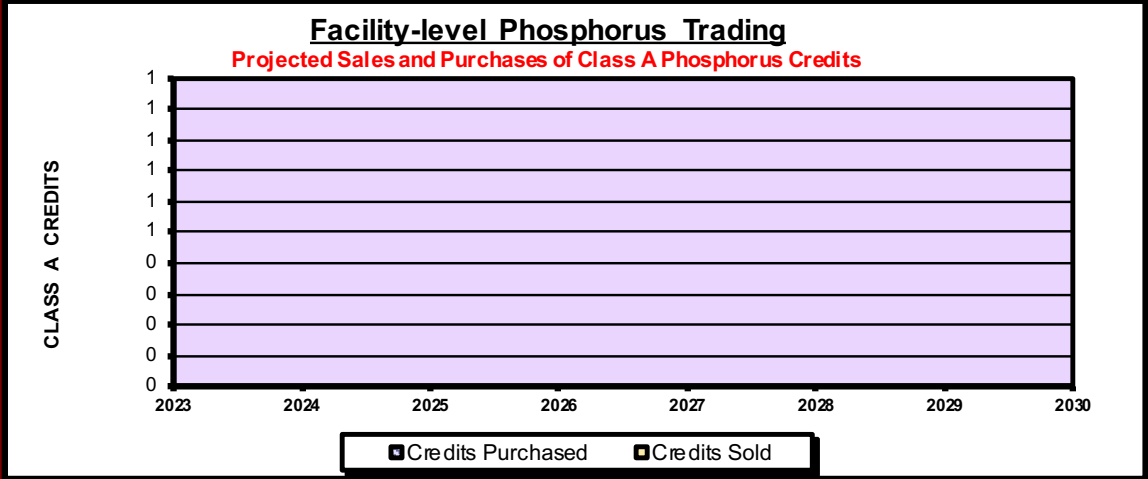


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Projected Flow (mgd)	0.32	0.32	0.33	0.33	0.34	0.34	0.35	0.35
Projected Avg. Annual Concentration (mg/L)	1.70	1.70	1.70	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	1,650	1,675	1,700	305	309	314	318	323
Delivery Factor	0.65	0.65	0.65	0.46	0.46	0.46	0.46	0.46
Expected Load	1,073	1,089	1,105	140	142	144	146	149
Delivered WLA	792	792	792	560	560	560	560	560
Expected Credits (delivered)	(281)	(297)	(313)	420	418	416	414	411
Transfers In (Out) within Owner Bubble	281	297	313	(420)	(418)	(416)	(414)	(411)
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Hanover Co-Totopotomoy
 YORK Trading Basin



Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Projected Flow (mgd)	4.63	4.40	4.45	4.50	4.55	4.60	4.65	4.70
Projected Avg. Annual Concentration (mg/L)	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Discharged Load (end of pipe)	7,751	7,370	7,454	7,538	7,622	7,705	7,789	7,873
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	7,751	7,370	7,454	7,538	7,622	7,705	7,789	7,873
Delivered WLA	12,182	12,182	12,182	12,182	12,182	12,182	12,182	12,182
Expected Credits (delivered)	4,431	4,812	4,728	4,644	4,560	4,477	4,393	4,309
Transfers In (Out) within Owner Bubble	(2,846)	(3,168)	(3,249)	(1,799)	(1,856)	(1,902)	(1,947)	(1,994)
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	(1,585)	(1,644)	(1,479)	(2,845)	(2,704)	(2,575)	(2,446)	(2,315)
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

Owner Bubble: Hampton Roads Sanitation District (York)

The facilities listed below have received an aggregated mass load limit pursuant to 9 VAC 25-820-70, Part 1.B.2., which is also referred to as an “owner bubble”. Accordingly, compliance is determined solely on an aggregate basis rather than by comparison of individual facility loads with respective individual WLAs.

The “Credit Transferred within Bubble” section of each table forecasts the use of Credits within the owner bubble during each Compliance Year, and must necessarily sum to zero. The specific Credit transfers shown in this table are provided for internal planning purposes only and, accordingly, are not binding and may change based on the actual performance of individual facilities within the bubble.

Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply with the aggregate Delivered WLA of the bubble.

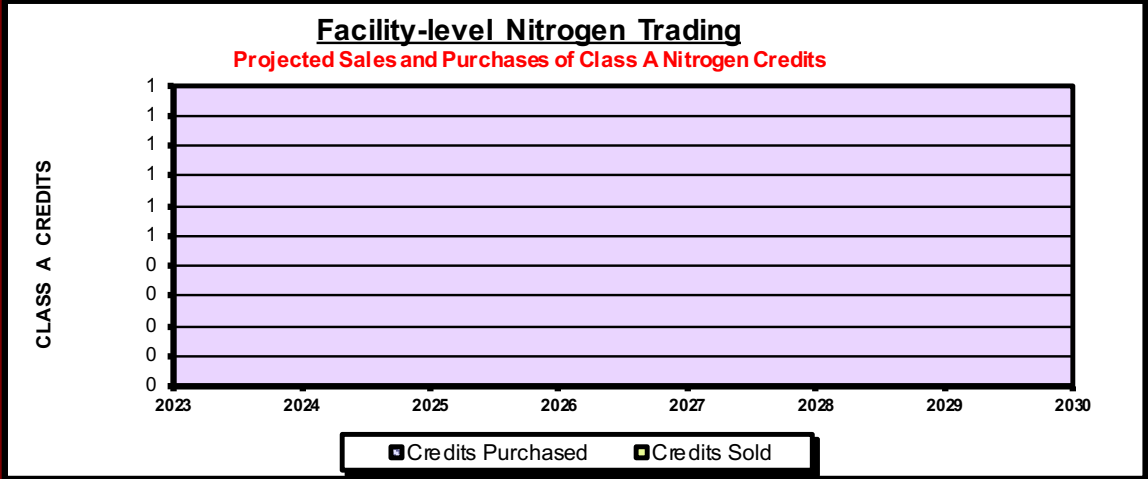
NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
King William	(763)	(600)	(560)	(520)	38	160	282	403
West Point	12,854	13,987	13,576	13,794	13,052	12,945	12,839	12,732
York	(12,091)	(13,387)	(13,016)	(13,274)	(13,090)	(13,105)	(13,121)	(13,135)
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
King William	-	-	-	-	-	-	-	-
West Point	-	-	-	-	-	-	-	-
York	25,028	21,585	24,496	8,051	7,890	7,242	6,592	5,945
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Credits	25,028	21,585	24,496	8,051	7,890	7,242	6,592	5,945
Private Exchanges*	(598)	(598)	(598)	(2,924)	(2,924)	(4,097)	(4,097)	(4,097)
Expected Net Credits	24,430	20,987	23,898	5,127	4,966	3,145	2,495	1,848
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	24,430	20,987	23,898	5,127	4,966	3,145	2,495	1,848
WQIF-Held Credits	0	0	0	0	0	0	0	0

PHOSPHORUS Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
King William	(140)	(128)	(125)	(122)	(80)	(71)	(62)	(53)
West Point	3,352	3,546	3,476	2,099	2,014	2,001	1,989	1,977
York	(3,212)	(3,418)	(3,351)	(1,977)	(1,934)	(1,930)	(1,927)	(1,924)
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
King William	-	-	-	-	-	-	-	-
West Point	-	-	-	-	-	-	-	-
York	1,253	921	1,136	2,477	2,497	2,458	2,419	2,379
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Credits	1,253	921	1,136	2,477	2,497	2,458	2,419	2,379
Private Exchanges*	(209)	(209)	(209)	(762)	(762)	(1,551)	(1,551)	(1,551)
Expected Net Credits	1,044	712	927	1,715	1,735	907	868	828
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	1,044	712	927	1,715	1,735	907	868	828
WQIF-Held Credits	0	0	0	0	0	0	0	0

* Reflects private trade with the Department of Energy - Jefferson Lab and other private trades to offset MS4 requirements

NITROGEN FACILITY SUMMARY

HRSD-King William
 YORK Trading Basin

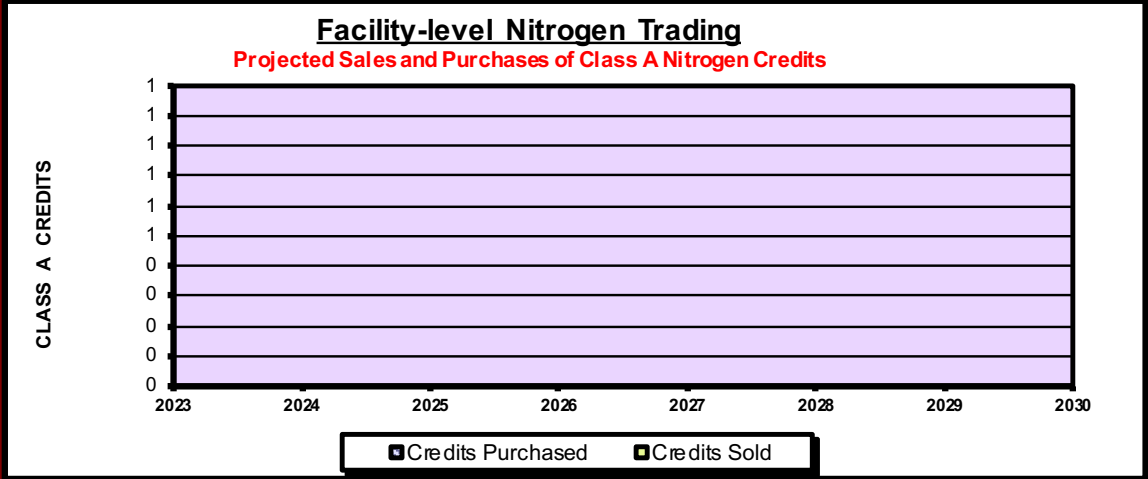


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Projected Flow (mgd)	0.05	0.07	0.07	0.07	0.12	0.13	0.14	0.15
Projected Avg. Annual Concentration (mg/L)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Discharged Load (end of pipe)	661	824	864	904	1,462	1,584	1,706	1,827
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	661	824	864	904	1,462	1,584	1,706	1,827
Delivered WLA	1,424	1,424	1,424	1,424	1,424	1,424	1,424	1,424
Expected Credits (delivered)	763	600	560	520	(38)	(160)	(282)	(403)
Transfers In (Out) within Owner Bubble	(763)	(600)	(560)	(520)	38	160	282	403
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

HRSD-West Point
 YORK Trading Basin

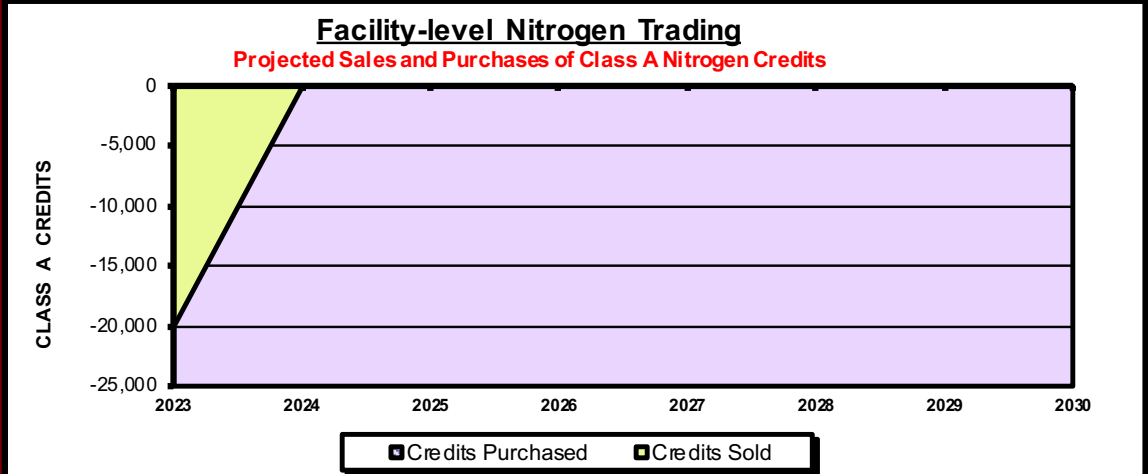


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Projected Flow (mgd)	0.45	0.47	0.46	0.46	0.45	0.45	0.45	0.44
Projected Avg. Annual Concentration (mg/L)	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50
Discharged Load (end of pipe)	23,818	24,951	24,540	24,758	24,016	23,909	23,803	23,696
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	23,818	24,951	24,540	24,758	24,016	23,909	23,803	23,696
Delivered WLA	10,964	10,964	10,964	10,964	10,964	10,964	10,964	10,964
Expected Credits (delivered)	(12,854)	(13,987)	(13,576)	(13,794)	(13,052)	(12,945)	(12,839)	(12,732)
Transfers In (Out) within Owner Bubble	12,854	13,987	13,576	13,794	13,052	12,945	12,839	12,732
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

HRSD-York
 YORK Trading Basin



Loading & Credit Summary

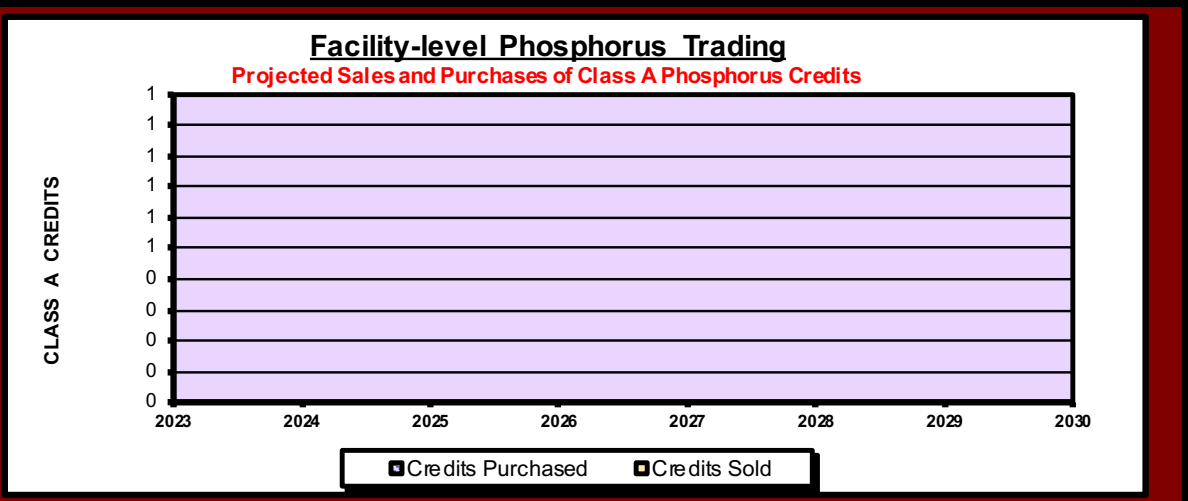
	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Projected Flow (mgd)	13.07	13.19	13.05	13.08	13.10	13.14	13.18	13.22
Projected Avg. Annual Concentration (mg/L)	6.00	6.00	6.00	5.20	5.20	5.20	5.20	5.20
Discharged Load (end of pipe)	238,808	240,955	238,415	207,119	207,464	208,097	208,731	209,364
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	238,808	240,955	238,415	207,119	207,464	208,097	208,731	209,364
Delivered WLA*	275,927	275,927	275,927	228,444	228,444	228,444	228,444	228,444
Expected Credits (delivered)	37,119	34,972	37,512	21,325	20,980	20,347	19,713	19,080
Transfers In (Out) within Owner Bubble	(12,091)	(13,387)	(13,016)	(13,274)	(13,090)	(13,105)	(13,121)	(13,135)
Transfers In (Out) from Private Exchange**	(598)	(598)	(598)	(2,924)	(2,924)	(4,097)	(4,097)	(4,097)
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	24,430	20,987	23,898	5,127	4,966	3,145	2,495	1,848
Class A Credit Sales (Purchases)	20,091	0	0	0	0	0	0	0
Expected Class B Credits	4,339	20,987	23,898	5,127	4,966	3,145	2,495	1,848

* Reflects consolidation of the HRSD-Mathews WLA

** Represents credits received via private trade with the Department of Energy-Jefferson Lab and credits used to meet MS4 requirements

PHOSPHORUS FACILITY SUMMARY

HRSD-King William
 YORK Trading Basin

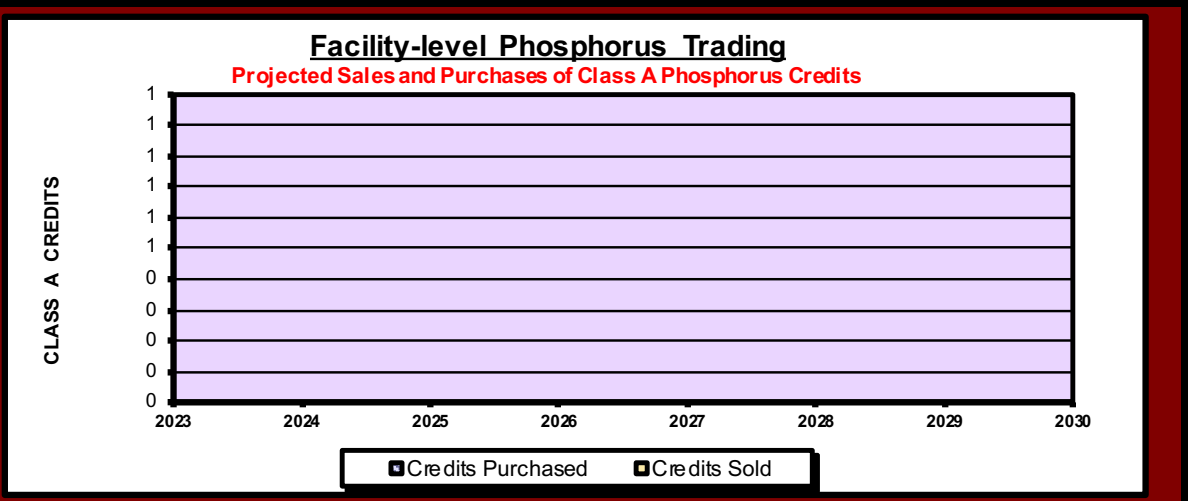


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Projected Flow (mgd)	0.05	0.07	0.07	0.07	0.12	0.13	0.14	0.15
Projected Avg. Annual Concentration (mg/L)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	50	62	65	68	110	119	128	137
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	50	62	65	68	110	119	128	137
Delivered WLA	190	190	190	190	190	190	190	190
Expected Credits (delivered)	140	128	125	122	80	71	62	53
Transfers In (Out) within Owner Bubble	(140)	(128)	(125)	(122)	(80)	(71)	(62)	(53)
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

HRSD-West Point
 YORK Trading Basin

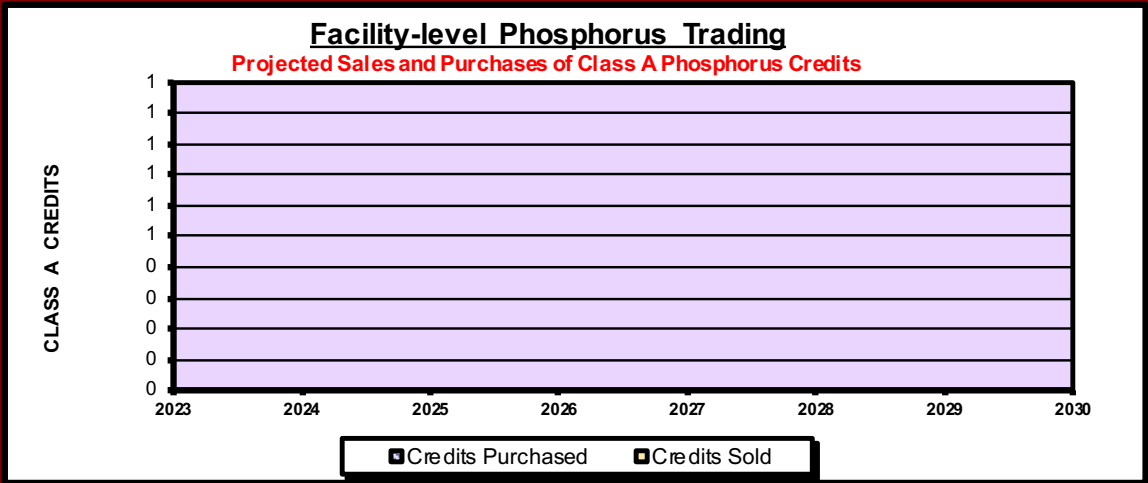


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Projected Flow (mgd)	0.45	0.47	0.46	0.46	0.45	0.45	0.45	0.44
Projected Avg. Annual Concentration (mg/L)	3.00	3.00	3.00	2.00	2.00	2.00	2.00	2.00
Discharged Load (end of pipe)	4,083	4,277	4,207	2,830	2,745	2,732	2,720	2,708
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	4,083	4,277	4,207	2,830	2,745	2,732	2,720	2,708
Delivered WLA	731	731	731	731	731	731	731	731
Expected Credits (delivered)	(3,352)	(3,546)	(3,476)	(2,099)	(2,014)	(2,001)	(1,989)	(1,977)
Transfers In (Out) within Owner Bubble	3,352	3,546	3,476	2,099	2,014	2,001	1,989	1,977
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

HRSD-York
 YORK Trading Basin



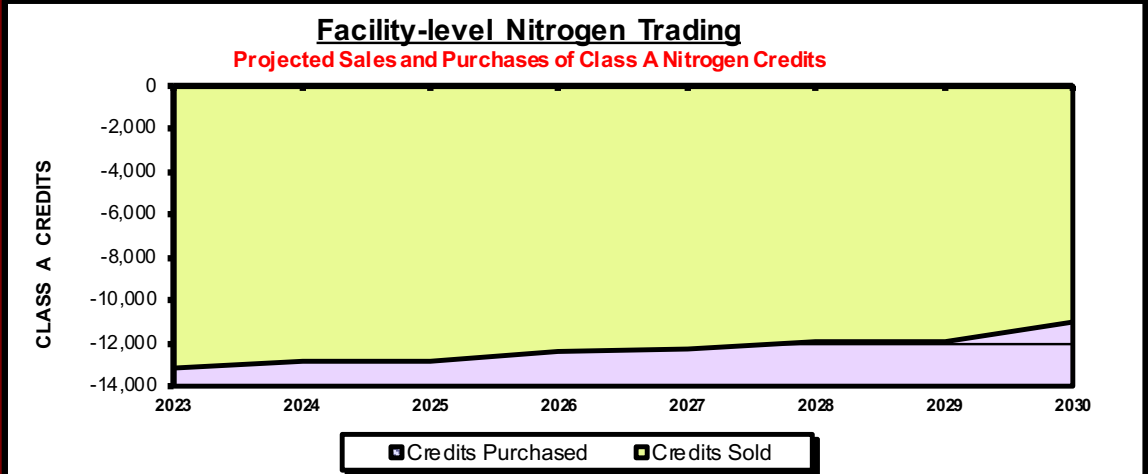
Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Projected Flow (mgd)	13.07	13.19	13.05	13.08	13.10	13.14	13.18	13.22
Projected Avg. Annual Concentration (mg/L)	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
Discharged Load (end of pipe)	13,930	14,056	13,908	13,941	13,964	14,007	14,049	14,092
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	13,930	14,056	13,908	13,941	13,964	14,007	14,049	14,092
Delivered WLA*	18,395	18,395	18,395	18,395	18,395	18,395	18,395	18,395
Expected Credits (delivered)	4,465	4,339	4,487	4,454	4,431	4,388	4,346	4,303
Transfers In (Out) within Owner Bubble	(3,212)	(3,418)	(3,351)	(1,977)	(1,934)	(1,930)	(1,927)	(1,924)
Transfers In (Out) from Private Exchange**	(209)	(209)	(209)	(762)	(762)	(1,551)	(1,551)	(1,551)
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	1,044	712	927	1,715	1,735	907	868	828
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	1,044	712	927	1,715	1,735	907	868	828

* Reflects consolidation of the HRSD-Mathews WLA
 ** Represents private trade to meet MS4 requirements

NITROGEN FACILITY SUMMARY

New Kent Co-Parham
 YORK Trading Basin

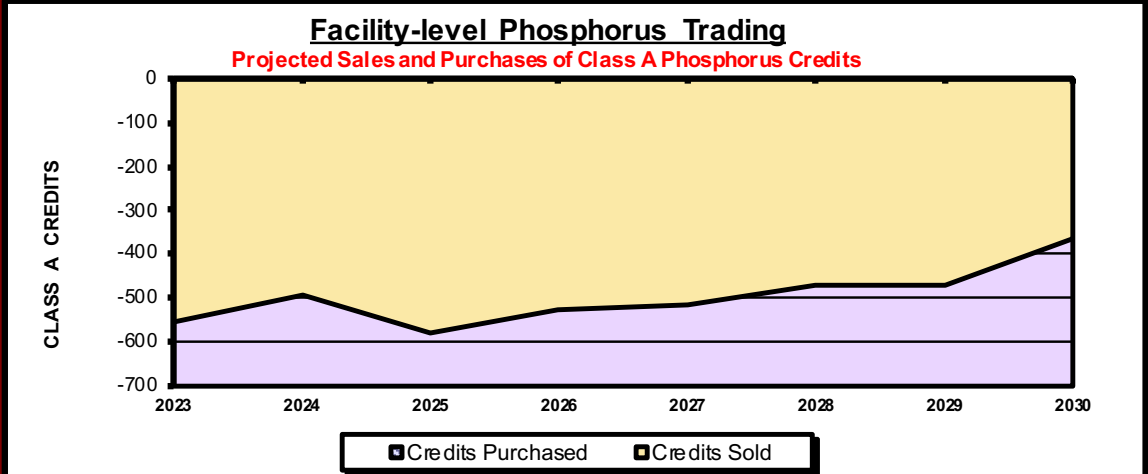


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Projected Flow (mgd)	0.50	0.55	0.60	0.65	0.68	0.70	0.70	0.80
Projected Avg. Annual Concentration (mg/L)	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Discharged Load (end of pipe)	9,137	10,050	10,964	11,878	12,426	12,791	12,791	14,619
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	9,137	10,050	10,964	11,878	12,426	12,791	12,791	14,619
Delivered WLA	36,547	36,547	36,547	36,547	36,547	36,547	36,547	36,547
Expected Credits (delivered)	27,410	26,497	25,583	24,669	24,121	23,756	23,756	21,928
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	27,410	26,497	25,583	24,669	24,121	23,756	23,756	21,928
Class A Credit Sales (Purchases)	13,157	12,882	12,792	12,335	12,243	11,878	11,878	10,964
Expected Class B Credits	14,253	13,615	12,791	12,334	11,878	11,878	11,878	10,964

PHOSPHORUS FACILITY SUMMARY

New Kent Co-Parham
 YORK Trading Basin

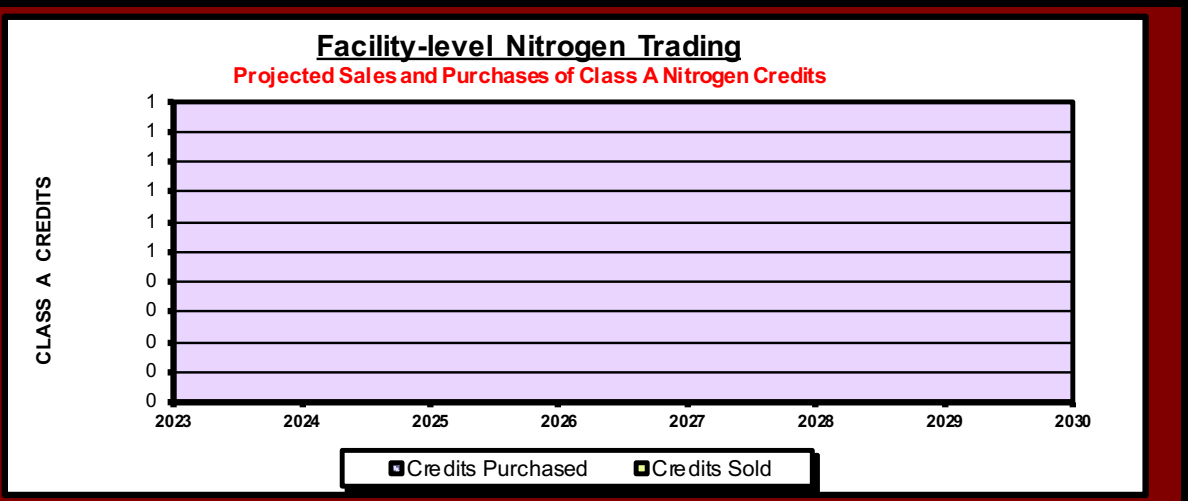


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Projected Flow (mgd)	0.50	0.55	0.60	0.65	0.68	0.70	0.70	0.80
Projected Avg. Annual Concentration (mg/L)	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Discharged Load (end of pipe)	1,066	1,173	1,279	1,386	1,450	1,492	1,492	1,706
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	1,066	1,173	1,279	1,386	1,450	1,492	1,492	1,706
Delivered WLA	2,436	2,436	2,436	2,436	2,436	2,436	2,436	2,436
Expected Credits (delivered)	1,370	1,263	1,157	1,050	986	944	944	730
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	1,370	1,263	1,157	1,050	986	944	944	730
Class A Credit Sales (Purchases)	555	492	579	525	515	472	472	365
Expected Class B Credits	815	771	578	525	471	472	472	365

NITROGEN FACILITY SUMMARY

RSA-Gordonsville
 YORK Trading Basin

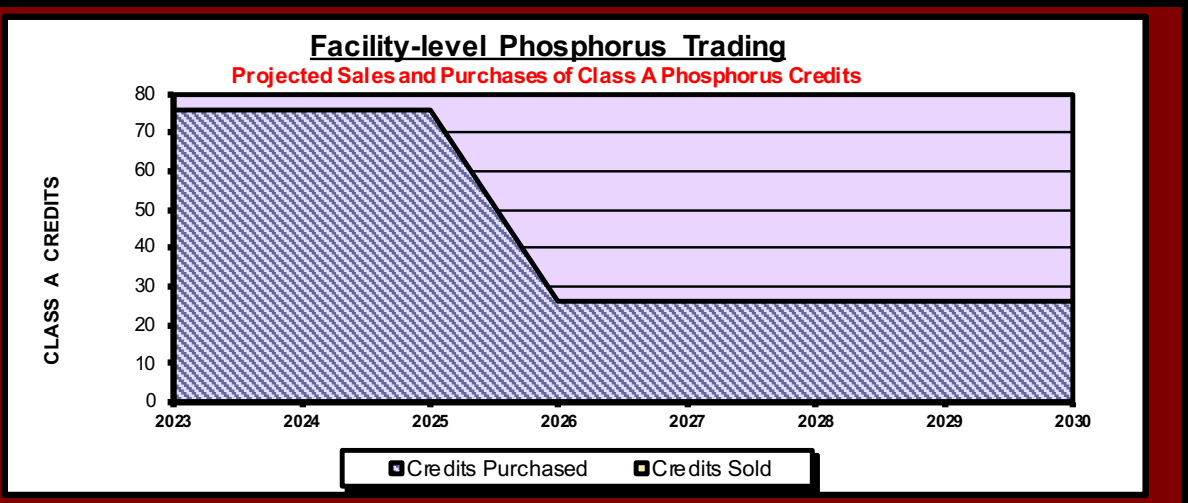


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Projected Flow (mgd)	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47
Projected Avg. Annual Concentration (mg/L)	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Discharged Load (end of pipe)	8,588	8,588	8,588	8,588	8,588	8,588	8,588	8,588
Delivery Factor	0.06	0.06	0.06	0.16	0.16	0.16	0.16	0.16
Expected Load	515	515	515	1,374	1,374	1,374	1,374	1,374
Delivered WLA	1,031	1,031	1,031	2,748	2,748	2,748	2,748	2,748
Expected Credits (delivered)	516	516	516	1,374	1,374	1,374	1,374	1,374
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	(296)	(296)	(296)	(789)	(789)	(789)	(789)	(789)
Expected Net Credits	220	220	220	585	585	585	585	585
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	220	220	220	585	585	585	585	585

PHOSPHORUS FACILITY SUMMARY

RSA-Gordonsville
 YORK Trading Basin



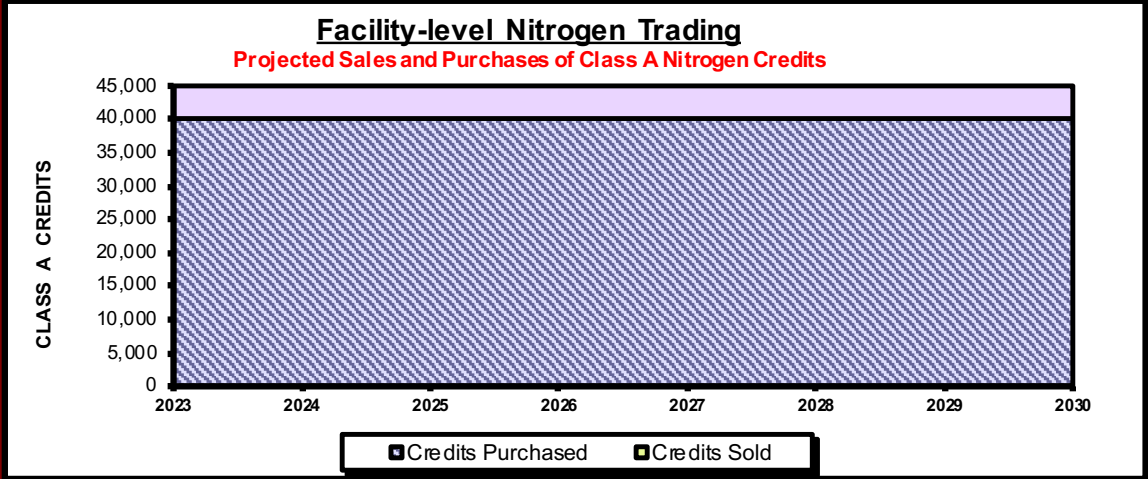
Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Projected Flow (mgd)	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47
Projected Avg. Annual Concentration (mg/L)	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Discharged Load (end of pipe)	1,288	1,288	1,288	1,288	1,288	1,288	1,288	1,288
Delivery Factor	0.53	0.53	0.53	0.18	0.18	0.18	0.18	0.18
Expected Load	683	683	683	232	232	232	232	232
Delivered WLA	607	607	607	206	206	206	206	206
Expected Credits (delivered)	(76)	(76)	(76)	(26)	(26)	(26)	(26)	(26)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	(76)	(76)	(76)	(26)	(26)	(26)	(26)	(26)
Class A Credit Sales (Purchases)	(76)	(76)	(76)	(26)	(26)	(26)	(26)	(26)
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

WestRock-West Point Mill

YORK Trading Basin

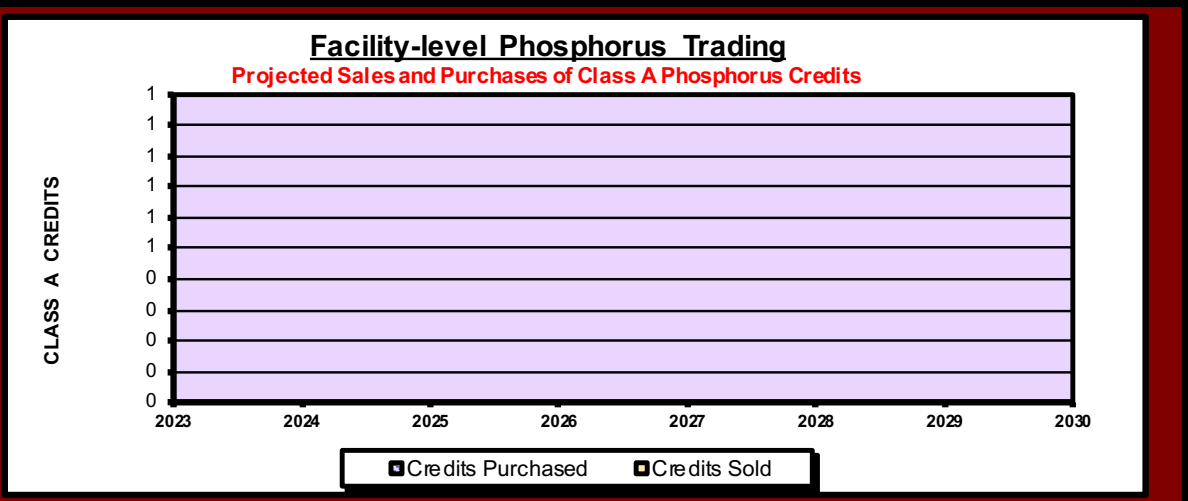


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00
Projected Flow (mgd)	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50
Projected Avg. Annual Concentration (mg/L)	6.34	6.34	6.34	6.34	6.34	6.34	6.34	6.34
Discharged Load (end of pipe)	299,287	299,287	299,287	299,287	299,287	299,287	299,287	299,287
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	299,287	299,287	299,287	299,287	299,287	299,287	299,287	299,287
Delivered WLA	259,177	259,177	259,177	259,177	259,177	259,177	259,177	259,177
Expected Credits (delivered)	(40,110)	(40,110)	(40,110)	(40,110)	(40,110)	(40,110)	(40,110)	(40,110)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	(40,110)	(40,110)	(40,110)	(40,110)	(40,110)	(40,110)	(40,110)	(40,110)
Class A Credit Sales (Purchases)	(40,110)	(40,110)	(40,110)	(40,110)	(40,110)	(40,110)	(40,110)	(40,110)
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

WestRock-West Point Mill
 YORK Trading Basin

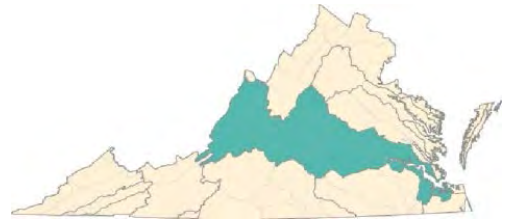


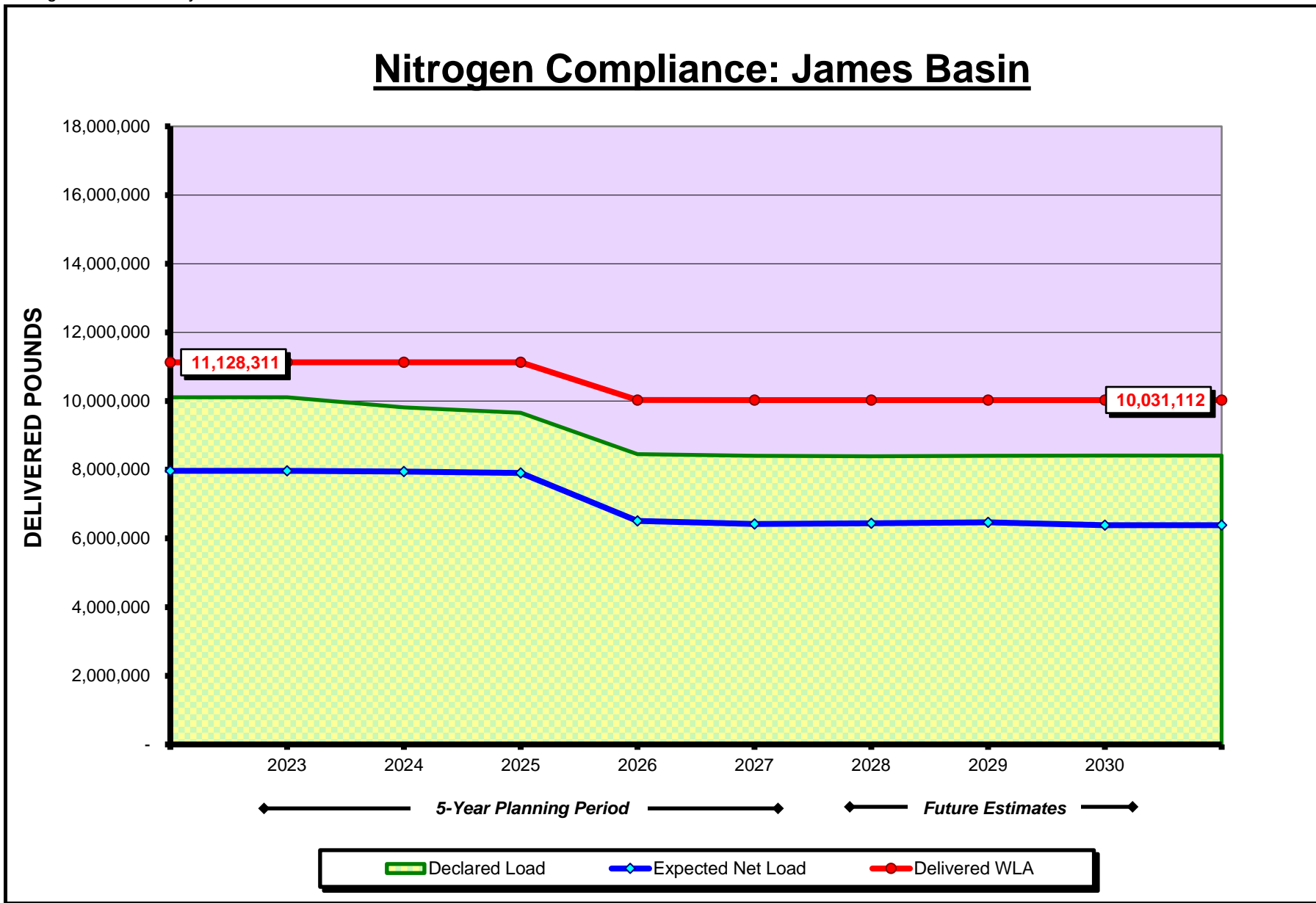
Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00
Projected Flow (mgd)	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50
Projected Avg. Annual Concentration (mg/L)	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Discharged Load (end of pipe)	53,343	53,343	53,343	53,343	53,343	53,343	53,343	53,343
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	53,343	53,343	53,343	53,343	53,343	53,343	53,343	53,343
Delivered WLA	56,038	56,038	56,038	56,038	56,038	56,038	56,038	56,038
Expected Credits (delivered)	2,695	2,695	2,695	2,695	2,695	2,695	2,695	2,695
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	2,695	2,695	2,695	2,695	2,695	2,695	2,695	2,695
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	2,695	2,695	2,695	2,695	2,695	2,695	2,695	2,695

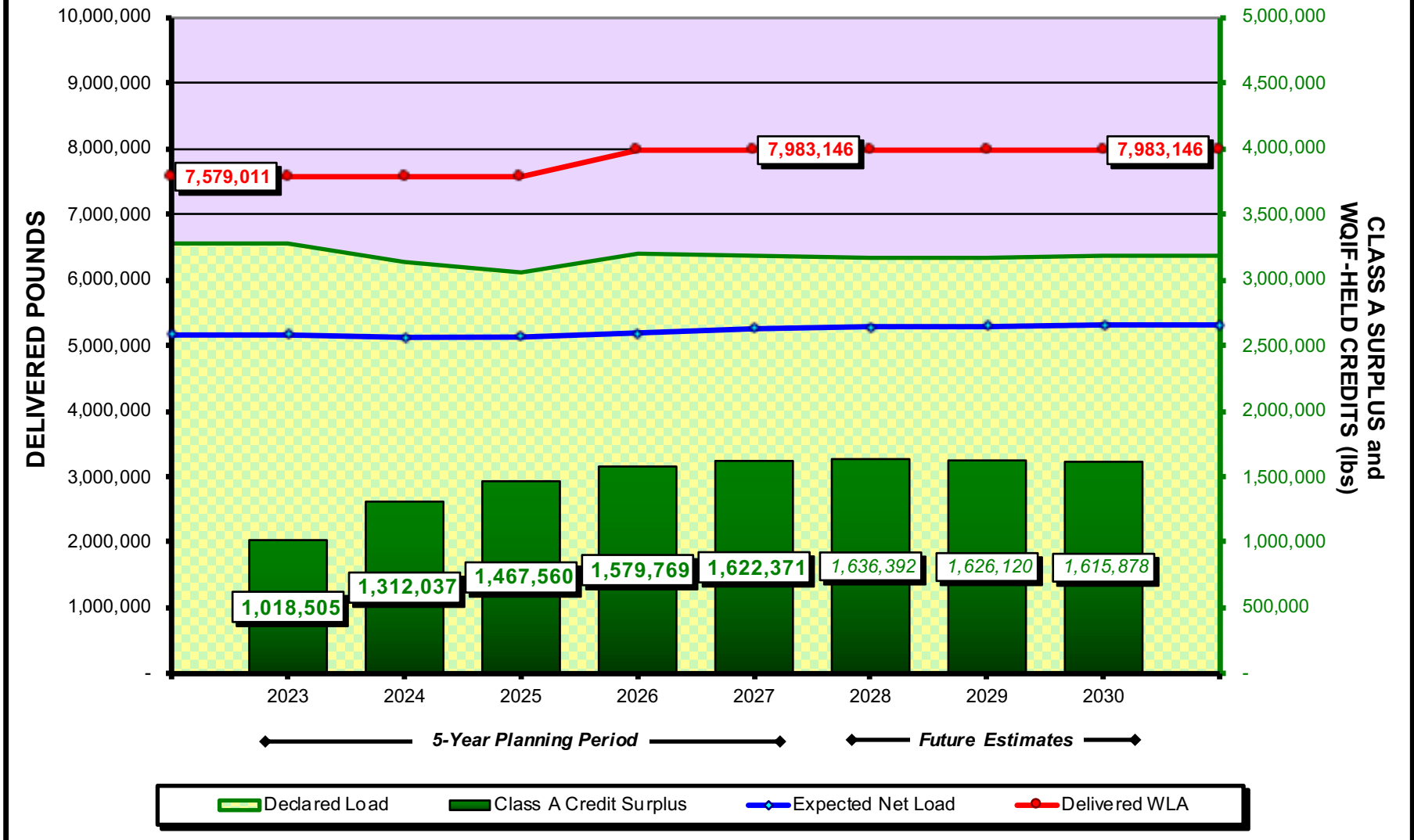
SECTION 5

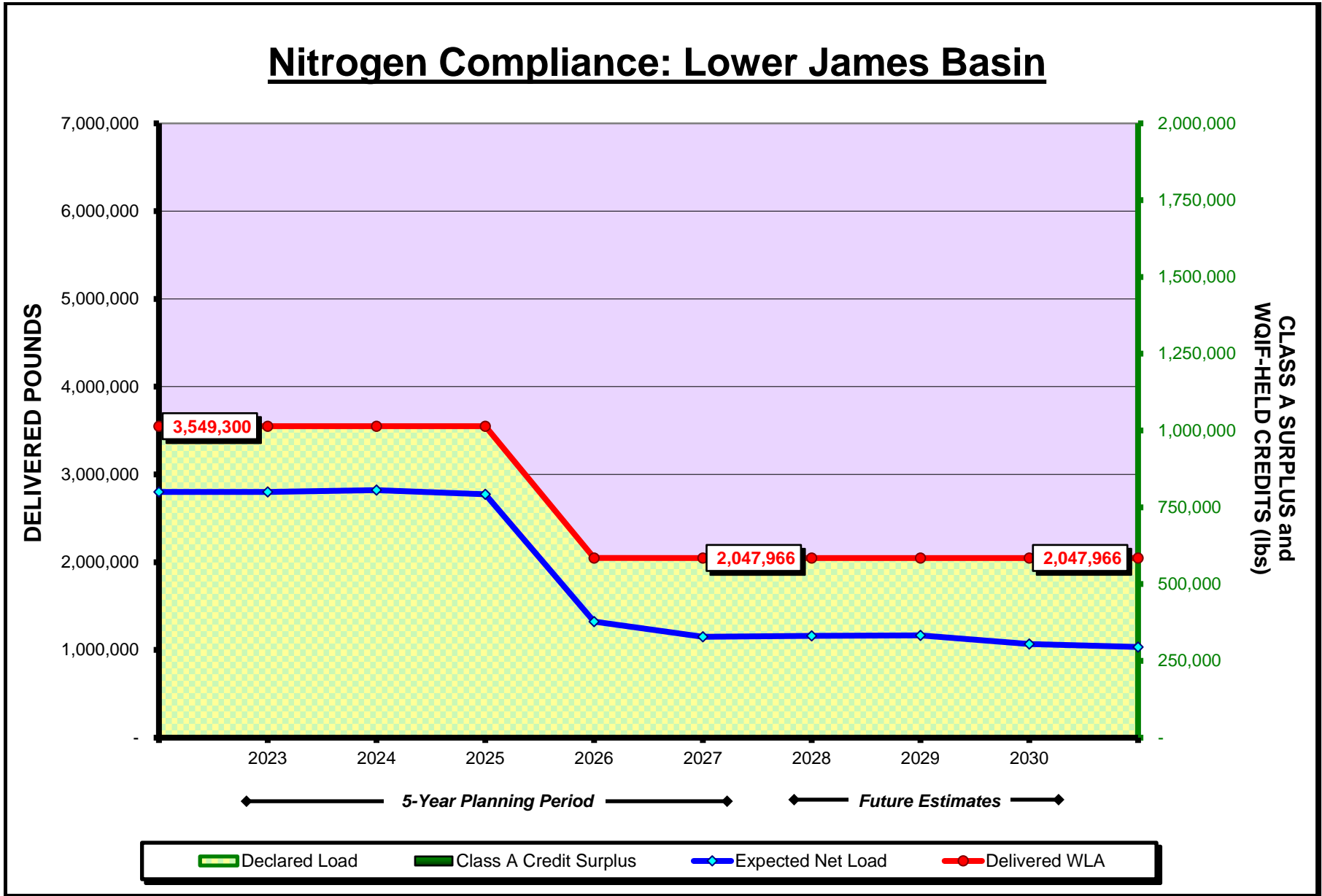
James River Basin Exchange Compliance Plan





Nitrogen Compliance: Upper James Basin





JAMES Basin: Nitrogen Credit Ledger

Compliance Year:		2023		Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)			
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits		Class A Sales	Class A* Purchases	Class B Sales**	
								PRICE:	\$ 0.24	\$ 4.04	\$ 0.02	
UPPER JAMES BASIN	7,579,011	5,167,156	2,411,855	-	-	-	2,411,855		1,093,446	(74,941)	1,393,350	
AdvanSix-Hopewell	1,090,798	723,625	367,173	-	-	-	367,173		100,000	-	267,173	
Alleghany Co-L. Jackson	12,829	6,513	6,316	-	-	-	6,316		4,500	-	1,816	
Alleghany Co-Low Moor	2,467	1,316	1,151	-	-	-	1,151		600	-	551	
Amherst (Town)	4,715	1,572	3,143	-	-	-	3,143		1,572	-	1,571	
Aqua Virginia-L. Monticello	9,065	11,543	(2,478)	1,536	-	-	(942)		-	(942)	-	
Aqua Virginia-Manakin Farms	3,509	1,973	1,536	(1,536)	-	-	-		-	-	-	
Buena Vista	22,613	28,307	(5,694)	-	-	-	(5,694)		-	(5,694)	-	
BWX Technologies, Inc	119,680	102,916	16,764	-	-	-	16,764		15,000	-	1,764	
Chesterfield-Falling Cr.	182,738	159,892	22,846	-	-	-	22,846		-	-	22,846	
Chesterfield-Proctors Cr.	411,151	245,472	165,679	-	(50,000)	-	115,679		-	-	115,679	
Covington	11,512	18,427	(6,915)	-	-	-	(6,915)		-	(6,915)	-	
Crewe	2,284	665	1,619	-	-	-	1,619		1,619	-	-	
Dominion-Chesterfield	243,099	189,070	54,029	-	-	-	54,029		-	-	54,029	
DuPont-Spruance	201,080	262,470	(61,390)	-	-	-	(61,390)		-	(61,390)	-	
Georgia-Pacific	73,493	51,965	21,528	-	-	-	21,528		17,000	-	4,528	
Greif Packaging	46,877	46,877	-	-	-	-	-		-	-	-	
Henrico Co	1,142,085	731,239	410,846	-	-	-	410,846		177,431	-	233,415	
Hopewell Water Renewal	1,827,336	1,260,862	566,474	-	-	-	566,474		-	-	566,474	
Lynchburg	343,052	214,653	128,399	-	-	-	128,399		97,000	-	31,399	
MSA-Lexington	16,994	4,721	12,273	-	-	-	12,273		800	-	11,473	
Philip Morris	139,724	45,683	94,041	-	-	-	94,041		60,000	-	34,041	
Richmond	1,093,652	548,201	545,451	-	-	-	545,451		500,000	-	45,451	
RWSA-Moores Creek	181,116	70,482	110,634	-	-	-	110,634		110,470	-	164	
South Central WWA	350,239	400,189	(49,950)	-	50,000	-	50		-	-	50	
Tyson Foods-Glen Allen	3,519	2,593	926	-	-	-	926		-	-	926	
WestRock-Covington	43,384	35,930	7,454	-	-	-	7,454		7,454	-	-	
								PRICE:	No Sale	No Sale	No Sale	
LOWER JAMES BASIN	3,549,300	2,798,088	751,212	-	(2,678)	-	748,534		-	-	748,534	
HRSD (Bubble)	3,549,300	2,798,088	751,212	-	(2,678)	-	748,534		-	-	748,534	

* For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.

** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.

JAMES Basin: Nitrogen Credit Ledger

Compliance Year:	2024	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)						
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits	PRICE:	Class A Sales	Class A* Purchases	Class B Sales**		
UPPER JAMES BASIN	7,579,011	5,128,706	2,450,305	-	(5)	-	2,450,300	\$ 0.18	\$ 4.13	\$ 0.02	1,381,340	(69,303)	1,138,263
AdvanSix-Hopewell	1,090,798	690,733	400,065	-	-	-	400,065		100,000	-	300,065		
Alleghany Co-L. Jackson	12,829	6,513	6,316	-	-	-	6,316		5,500	-	816		
Alleghany Co-Low Moor	2,467	1,316	1,151	-	-	-	1,151		600	-	551		
Amherst (Town)	4,715	1,986	2,729	-	-	-	2,729		1,365	-	1,364		
Aqua Virginia-L. Monticello	9,065	11,543	(2,478)	1,536	-	-	(942)		-	(942)	-		
Aqua Virginia-Manakin Farms	3,509	1,973	1,536	(1,536)	-	-	-		-	-	-		
Buena Vista	22,613	28,494	(5,881)	-	-	-	(5,881)		-	(5,881)	-		
BWX Technologies, Inc	119,680	102,916	16,764	-	-	-	16,764		15,000	-	1,764		
Chesterfield-Falling Cr.	182,738	159,892	22,846	-	-	-	22,846		-	-	22,846		
Chesterfield-Proctors Cr.	411,151	250,802	160,349	-	(50,000)	-	110,349		-	-	110,349		
Covington	11,512	18,292	(6,780)	-	-	-	(6,780)		-	(6,780)	-		
Crewe	2,284	665	1,619	-	-	-	1,619		1,619	-	-		
Dominion-Chesterfield	243,099	189,070	54,029	-	-	-	54,029		-	-	54,029		
DuPont-Spruance	201,080	256,780	(55,700)	-	-	-	(55,700)		-	(55,700)	-		
Georgia-Pacific	73,493	50,709	22,784	-	-	-	22,784		17,000	-	5,784		
Greif Packaging	46,877	46,877	-	-	-	-	-		-	-	-		
Henrico Co	1,142,085	746,162	395,923	-	-	-	395,923		183,475	-	212,448		
Hopewell Water Renewal	1,827,336	1,269,999	557,337	-	-	-	557,337		278,669	-	278,668		
Lynchburg	343,052	214,961	128,091	-	-	-	128,091		100,000	-	28,091		
MSA-Lexington	16,994	4,721	12,273	-	-	-	12,273		800	-	11,473		
Philip Morris	139,724	45,683	94,041	-	-	-	94,041		65,000	-	29,041		
Richmond	1,093,652	513,938	579,714	-	(5)	-	579,709		500,000	-	79,709		
RWSA-Moores Creek	181,116	76,095	105,021	-	-	-	105,021		104,858	-	163		
South Central WWA	350,239	400,220	(49,981)	-	50,000	-	19		-	-	19		
Tyson Foods-Glen Allen	3,519	2,436	1,083	-	-	-	1,083		-	-	1,083		
WestRock-Covington	43,384	35,930	7,454	-	-	-	7,454		7,454	-	-		
LOWER JAMES BASIN	3,549,300	2,817,769	731,531	-	(2,678)	-	728,853	No Sale	No Sale	No Sale	-	-	728,853
HRSD (Bubble)	3,549,300	2,817,769	731,531	-	(2,678)	-	728,853		-	-	728,853		

*** For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.**

** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.

JAMES Basin: Nitrogen Credit Ledger

Compliance Year:	2025	Credit Forecasts		Preliminary Use of Credits			Expected Net Credits	Credit Exchange (Pounds)			
		Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange		WQIF-Held Credits	Class A Sales	Class A* Purchases	Class B Sales**
								PRICE:	\$ 0.20	\$ 4.21	\$ 0.03
UPPER JAMES BASIN	7,579,011	5,133,751	2,445,260	-	(5)	-	2,445,255	1,552,546	(84,986)	977,695	
AdvanSix-Hopewell	1,090,798	690,733	400,065	-	-	-	400,065	100,000	-	300,065	
Alleghany Co-L. Jackson	12,829	6,513	6,316	-	-	-	6,316	5,500	-	816	
Alleghany Co-Low Moor	2,467	1,316	1,151	-	-	-	1,151	600	-	551	
Amherst (Town)	4,715	1,914	2,801	-	-	-	2,801	1,400	-	1,401	
Aqua Virginia-L. Monticello	9,065	11,909	(2,844)	1,536	-	-	(1,308)	-	(1,308)	-	
Aqua Virginia-Manakin Farms	3,509	1,973	1,536	(1,536)	-	-	-	-	-	-	
Buena Vista	22,613	30,924	(8,311)	-	-	-	(8,311)	-	(8,311)	-	
BWX Technologies, Inc	119,680	102,916	16,764	-	-	-	16,764	15,000	-	1,764	
Chesterfield-Falling Cr.	182,738	159,892	22,846	-	-	-	22,846	-	-	22,846	
Chesterfield-Proctors Cr.	411,151	256,132	155,019	-	(50,000)	-	105,019	-	-	105,019	
Covington	11,512	18,292	(6,780)	-	-	-	(6,780)	-	(6,780)	-	
Crewe	2,284	665	1,619	-	-	-	1,619	1,619	-	-	
Dominion-Chesterfield	243,099	189,070	54,029	-	-	-	54,029	-	-	54,029	
DuPont-Spruance	201,080	269,667	(68,587)	-	-	-	(68,587)	-	(68,587)	-	
Georgia-Pacific	73,493	50,709	22,784	-	-	-	22,784	17,000	-	5,784	
Greif Packaging	46,877	46,877	-	-	-	-	-	-	-	-	
Henrico Co	1,142,085	761,085	381,000	-	-	-	381,000	251,569	-	129,431	
Hopewell Water Renewal	1,827,336	1,269,999	557,337	-	-	-	557,337	278,669	-	278,668	
Lynchburg	343,052	215,269	127,783	-	-	-	127,783	105,000	-	22,783	
MSA-Lexington	16,994	4,721	12,273	-	-	-	12,273	800	-	11,473	
Philip Morris	139,724	45,683	94,041	-	-	-	94,041	65,000	-	29,041	
Richmond	1,093,652	479,676	613,976	-	(5)	-	613,971	600,000	-	13,971	
RWSA-Moores Creek	181,116	78,181	102,935	-	-	-	102,935	102,935	-	-	
South Central WWA	350,239	400,238	(49,999)	-	50,000	-	1	-	-	1	
Tyson Foods-Glen Allen	3,519	3,467	52	-	-	-	52	-	-	52	
WestRock-Covington	43,384	35,930	7,454	-	-	-	7,454	7,454	-	-	
								PRICE:	No Sale	No Sale	No Sale
LOWER JAMES BASIN	3,549,300	2,771,930	777,370	-	(2,678)	-	774,692	-	-	774,692	
HRSD (Bubble)	3,549,300	2,771,930	777,370	-	(2,678)	-	774,692	-	-	774,692	

* For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.

** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.

JAMES Basin: Nitrogen Credit Ledger

Compliance Year:	2026	Credit Forecasts		Preliminary Use of Credits			Expected Net Credits	Credit Exchange (Pounds)			
		Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange		WQIF-Held Credits	Class A Sales	Class A* Purchases	Class B Sales**
								PRICE:	\$ 0.23	\$ 4.26	\$ 0.03
UPPER JAMES BASIN	7,983,146	5,183,785	2,799,361	-	(5)	-	2,799,356	1,683,680	(103,911)	1,219,587	
AdvanSix-Hopewell	1,090,798	690,733	400,065	-	-	-	400,065	100,000	-	300,065	
Alleghany Co-L. Jackson	25,659	13,025	12,634	-	-	-	12,634	10,000	-	2,634	
Alleghany Co-Low Moor	4,934	1,974	2,960	-	-	-	2,960	2,000	-	960	
Amherst (Town)	4,386	1,781	2,605	-	-	-	2,605	1,300	-	1,305	
Aqua Virginia-L. Monticello	10,340	13,793	(3,453)	1,204	-	-	(2,249)	-	(2,249)	-	
Aqua Virginia-Manakin Farms	2,751	1,547	1,204	(1,204)	-	-	-	-	-	-	
Buena Vista	29,603	44,161	(14,558)	-	-	-	(14,558)	-	(14,558)	-	
BWX Technologies, Inc	149,600	128,644	20,956	-	-	-	20,956	15,000	-	5,956	
Chesterfield-Falling Cr.	182,738	159,892	22,846	-	-	-	22,846	-	-	22,846	
Chesterfield-Proctors Cr.	411,151	261,461	149,690	-	-	-	149,690	50,000	-	99,690	
Covington	35,085	55,746	(20,661)	-	-	-	(20,661)	-	(20,661)	-	
Crewe	3,107	905	2,202	-	-	-	2,202	2,202	-	-	
Dominion-Chesterfield	243,099	189,070	54,029	-	-	-	54,029	-	-	54,029	
DuPont-Spruance	201,080	267,523	(66,443)	-	-	-	(66,443)	-	(66,443)	-	
Georgia-Pacific	79,618	59,388	20,230	-	-	-	20,230	17,000	-	3,230	
Greif Packaging	52,737	52,737	-	-	-	-	-	-	-	-	
Henrico Co	1,142,085	790,932	351,153	-	-	-	351,153	247,541	-	103,612	
Hopewell Water Renewal	1,827,336	1,279,135	548,201	-	-	-	548,201	274,101	-	274,100	
Lynchburg	439,536	282,916	156,620	-	-	-	156,620	130,000	-	26,620	
MSA-Lexington	31,247	8,680	22,567	-	-	-	22,567	400	-	22,167	
Philip Morris	139,724	45,683	94,041	-	-	-	94,041	65,000	-	29,041	
Richmond	1,093,652	411,151	682,501	-	(5)	-	682,496	600,000	-	82,496	
RWSA-Moores Creek	217,905	85,361	132,544	-	-	-	132,544	132,544	-	-	
South Central WWA	350,239	159,969	190,270	-	-	-	190,270	-	-	190,270	
Tyson Foods-Glen Allen	1,760	1,194	566	-	-	-	566	-	-	566	
WestRock-Covington	212,976	176,384	36,592	-	-	-	36,592	36,592	-	-	
								PRICE:	No Sale	No Sale	No Sale
LOWER JAMES BASIN	2,047,866	1,295,116	752,750	-	(27,717)	-	725,033	-	-	725,033	
HRSD (Bubble)	2,047,866	1,295,116	752,750	-	(27,717)	-	725,033	-	-	725,033	

* For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.

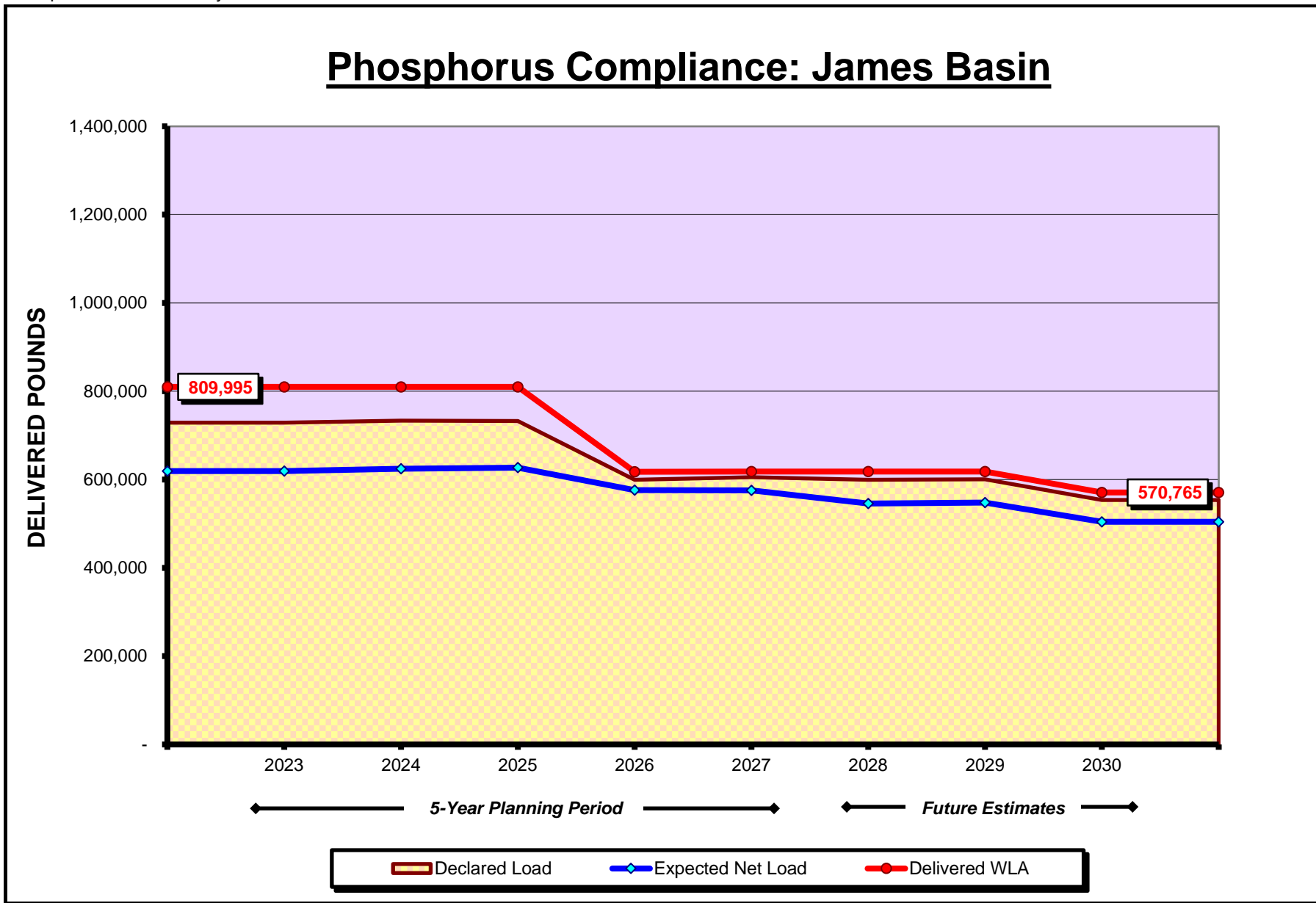
** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.

JAMES Basin: Nitrogen Credit Ledger

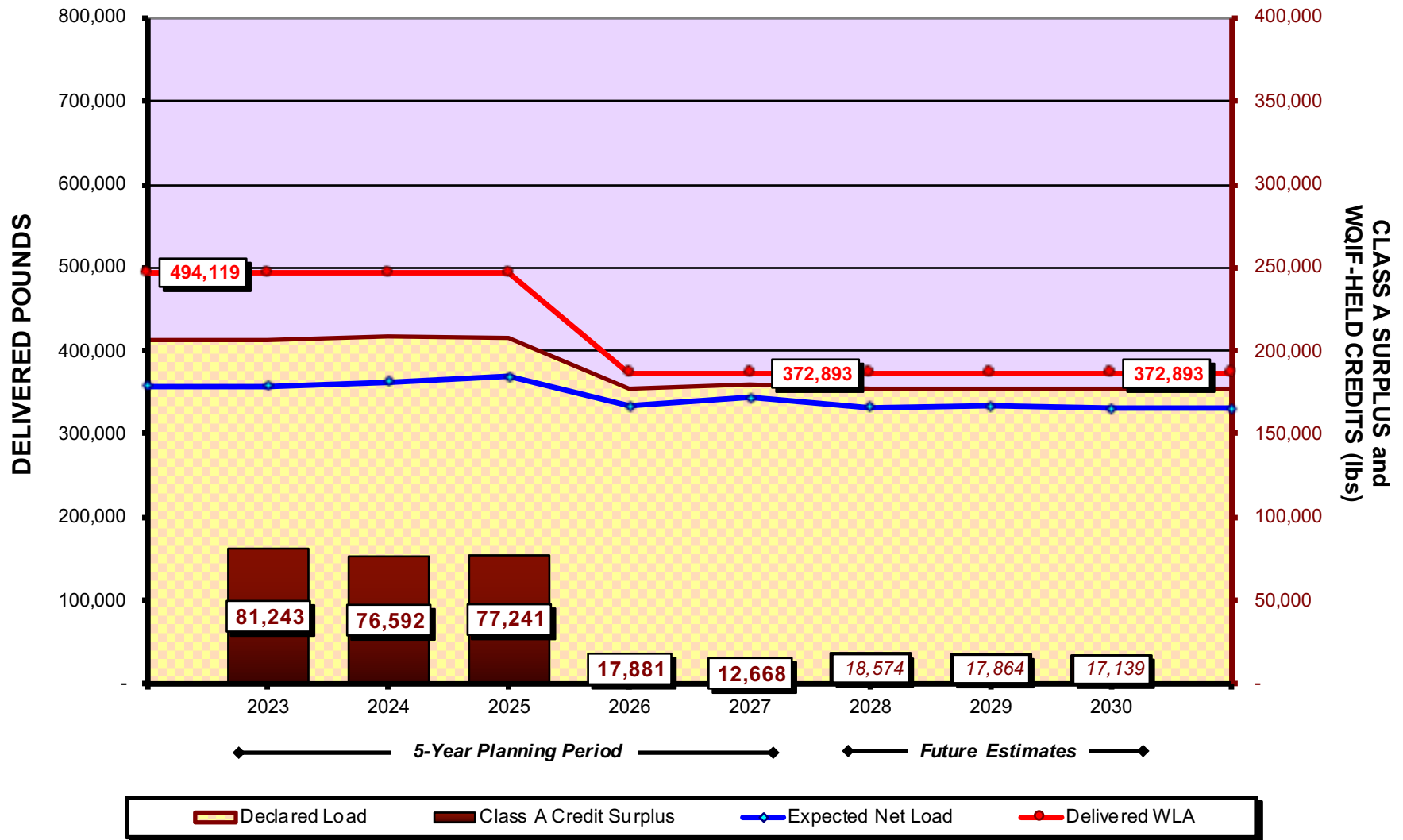
Compliance Year:	2027	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)				
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits	PRICE:	Class A Sales	Class A* Purchases	Class B Sales**
UPPER JAMES BASIN	7,983,146	5,273,513	2,709,633	-	(5)	-	2,709,628	\$ 0.20	\$ 4.62	\$ 0.03	1,707,277 (84,906) 1,087,257
AdvanSix-Hopewell	1,090,798	690,733	400,065	-	-	-	400,065		150,000	-	250,065
Alleghany Co-L. Jackson	25,659	13,025	12,634	-	-	-	12,634		10,000	-	2,634
Alleghany Co-Low Moor	4,934	1,974	2,960	-	-	-	2,960		2,000	-	960
Amherst (Town)	4,386	1,781	2,605	-	-	-	2,605		1,300	-	1,305
Aqua Virginia-L. Monticello	10,340	14,002	(3,662)	1,204	-	-	(2,458)		-	(2,458)	-
Aqua Virginia-Manakin Farms	2,751	1,547	1,204	(1,204)	-	-	-		-	-	-
Buena Vista	29,603	42,466	(12,863)	-	-	-	(12,863)		-	(12,863)	-
BWX Technologies, Inc	149,600	128,644	20,956	-	-	-	20,956		15,000	-	5,956
Chesterfield-Falling Cr.	182,738	159,892	22,846	-	-	-	22,846		-	-	22,846
Chesterfield-Proctors Cr.	411,151	266,791	144,360	-	-	-	144,360		50,000	-	94,360
Covington	35,085	55,746	(20,661)	-	-	-	(20,661)		-	(20,661)	-
Crewe	3,107	905	2,202	-	-	-	2,202		2,202	-	-
Dominion-Chesterfield	243,099	189,070	54,029	-	-	-	54,029		-	-	54,029
DuPont-Spruance	201,080	250,004	(48,924)	-	-	-	(48,924)		-	(48,924)	-
Georgia-Pacific	79,618	59,388	20,230	-	-	-	20,230		17,000	-	3,230
Greif Packaging	52,737	52,737	-	-	-	-	-		-	-	-
Henrico Co	1,142,085	871,517	270,568	-	-	-	270,568		243,511	-	27,057
Hopewell Water Renewal	1,827,336	1,288,272	539,064	-	-	-	539,064		269,532	-	269,532
Lynchburg	439,536	283,310	156,226	-	-	-	156,226		125,000	-	31,226
MSA-Lexington	31,247	8,680	22,567	-	-	-	22,567		400	-	22,167
Philip Morris	139,724	45,683	94,041	-	-	-	94,041		65,000	-	29,041
Richmond	1,093,652	411,151	682,501	-	(5)	-	682,496		600,000	-	82,496
RWSA-Moores Creek	217,905	98,165	119,740	-	-	-	119,740		119,740	-	-
South Central WWA	350,239	160,593	189,646	-	-	-	189,646		-	-	189,646
Tyson Foods-Glen Allen	1,760	1,053	707	-	-	-	707		-	-	707
WestRock-Covington	212,976	176,384	36,592	-	-	-	36,592		36,592	-	-
LOWER JAMES BASIN	2,047,966	1,122,350	925,616	-	(27,717)	-	897,899	No Sale	No Sale	No Sale	- - 897,899
HRSD (Bubble)	2,047,966	1,122,350	925,616	-	(27,717)	-	897,899		-	-	897,899

*** For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.**

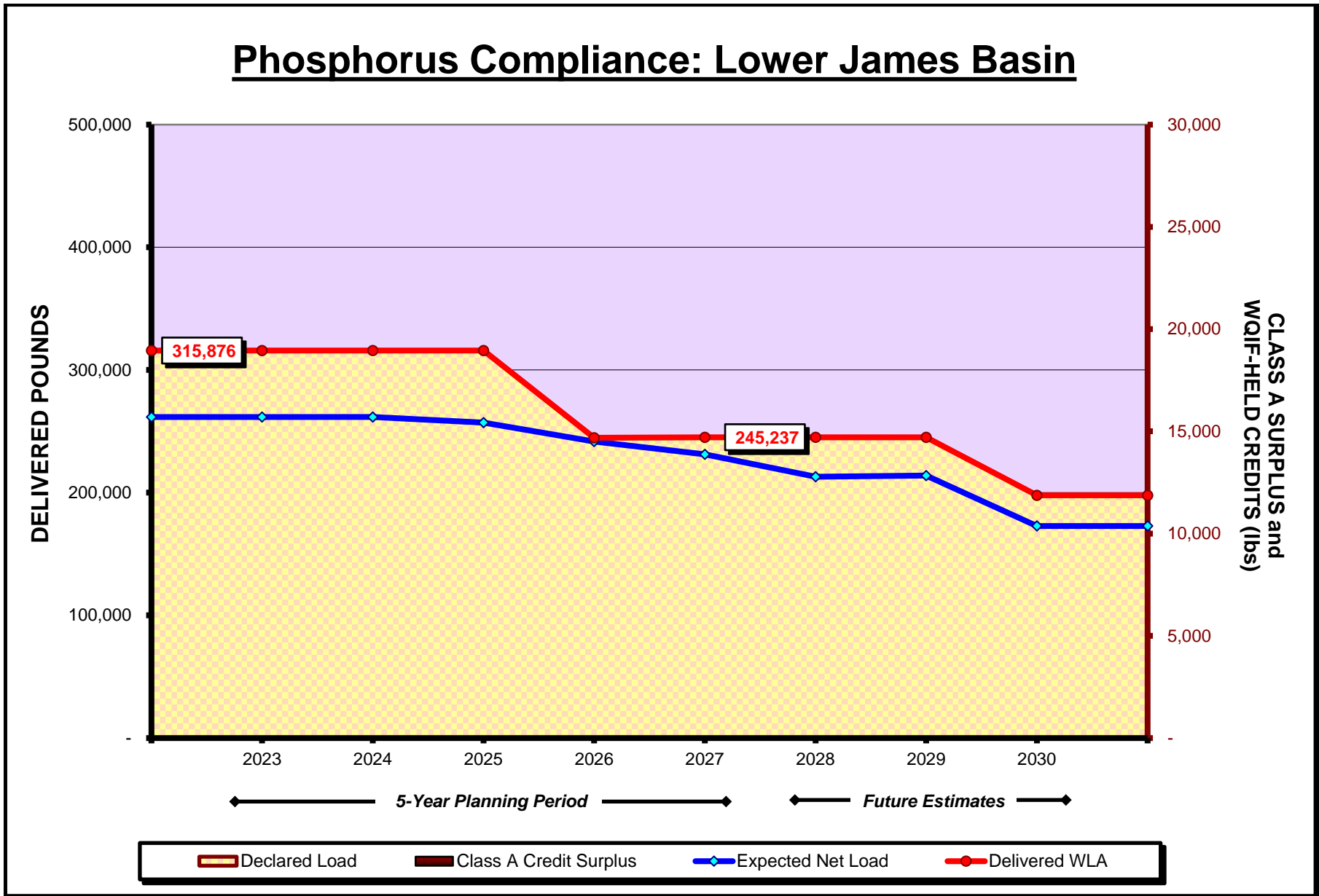
** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.



Phosphorus Compliance: Upper James Basin



Phosphorus Compliance: Lower James Basin



JAMES Basin: Phosphorus Credit Ledger

Compliance Year:	2023	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)						
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits	PRICE:	Class A Sales	Class A* Purchases	Class B Sales**		
UPPER JAMES BASIN	494,119	357,677	136,442	-	-	-	136,442	\$ 0.77	\$ 6.08	\$ 0.14	94,579	(13,336)	55,199
AdvanSix-Hopewell	41,841	36,181	5,660	-	-	-	5,660		-	-	-	-	5,660
Alleghany Co-L. Jackson	2,280	856	1,424	(427)	-	-	997		450	-	-	-	547
Alleghany Co-Low Moor	438	865	(427)	427	-	-	-		-	-	-	-	-
Amherst (Town)	526	649	(123)	-	-	-	(123)		-	(123)	-	-	-
Aqua Virginia-L. Monticello	679	872	(193)	193	-	-	-		-	-	-	-	-
Aqua Virginia-Manakin Farms	378	69	309	(193)	-	-	116		-	-	-	-	116
Buena Vista	1,972	5,382	(3,410)	-	-	-	(3,410)		-	(3,410)	-	-	-
BWX Technologies, Inc	877	519	358	-	-	-	358		100	-	-	-	258
Chesterfield-Falling Cr.	12,473	15,989	(3,516)	3,516	-	-	-		-	-	-	-	-
Chesterfield-Proctors Cr.	33,344	27,002	6,342	(3,516)	(40)	-	2,786		-	-	-	-	2,786
Covington	2,631	1,726	905	-	-	-	905		900	-	-	-	5
Crewe	327	37	290	-	-	-	290		290	-	-	-	-
Dominion-Chesterfield	170	210	(40)	-	40	-	-		-	-	-	-	-
DuPont-Spruance	6,339	12,222	(5,883)	-	-	-	(5,883)		-	(5,883)	-	-	-
Georgia-Pacific	28,594	13,244	15,350	-	-	-	15,350		12,000	-	-	-	3,350
Greif Packaging	17,098	11,244	5,854	-	-	-	5,854		5,000	-	-	-	854
Henrico Co	92,623	52,231	40,392	-	-	-	40,392		22,614	-	-	-	17,778
Hopewell Water Renewal	61,749	58,840	2,909	-	-	-	2,909		-	-	-	-	2,909
Lynchburg	19,290	23,210	(3,920)	-	-	-	(3,920)		-	(3,920)	-	-	-
MSA-Lexington	2,631	649	1,982	-	-	-	1,982		921	-	-	-	1,061
Philip Morris	2,149	1,827	322	-	-	-	322		-	-	-	-	322
Richmond	55,299	20,558	34,741	-	-	-	34,741		20,000	-	-	-	14,741
RWSA-Moores Creek	13,153	7,330	5,823	-	-	-	5,823		5,763	-	-	-	60
South Central WWA	28,404	23,715	4,689	-	-	-	4,689		-	-	-	-	4,689
Tyson Foods-Glen Allen	147	84	63	-	-	-	63		-	-	-	-	63
WestRock-Covington	68,707	42,166	26,541	-	-	-	26,541		26,541	-	-	-	-
LOWER JAMES BASIN	315,876	261,041	54,835	-	(620)	-	54,215	No Sale	No Sale	No Sale	-	-	54,215
HRSD (Bubble)	315,876	261,041	54,835	-	(620)	-	54,215		-	-	-	-	54,215

*** For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.**

** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.

JAMES Basin: Phosphorus Credit Ledger

Compliance Year:	2024	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)						
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits	PRICE:	Class A Sales	Class A* Purchases	Class B Sales**		
UPPER JAMES BASIN	494,119	362,683	131,436	-	(1)	-	131,435	\$ 1.06	\$ 6.22	\$ 0.20	94,628	(18,036)	54,843
AdvanSix-Hopewell	41,841	32,892	8,949	-	-	-	8,949		-	-	8,949		
Alleghany Co-L. Jackson	2,280	856	1,424	(427)	-	-	997		750	-	247		
Alleghany Co-Low Moor	438	865	(427)	427	-	-	-		-	-	-		
Amherst (Town)	526	908	(382)	-	-	-	(382)		-	(382)	-		
Aqua Virginia-L. Monticello	679	872	(193)	193	-	-	-		-	-	-		
Aqua Virginia-Manakin Farms	378	69	309	(193)	-	-	116		-	-	116		
Buena Vista	1,972	5,896	(3,924)	-	-	-	(3,924)		-	(3,924)	-		
BWX Technologies, Inc	877	519	358	-	-	-	358		100	-	258		
Chesterfield-Falling Cr.	12,473	15,989	(3,516)	3,516	-	-	-		-	-	-		
Chesterfield-Proctors Cr.	33,344	27,588	5,756	(3,516)	(40)	-	2,200		-	-	2,200		
Covington	2,631	1,808	823	-	-	-	823		800	-	23		
Crewe	327	37	290	-	-	-	290		290	-	-		
Dominion-Chesterfield	170	210	(40)	-	40	-	-		-	-	-		
DuPont-Spruance	6,339	16,115	(9,776)	-	-	-	(9,776)		-	(9,776)	-		
Georgia-Pacific	28,594	14,001	14,593	-	-	-	14,593		12,000	-	2,593		
Greif Packaging	17,098	11,244	5,854	-	-	-	5,854		5,000	-	854		
Henrico Co	92,623	53,297	39,326	-	-	-	39,326		23,046	-	16,280		
Hopewell Water Renewal	61,749	59,267	2,482	-	-	-	2,482		-	-	2,482		
Lynchburg	19,290	23,244	(3,954)	-	-	-	(3,954)		-	(3,954)	-		
MSA-Lexington	2,631	649	1,982	-	-	-	1,982		921	-	1,061		
Philip Morris	2,149	1,827	322	-	-	-	322		-	-	322		
Richmond	55,299	20,558	34,741	-	(1)	-	34,740		20,000	-	14,740		
RWSA-Moores Creek	13,153	7,914	5,239	-	-	-	5,239		5,180	-	59		
South Central WWA	28,404	23,808	4,596	-	-	-	4,596		-	-	4,596		
Tyson Foods-Glen Allen	147	84	63	-	-	-	63		-	-	63		
WestRock-Covington	68,707	42,166	26,541	-	-	-	26,541		26,541	-	-		
LOWER JAMES BASIN	315,876	261,095	54,781	-	(620)	-	54,161	No Sale	No Sale	No Sale	-	-	54,161
HRSD (Bubble)	315,876	261,095	54,781	-	(620)	-	54,161		-	-	54,161		

*** For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.**

** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.

JAMES Basin: Phosphorus Credit Ledger

Compliance Year:	2025	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)				
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits		Class A Sales	Class A* Purchases	Class B Sales**
								PRICE:	\$ 1.11	\$ 6.34	\$ 0.25
UPPER JAMES BASIN	494,119	369,704	124,415	-	(1)	-	124,414	96,031	(18,790)	47,173	
AdvanSix-Hopewell	41,841	36,181	5,660	-	-	-	5,660	-	-	5,660	
Alleghany Co-L. Jackson	2,280	856	1,424	(427)	-	-	997	750	-	247	
Alleghany Co-Low Moor	438	865	(427)	427	-	-	-	-	-	-	
Amherst (Town)	526	790	(264)	-	-	-	(264)	-	(264)	-	
Aqua Virginia-L. Monticello	679	900	(221)	221	-	-	-	-	-	-	
Aqua Virginia-Manakin Farms	378	121	257	(221)	-	-	36	-	-	36	
Buena Vista	1,972	6,122	(4,150)	-	-	-	(4,150)	-	(4,150)	-	
BWX Technologies, Inc	877	519	358	-	-	-	358	100	-	258	
Chesterfield-Falling Cr.	12,473	15,989	(3,516)	3,516	-	-	-	-	-	-	
Chesterfield-Proctors Cr.	33,344	25,613	7,731	(3,516)	(40)	-	4,175	-	-	4,175	
Covington	2,631	1,808	823	-	-	-	823	800	-	23	
Crewe	327	37	290	-	-	-	290	290	-	-	
Dominion-Chesterfield	170	210	(40)	-	40	-	-	-	-	-	
DuPont-Spruance	6,339	16,426	(10,087)	-	-	-	(10,087)	-	(10,087)	-	
Georgia-Pacific	28,594	14,001	14,593	-	-	-	14,593	12,000	-	2,593	
Greif Packaging	17,098	15,461	1,637	-	-	-	1,637	1,000	-	637	
Henrico Co	92,623	54,363	38,260	-	-	-	38,260	27,910	-	10,350	
Hopewell Water Renewal	61,749	59,267	2,482	-	-	-	2,482	-	-	2,482	
Lynchburg	19,290	23,579	(4,289)	-	-	-	(4,289)	-	(4,289)	-	
MSA-Lexington	2,631	649	1,982	-	-	-	1,982	921	-	1,061	
Philip Morris	2,149	1,827	322	-	-	-	322	-	-	322	
Richmond	55,299	20,558	34,741	-	(1)	-	34,740	20,000	-	14,740	
RWSA-Moores Creek	13,153	7,434	5,719	-	-	-	5,719	5,719	-	-	
South Central WWA	28,404	23,902	4,502	-	-	-	4,502	-	-	4,502	
Tyson Foods-Glen Allen	147	60	87	-	-	-	87	-	-	87	
WestRock-Covington	68,707	42,166	26,541	-	-	-	26,541	26,541	-	-	
								PRICE:	No Sale	No Sale	No Sale
LOWER JAMES BASIN	315,876	256,557	59,319	-	(620)	-	58,699	-	-	58,699	
HRSD (Bubble)	315,876	256,557	59,319	-	(620)	-	58,699	-	-	58,699	

*** For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.**

** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.

JAMES Basin: Phosphorus Credit Ledger

Compliance Year:	2026	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)						
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits	PRICE:	Class A Sales	Class A* Purchases	Class B Sales**		
UPPER JAMES BASIN	372,893	334,237	38,656	-	(1)	-	38,655	\$ 4.27	\$ 6.41	\$ 1.57	68,994	(51,113)	20,774
AdvanSix-Hopewell	41,841	32,892	8,949	-	-	-	8,949		-	-	8,949		
Alleghany Co-L. Jackson	1,959	736	1,223	(367)	-	-	856		650	-	206		
Alleghany Co-Low Moor	376	743	(367)	367	-	-	-		-	-	-		
Amherst (Town)	408	612	(204)	-	-	-	(204)		-	(204)	-		
Aqua Virginia-L. Monticello	555	746	(191)	191	-	-	-		-	-	-		
Aqua Virginia-Manakin Farms	298	96	202	(191)	-	-	11		-	-	11		
Buena Vista	2,361	7,727	(5,366)	-	-	-	(5,366)		-	(5,366)	-		
BWX Technologies, Inc	679	402	277	-	-	-	277		100	-	177		
Chesterfield-Falling Cr.	6,153	8,954	(2,801)	2,801	-	-	-		-	-	-		
Chesterfield-Proctors Cr.	16,448	13,596	2,852	(2,801)	(40)	-	11		-	-	11		
Covington	3,297	2,420	877	-	-	-	877		877	-	-		
Crewe	197	22	175	-	-	-	175		175	-	-		
Dominion-Chesterfield	170	210	(40)	-	40	-	-		-	-	-		
DuPont-Spruance	6,339	16,945	(10,606)	-	-	-	(10,606)		-	(10,606)	-		
Georgia-Pacific	31,413	11,878	19,535	-	-	-	19,535		16,000	-	3,535		
Greif Packaging	16,617	15,025	1,592	-	-	-	1,592		1,000	-	592		
Henrico Co	45,689	40,354	5,335	-	-	-	5,335		3,735	-	1,600		
Hopewell Water Renewal	30,459	59,693	(29,234)	-	-	-	(29,234)		-	(29,234)	-		
Lynchburg	22,822	27,514	(4,692)	-	-	-	(4,692)		-	(4,692)	-		
MSA-Lexington	3,075	758	2,317	-	-	-	2,317		500	-	1,817		
Philip Morris	1,060	2,071	(1,011)	-	-	-	(1,011)		-	(1,011)	-		
Richmond	27,413	20,558	6,855	-	(1)	-	6,854		5,000	-	1,854		
RWSA-Moores Creek	14,079	6,018	8,061	-	-	-	8,061		8,061	-	-		
South Central WWA	14,011	11,998	2,013	-	-	-	2,013		-	-	2,013		
Tyson Foods-Glen Allen	16	7	9	-	-	-	9		-	-	9		
WestRock-Covington	85,158	52,262	32,896	-	-	-	32,896		32,896	-	-		
LOWER JAMES BASIN	244,687	234,814	9,873	-	(6,826)	-	3,047	No Sale	No Sale	No Sale	3,047		
HRSD (Bubble)	244,687	234,814	9,873	-	(6,826)	-	3,047		-	-	3,047		

*** For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.**

** Class A and Class B Credit Sales are estimates only; actual Credits generated—and the resulting sales prices—may vary from estimates based on Delivered Loads in the Compliance Year.

JAMES Basin: Phosphorus Credit Ledger

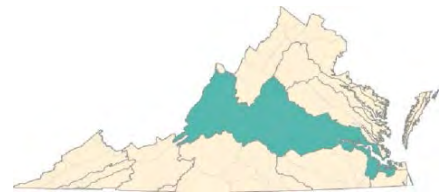
Compliance Year:	2027	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)				
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits		Class A Sales	Class A* Purchases	Class B Sales**
								PRICE:	\$ 5.00	\$ 6.94	\$ 2.18
UPPER JAMES BASIN	372,893	343,984	28,909	-	(1)	-	28,908	63,804	(51,136)	16,240	
AdvanSix-Hopewell	41,841	36,181	5,660	-	-	-	5,660	-	-	5,660	
Alleghany Co-L. Jackson	1,959	736	1,223	(367)	-	-	856	650	-	206	
Alleghany Co-Low Moor	376	743	(367)	367	-	-	-	-	-	-	
Amherst (Town)	408	612	(204)	-	-	-	(204)	-	(204)	-	
Aqua Virginia-L. Monticello	555	757	(202)	202	-	-	-	-	-	-	
Aqua Virginia-Manakin Farms	298	96	202	(202)	-	-	-	-	-	-	
Buena Vista	2,361	7,285	(4,924)	-	-	-	(4,924)	-	(4,924)	-	
BWX Technologies, Inc	679	402	277	-	-	-	277	100	-	177	
Chesterfield-Falling Cr.	6,153	8,634	(2,481)	2,481	-	-	-	-	-	-	
Chesterfield-Proctors Cr.	16,448	13,873	2,575	(2,481)	(40)	-	54	-	-	54	
Covington	3,297	2,445	852	-	-	-	852	852	-	-	
Crewe	197	22	175	-	-	-	175	175	-	-	
Dominion-Chesterfield	170	210	(40)	-	40	-	-	-	-	-	
DuPont-Spruance	6,339	16,945	(10,606)	-	-	-	(10,606)	-	(10,606)	-	
Georgia-Pacific	31,413	11,878	19,535	-	-	-	19,535	16,000	-	3,535	
Greif Packaging	16,617	15,025	1,592	-	-	-	1,592	1,000	-	592	
Henrico Co	45,689	44,465	1,224	-	-	-	1,224	857	-	367	
Hopewell Water Renewal	30,459	60,119	(29,660)	-	-	-	(29,660)	-	(29,660)	-	
Lynchburg	22,822	27,553	(4,731)	-	-	-	(4,731)	-	(4,731)	-	
MSA-Lexington	3,075	758	2,317	-	-	-	2,317	500	-	1,817	
Philip Morris	1,060	2,071	(1,011)	-	-	-	(1,011)	-	(1,011)	-	
Richmond	27,413	20,558	6,855	-	(1)	-	6,854	5,000	-	1,854	
RWSA-Moores Creek	14,079	8,305	5,774	-	-	-	5,774	5,774	-	-	
South Central WWA	14,011	12,044	1,967	-	-	-	1,967	-	-	1,967	
Tyson Foods-Glen Allen	16	5	11	-	-	-	11	-	-	11	
WestRock-Covington	85,158	52,262	32,896	-	-	-	32,896	32,896	-	-	
								PRICE:	No Sale	No Sale	No Sale
LOWER JAMES BASIN	245,237	224,469	20,768	-	(6,826)	-	13,942	-	-	13,942	
HRSD (Bubble)	245,237	224,469	20,768	-	(6,826)	-	13,942	-	-	13,942	

*** For this Compliance Year, 0% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.**

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James River Basin

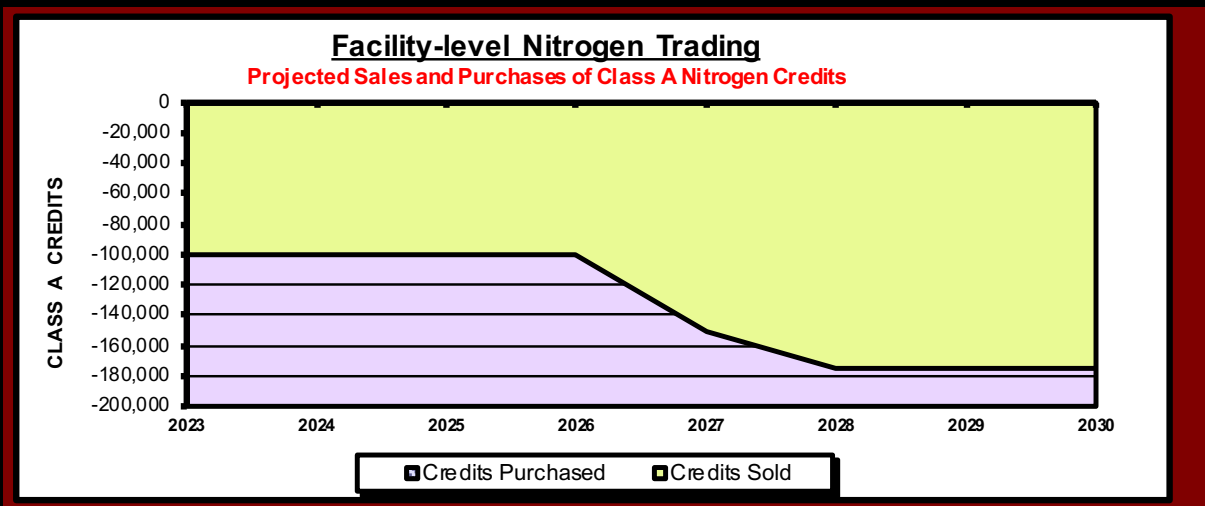
Supplemental Information for Individual Facilities



NITROGEN FACILITY SUMMARY

AdvanSix-Hopewell

UPPER JAMES Trading Basin



Loading & Credit Summary

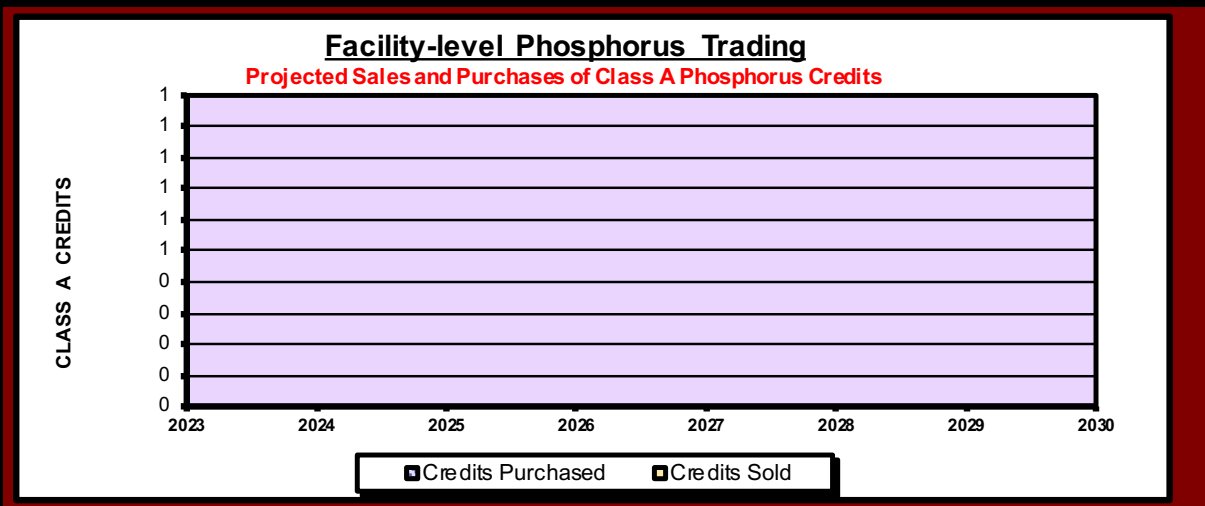
Design Flow (mgd)	121.00
Projected Flow (mgd)	108.00
Projected Avg. Annual Concentration (mg/L)	2.20
Discharged Load (end of pipe)	723,625
Delivery Factor	1.00
Expected Load	723,625
Delivered WLA	1,090,798
Expected Credits (delivered)	367,173
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	367,173
Class A Credit Sales (Purchases)	100,000
Expected Class B Credits	267,173

	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	121.00	121.00	121.00	121.00	121.00	121.00	121.00	121.00
Projected Flow (mgd)	108.00	108.00	108.00	108.00	108.00	106.00	106.00	105.00
Projected Avg. Annual Concentration (mg/L)	2.20	2.10	2.10	2.10	2.10	2.10	2.10	2.10
Discharged Load (end of pipe)	723,625	690,733	690,733	690,733	690,733	677,942	677,942	671,546
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	723,625	690,733	690,733	690,733	690,733	677,942	677,942	671,546
Delivered WLA	1,090,798	1,090,798	1,090,798	1,090,798	1,090,798	1,090,798	1,090,798	1,090,798
Expected Credits (delivered)	367,173	400,065	400,065	400,065	400,065	412,856	412,856	419,252
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	367,173	400,065	400,065	400,065	400,065	412,856	412,856	419,252
Class A Credit Sales (Purchases)	100,000	100,000	100,000	100,000	150,000	175,000	175,000	175,000
Expected Class B Credits	267,173	300,065	300,065	300,065	250,065	237,856	237,856	244,252

PHOSPHORUS FACILITY SUMMARY

AdvanSix-Hopewell

UPPER JAMES Trading Basin



Loading & Credit Summary

Design Flow (mgd)	121.00
Projected Flow (mgd)	108.00
Projected Avg. Annual Concentration (mg/L)	0.11
Discharged Load (end of pipe)	36,181
Delivery Factor	1.00
Expected Load	36,181
Delivered WLA	41,841
Expected Credits (delivered)	5,660
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	5,660
Class A Credit Sales (Purchases)	0
Expected Class B Credits	5,660

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	121.00	121.00	121.00	121.00	121.00	121.00	121.00	121.00
Projected Flow (mgd)	108.00	108.00	108.00	108.00	108.00	106.00	106.00	105.00
Projected Avg. Annual Concentration (mg/L)	0.11	0.10	0.11	0.10	0.11	0.11	0.11	0.10
Discharged Load (end of pipe)	36,181	32,892	36,181	32,892	36,181	35,511	35,511	31,978
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	36,181	32,892	36,181	32,892	36,181	35,511	35,511	31,978
Delivered WLA	41,841	41,841	41,841	41,841	41,841	41,841	41,841	41,841
Expected Credits (delivered)	5,660	8,949	5,660	8,949	5,660	6,330	6,330	9,863
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	5,660	8,949	5,660	8,949	5,660	6,330	6,330	9,863
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	5,660	8,949	5,660	8,949	5,660	6,330	6,330	9,863

Owner Bubble: Alleghany County

The facilities listed below have received an aggregated mass load limit pursuant to 9 VAC 25-820-70, Part 1.B.2., which is also referred to as an “owner bubble”. Accordingly, compliance is determined solely on an aggregate basis rather than by comparison of individual facility loads with respective individual WLAs.

The “Credit Transferred within Bubble” section of each table forecasts the use of Credits within the owner bubble during each Compliance Year, and must necessarily sum to zero. The specific Credit transfers shown in this table are provided for internal planning purposes only and, accordingly, are not binding and may change based on the actual performance of individual facilities within the bubble.

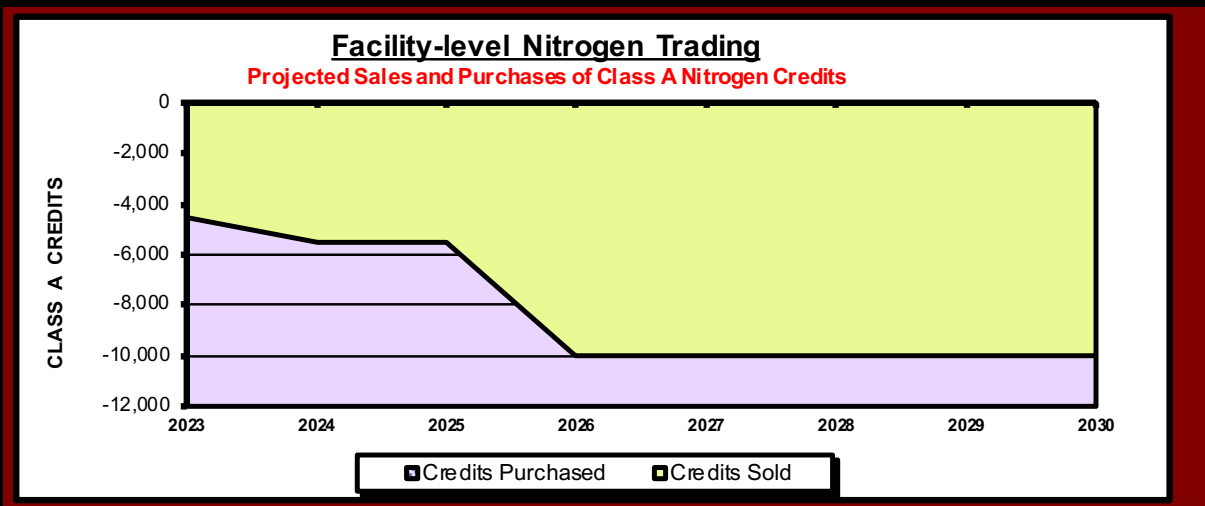
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply with the aggregate Delivered WLA of the bubble.

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
Lower Jackson	-	-	-	-	-	-	-	-
Low Moor	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Lower Jackson	6,316	6,316	6,316	12,634	12,634	12,634	12,634	12,634
Low Moor	1,151	1,151	1,151	2,960	2,960	2,960	2,960	2,960
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	7,467	7,467	7,467	15,594	15,594	15,594	15,594	15,594
Class A Sales (Purchases)	5,100	6,100	6,100	12,000	12,000	12,000	12,000	12,000
<i>Expected Class B Credits</i>	<i>2,367</i>	<i>1,367</i>	<i>1,367</i>	<i>3,594</i>	<i>3,594</i>	<i>3,594</i>	<i>3,594</i>	<i>3,594</i>
<i>WQIF-Held Credits</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>

PHOSPHORUS Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
Lower Jackson	(427)	(427)	(427)	(367)	(367)	(367)	(367)	(367)
Low Moor	427	427	427	367	367	367	367	367
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Lower Jackson	997	997	997	856	856	856	856	856
Low Moor	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	997	997	997	856	856	856	856	856
Class A Sales (Purchases)	450	750	750	650	650	650	650	650
<i>Expected Class B Credits</i>	<i>547</i>	<i>247</i>	<i>247</i>	<i>206</i>	<i>206</i>	<i>206</i>	<i>206</i>	<i>206</i>
<i>WQIF-Held Credits</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>

NITROGEN FACILITY SUMMARY

Allegheny Co-L. Jackson
 UPPER JAMES Trading Basin



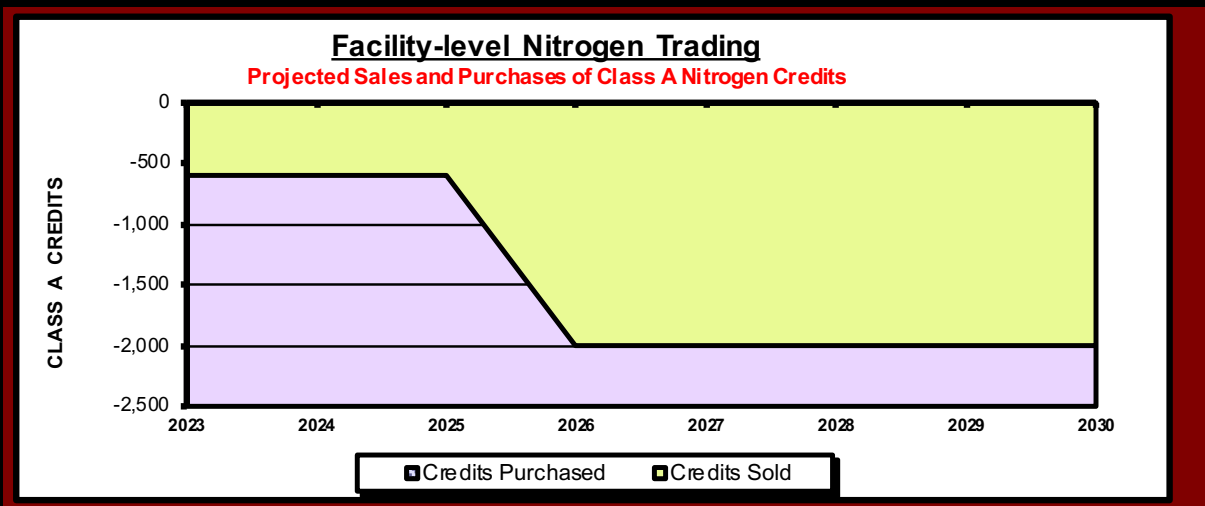
Loading & Credit Summary

Design Flow (mgd)	2.60
Projected Flow (mgd)	1.32
Projected Avg. Annual Concentration (mg/L)	6.00
Discharged Load (end of pipe)	24,121
Delivery Factor	0.27
Expected Load	6,513
Delivered WLA	12,829
Expected Credits (delivered)	6,316
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	6,316
Class A Credit Sales (Purchases)	4,500
Expected Class B Credits	1,816

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60
Projected Flow (mgd)	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
Projected Avg. Annual Concentration (mg/L)	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Discharged Load (end of pipe)	24,121	24,121	24,121	24,121	24,121	24,121	24,121	24,121
Delivery Factor	0.27	0.27	0.27	0.54	0.54	0.54	0.54	0.54
Expected Load	6,513	6,513	6,513	13,025	13,025	13,025	13,025	13,025
Delivered WLA	12,829	12,829	12,829	25,659	25,659	25,659	25,659	25,659
Expected Credits (delivered)	6,316	6,316	6,316	12,634	12,634	12,634	12,634	12,634
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	6,316	6,316	6,316	12,634	12,634	12,634	12,634	12,634
Class A Credit Sales (Purchases)	4,500	5,500	5,500	10,000	10,000	10,000	10,000	10,000
Expected Class B Credits	1,816	816	816	2,634	2,634	2,634	2,634	2,634

NITROGEN FACILITY SUMMARY

Allegheny Co-Low Moor
 UPPER JAMES Trading Basin



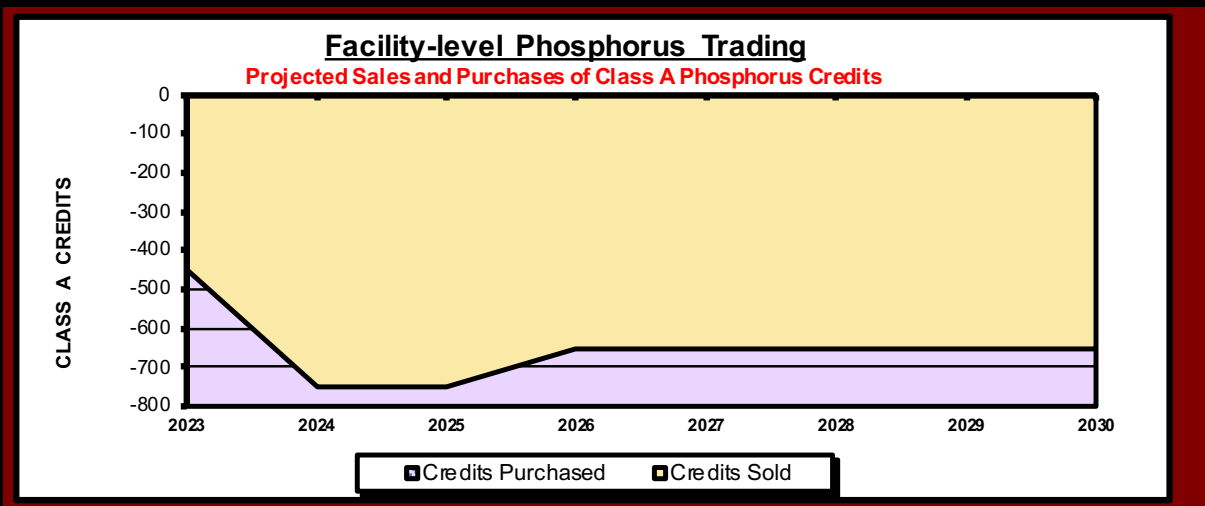
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Projected Flow (mgd)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Projected Avg. Annual Concentration (mg/L)	8.00	8.00	8.00	6.00	6.00	6.00	6.00	6.00
Discharged Load (end of pipe)	4,873	4,873	4,873	3,655	3,655	3,655	3,655	3,655
Delivery Factor	0.27	0.27	0.27	0.54	0.54	0.54	0.54	0.54
Expected Load	1,316	1,316	1,316	1,974	1,974	1,974	1,974	1,974
Delivered WLA	2,467	2,467	2,467	4,934	4,934	4,934	4,934	4,934
Expected Credits (delivered)	1,151	1,151	1,151	2,960	2,960	2,960	2,960	2,960
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	1,151	1,151	1,151	2,960	2,960	2,960	2,960	2,960
Class A Credit Sales (Purchases)	600	600	600	2,000	2,000	2,000	2,000	2,000
Expected Class B Credits	551	551	551	960	960	960	960	960

PHOSPHORUS FACILITY SUMMARY

Allegheny Co-L. Jackson
 UPPER JAMES Trading Basin



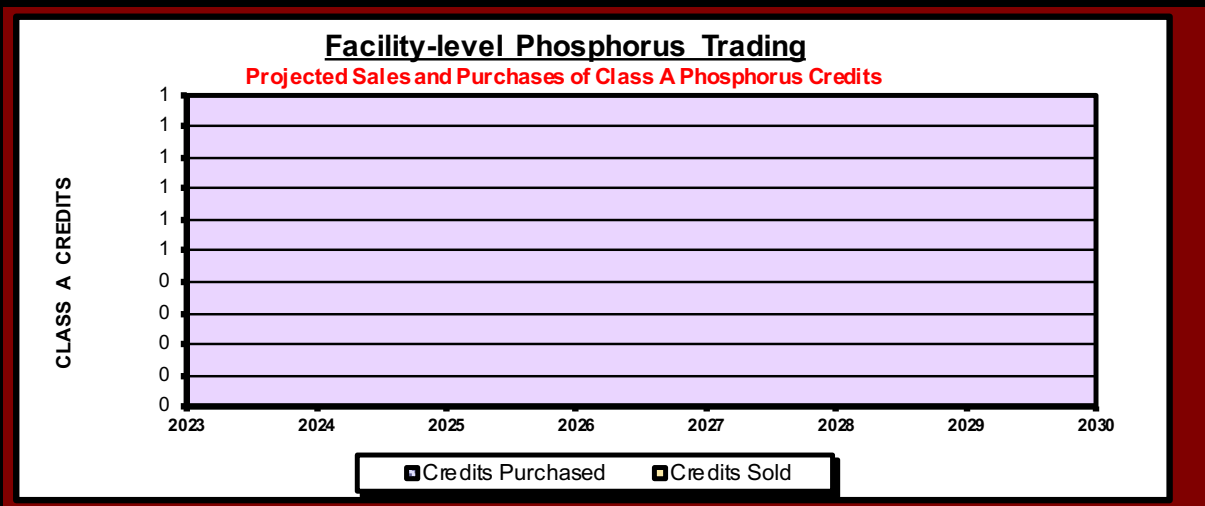
Loading & Credit Summary

Design Flow (mgd)	2.60
Projected Flow (mgd)	1.32
Projected Avg. Annual Concentration (mg/L)	0.30
Discharged Load (end of pipe)	1,206
Delivery Factor	0.71
Expected Load	856
Delivered WLA	2,280
Expected Credits (delivered)	1,424
Transfers In (Out) within Owner Bubble	(427)
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	997
Class A Credit Sales (Purchases)	450
Expected Class B Credits	547

	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60
Projected Flow (mgd)	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
Projected Avg. Annual Concentration (mg/L)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	1,206	1,206	1,206	1,206	1,206	1,206	1,206	1,206
Delivery Factor	0.71	0.71	0.71	0.61	0.61	0.61	0.61	0.61
Expected Load	856	856	856	736	736	736	736	736
Delivered WLA	2,280	2,280	2,280	1,959	1,959	1,959	1,959	1,959
Expected Credits (delivered)	1,424	1,424	1,424	1,223	1,223	1,223	1,223	1,223
Transfers In (Out) within Owner Bubble	(427)	(427)	(427)	(367)	(367)	(367)	(367)	(367)
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	997	997	997	856	856	856	856	856
Class A Credit Sales (Purchases)	450	750	750	650	650	650	650	650
Expected Class B Credits	547	247	247	206	206	206	206	206

PHOSPHORUS FACILITY SUMMARY

Allegheny Co-Low Moor
 UPPER JAMES Trading Basin



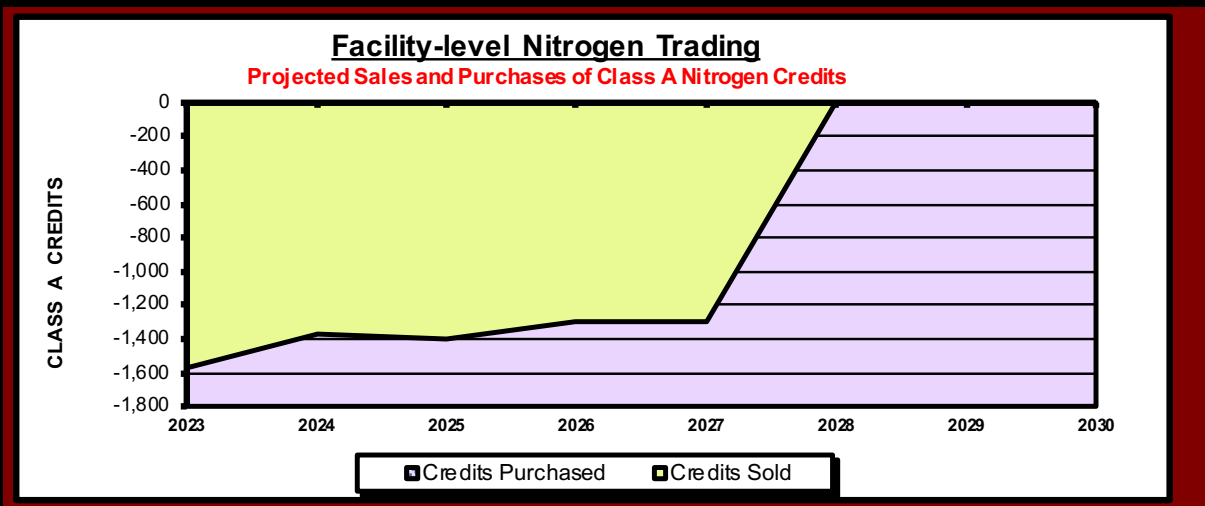
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Projected Flow (mgd)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Projected Avg. Annual Concentration (mg/L)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Discharged Load (end of pipe)	1,218	1,218	1,218	1,218	1,218	1,218	1,218	1,218
Delivery Factor	0.71	0.71	0.71	0.61	0.61	0.61	0.61	0.61
Expected Load	865	865	865	743	743	743	743	743
Delivered WLA	438	438	438	376	376	376	376	376
Expected Credits (delivered)	(427)	(427)	(427)	(367)	(367)	(367)	(367)	(367)
Transfers In (Out) within Owner Bubble	427	427	427	367	367	367	367	367
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

Amherst (Town)
 UPPER JAMES Trading Basin



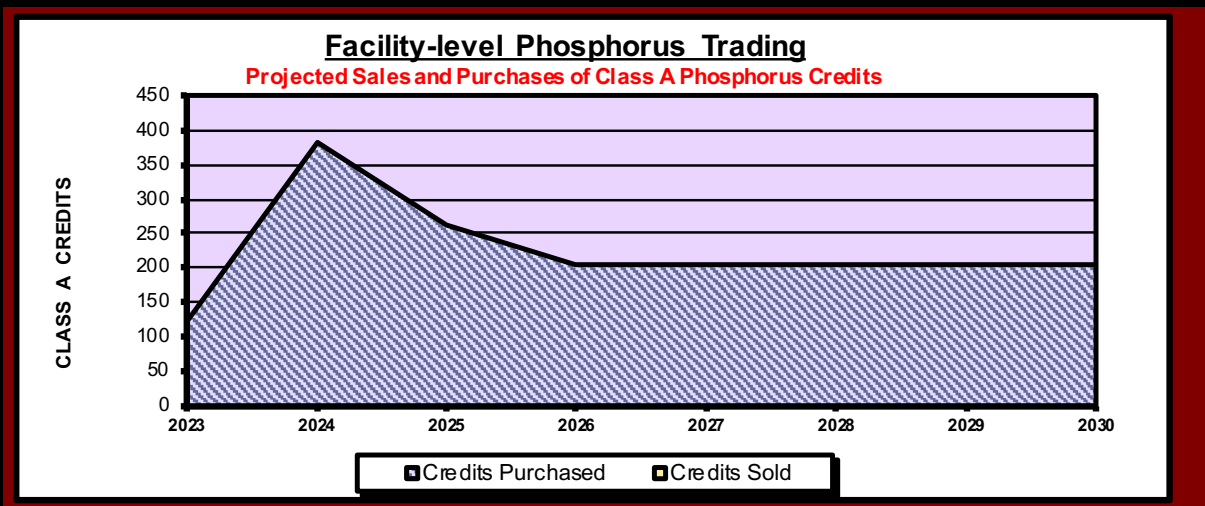
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Projected Flow (mgd)	0.30	0.42	0.42	0.42	0.42	0.42	0.42	0.42
Projected Avg. Annual Concentration (mg/L)	4.00	3.61	3.48	3.48	3.48	3.48	3.48	3.48
Discharged Load (end of pipe)	3,655	4,618	4,451	4,451	4,451	4,451	4,451	4,451
Delivery Factor	0.43	0.43	0.43	0.40	0.40	0.40	0.40	0.40
Expected Load	1,572	1,986	1,914	1,781	1,781	1,781	1,781	1,781
Delivered WLA	4,715	4,715	4,715	4,386	4,386	4,386	4,386	4,386
Expected Credits (delivered)	3,143	2,729	2,801	2,605	2,605	2,605	2,605	2,605
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	3,143	2,729	2,801	2,605	2,605	2,605	2,605	2,605
Class A Credit Sales (Purchases)	1,572	1,365	1,400	1,300	1,300	0	0	0
Expected Class B Credits	1,571	1,364	1,401	1,305	1,305	2,605	2,605	2,605

PHOSPHORUS FACILITY SUMMARY

Amherst (Town)
 UPPER JAMES Trading Basin



Loading & Credit Summary

Design Flow (mgd)	0.60
Projected Flow (mgd)	0.30
Projected Avg. Annual Concentration (mg/L)	1.00
Discharged Load (end of pipe)	914
Delivery Factor	0.71
Expected Load	649
Delivered WLA	526
Expected Credits (delivered)	(123)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(123)
Class A Credit Sales (Purchases)	(123)
Expected Class B Credits	0

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Projected Flow (mgd)	0.30	0.42	0.42	0.42	0.42	0.42	0.42	0.42
Projected Avg. Annual Concentration (mg/L)	1.00	1.00	0.87	0.87	0.87	0.87	0.87	0.87
Discharged Load (end of pipe)	914	1,279	1,113	1,113	1,113	1,113	1,113	1,113
Delivery Factor	0.71	0.71	0.71	0.55	0.55	0.55	0.55	0.55
Expected Load	649	908	790	612	612	612	612	612
Delivered WLA	526	526	526	408	408	408	408	408
Expected Credits (delivered)	(123)	(382)	(264)	(204)	(204)	(204)	(204)	(204)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	(123)	(382)	(264)	(204)	(204)	(204)	(204)	(204)
Class A Credit Sales (Purchases)	(123)	(382)	(264)	(204)	(204)	(204)	(204)	(204)
Expected Class B Credits	0	0	0	0	0	0	0	0

Owner Bubble: Aqua Virginia (James Basin)

The facilities listed below have received an aggregated mass load limit pursuant to 9 VAC 25-820-70, Part 1.B.2., which is also referred to as an “owner bubble”. Accordingly, compliance is determined solely on an aggregate basis rather than by comparison of individual facility loads with respective individual WLAs.

The “Credit Transferred within Bubble” section of each table forecasts the use of Credits within the owner bubble during each Compliance Year, and must necessarily sum to zero. The specific Credit transfers shown in this table are provided for internal planning purposes only and, accordingly, are not binding and may change based on the actual performance of individual facilities within the bubble.

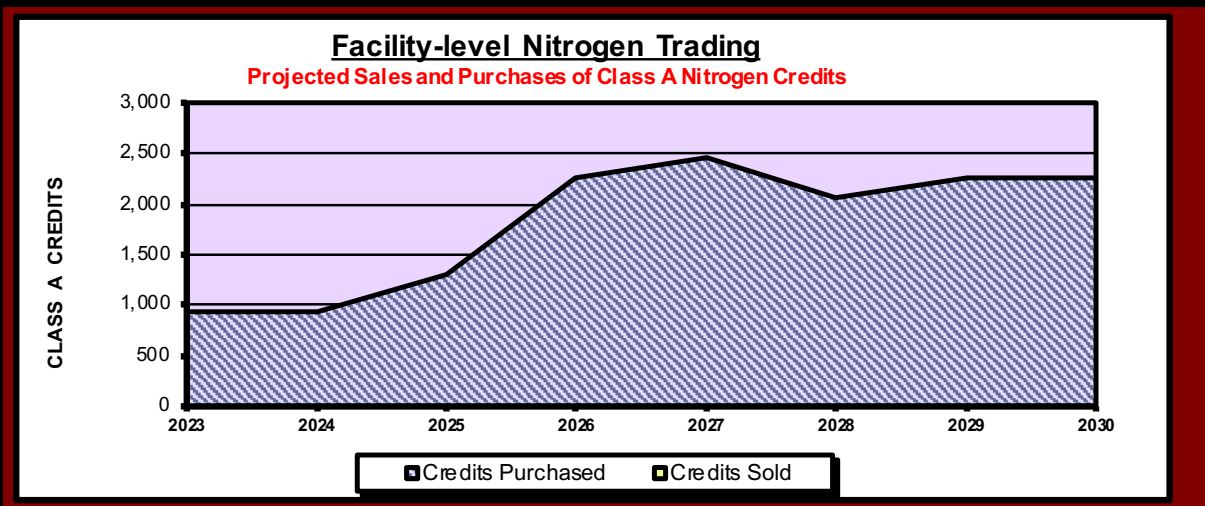
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply with the aggregate Delivered WLA of the bubble.

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
Lake Monticello	1,536	1,536	1,536	1,204	1,204	1,204	1,204	1,204
Manakin Farms Lagoon	(1,536)	(1,536)	(1,536)	(1,204)	(1,204)	(1,204)	(1,204)	(1,204)
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Lake Monticello	(942)	(942)	(1,308)	(2,249)	(2,458)	(2,062)	(2,262)	(2,262)
Manakin Farms Lagoon	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Credits	(942)	(942)	(1,308)	(2,249)	(2,458)	(2,062)	(2,262)	(2,262)
Private Exchanges	-	-	-	-	-	-	-	-
Expected Net Credits	(942)	(942)	(1,308)	(2,249)	(2,458)	(2,062)	(2,262)	(2,262)
Class A Sales (Purchases)	(942)	(942)	(1,308)	(2,249)	(2,458)	(2,062)	(2,262)	(2,262)
Expected Class B Credits	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0

PHOSPHORUS Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
Lake Monticello	193	193	221	191	202	178	188	188
Manakin Farms Lagoon	(193)	(193)	(221)	(191)	(202)	(178)	(188)	(188)
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Lake Monticello	-	-	-	-	-	-	-	-
Manakin Farms Lagoon	116	116	36	11	-	24	14	14
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	116	116	36	11	-	24	14	14
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	116	116	36	11	0	24	14	14
WQIF-Held Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

Aqua Virginia-L. Monticello
 UPPER JAMES Trading Basin

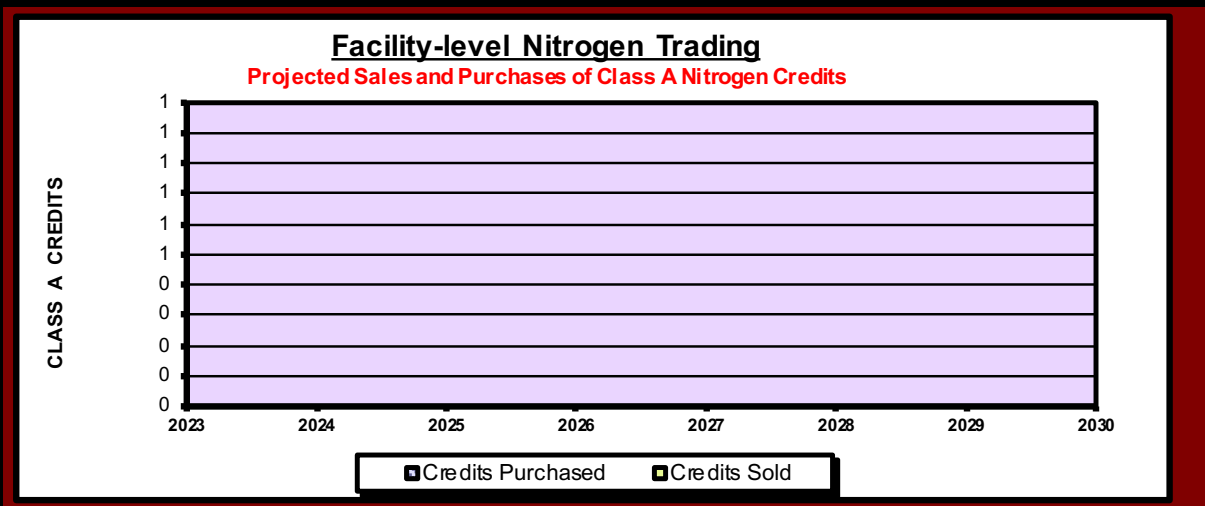


Loading & Credit Summary	
Design Flow (mgd)	1.00
Projected Flow (mgd)	0.63
Projected Avg. Annual Concentration (mg/L)	9.40
Discharged Load (end of pipe)	18,036
Delivery Factor	0.64
Expected Load	11,543
Delivered WLA	9,065
Expected Credits (delivered)	(2,478)
Transfers In (Out) within Owner Bubble	1,536
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(942)
Class A Credit Sales (Purchases)	(942)
Expected Class B Credits	0

	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Projected Flow (mgd)	0.63	0.63	0.65	0.66	0.67	0.68	0.69	0.69
Projected Avg. Annual Concentration (mg/L)	9.40	9.40	9.40	9.40	9.40	9.00	9.00	9.00
Discharged Load (end of pipe)	18,036	18,036	18,608	18,895	19,181	18,639	18,913	18,913
Delivery Factor	0.64	0.64	0.64	0.73	0.73	0.73	0.73	0.73
Expected Load	11,543	11,543	11,909	13,793	14,002	13,606	13,806	13,806
Delivered WLA	9,065	9,065	9,065	10,340	10,340	10,340	10,340	10,340
Expected Credits (delivered)	(2,478)	(2,478)	(2,844)	(3,453)	(3,662)	(3,266)	(3,466)	(3,466)
Transfers In (Out) within Owner Bubble	1,536	1,536	1,536	1,204	1,204	1,204	1,204	1,204
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	(942)	(942)	(1,308)	(2,249)	(2,458)	(2,062)	(2,262)	(2,262)
Class A Credit Sales (Purchases)	(942)	(942)	(1,308)	(2,249)	(2,458)	(2,062)	(2,262)	(2,262)
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

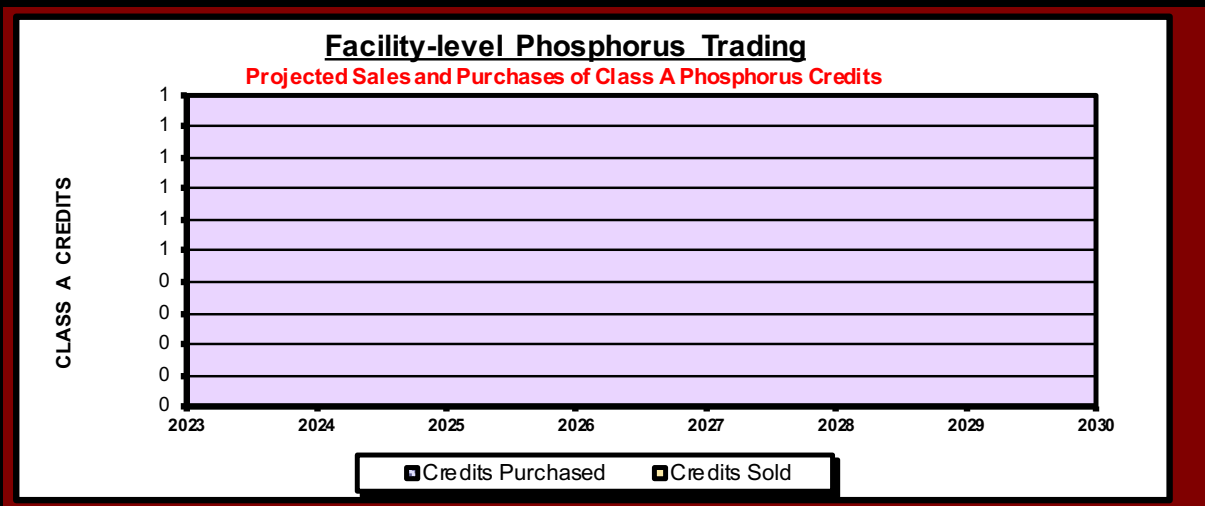
Aqua Virginia-Manakin Farms
 UPPER JAMES Trading Basin



Loading & Credit Summary	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Projected Flow (mgd)	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Projected Avg. Annual Concentration (mg/L)	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20
Discharged Load (end of pipe)	2,242	2,242	2,242	2,242	2,242	2,242	2,242	2,242
Delivery Factor	0.88	0.88	0.88	0.69	0.69	0.69	0.69	0.69
Expected Load	1,973	1,973	1,973	1,547	1,547	1,547	1,547	1,547
Delivered WLA	3,509	3,509	3,509	2,751	2,751	2,751	2,751	2,751
Expected Credits (delivered)	1,536	1,536	1,536	1,204	1,204	1,204	1,204	1,204
Transfers In (Out) within Owner Bubble	(1,536)	(1,536)	(1,536)	(1,204)	(1,204)	(1,204)	(1,204)	(1,204)
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

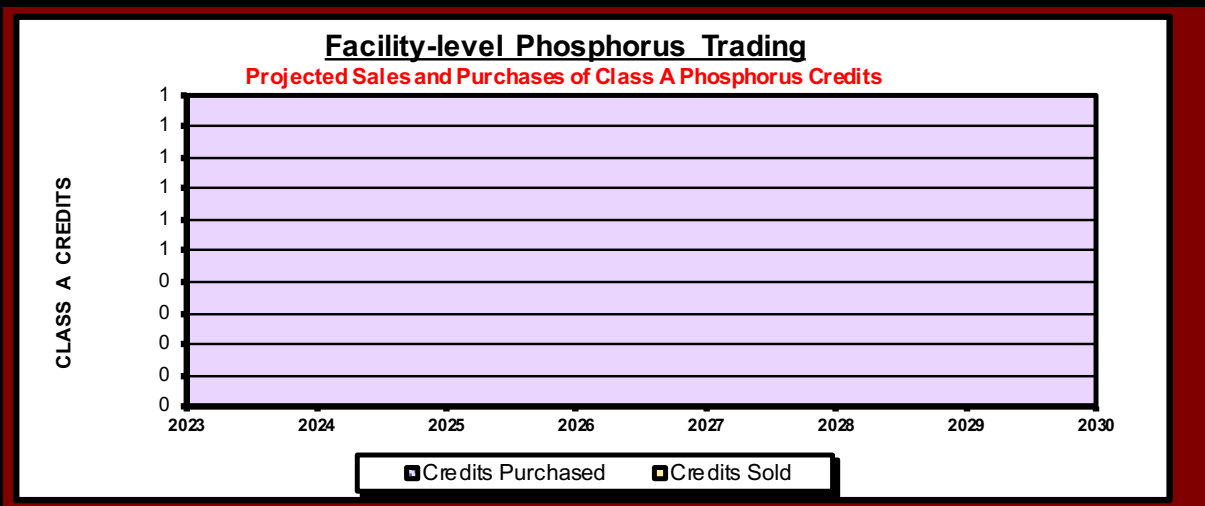
Aqua Virginia-L. Monticello
 UPPER JAMES Trading Basin



Loading & Credit Summary	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Projected Flow (mgd)	0.63	0.63	0.65	0.66	0.67	0.68	0.69	0.69
Projected Avg. Annual Concentration (mg/L)	0.64	0.64	0.64	0.64	0.64	0.61	0.61	0.61
Discharged Load (end of pipe)	1,228	1,228	1,267	1,286	1,306	1,263	1,282	1,282
Delivery Factor	0.71	0.71	0.71	0.58	0.58	0.58	0.58	0.58
Expected Load	872	872	900	746	757	733	743	743
Delivered WLA	679	679	679	555	555	555	555	555
Expected Credits (delivered)	(193)	(193)	(221)	(191)	(202)	(178)	(188)	(188)
Transfers In (Out) within Owner Bubble	193	193	221	191	202	178	188	188
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

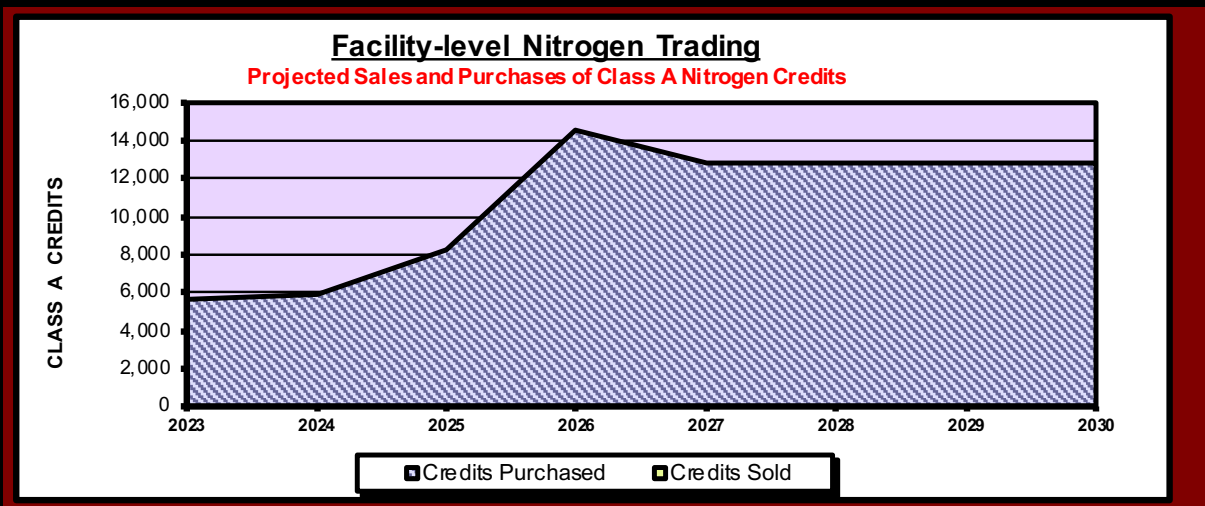
Aqua Virginia-Manakin Farms
 UPPER JAMES Trading Basin



Loading & Credit Summary	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Projected Flow (mgd)	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Projected Avg. Annual Concentration (mg/L)	0.40	0.40	0.70	0.70	0.70	0.70	0.70	0.70
Discharged Load (end of pipe)	97	97	171	171	171	171	171	171
Delivery Factor	0.71	0.71	0.71	0.56	0.56	0.56	0.56	0.56
Expected Load	69	69	121	96	96	96	96	96
Delivered WLA	378	378	378	298	298	298	298	298
Expected Credits (delivered)	309	309	257	202	202	202	202	202
Transfers In (Out) within Owner Bubble	(193)	(193)	(221)	(191)	(202)	(178)	(188)	(188)
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	116	116	36	11	0	24	14	14
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	116	116	36	11	0	24	14	14

NITROGEN FACILITY SUMMARY

Buena Vista
UPPER JAMES Trading Basin

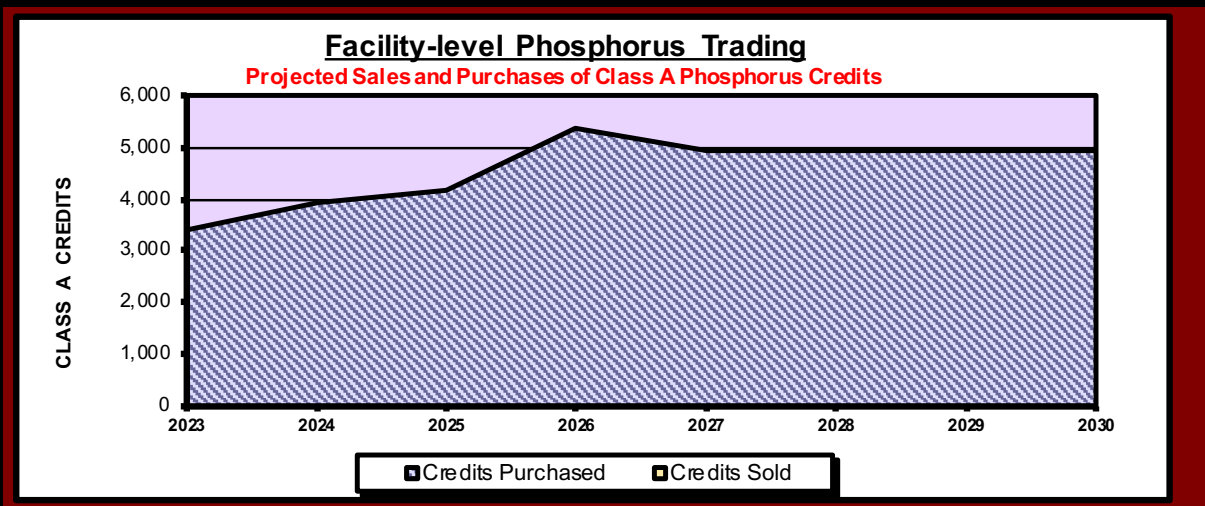


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Projected Flow (mgd)	1.31	1.33	1.43	1.64	1.59	1.59	1.59	1.59
Projected Avg. Annual Concentration (mg/L)	12.90	12.79	12.91	12.28	12.18	12.18	12.18	12.18
Discharged Load (end of pipe)	51,467	51,807	56,225	61,335	58,981	58,981	58,981	58,981
Delivery Factor	0.55	0.55	0.55	0.72	0.72	0.72	0.72	0.72
Expected Load	28,307	28,494	30,924	44,161	42,466	42,466	42,466	42,466
Delivered WLA	22,613	22,613	22,613	29,603	29,603	29,603	29,603	29,603
Expected Credits (delivered)	(5,694)	(5,881)	(8,311)	(14,558)	(12,863)	(12,863)	(12,863)	(12,863)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	(5,694)	(5,881)	(8,311)	(14,558)	(12,863)	(12,863)	(12,863)	(12,863)
Class A Credit Sales (Purchases)	(5,694)	(5,881)	(8,311)	(14,558)	(12,863)	(12,863)	(12,863)	(12,863)
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Buena Vista
 UPPER JAMES Trading Basin



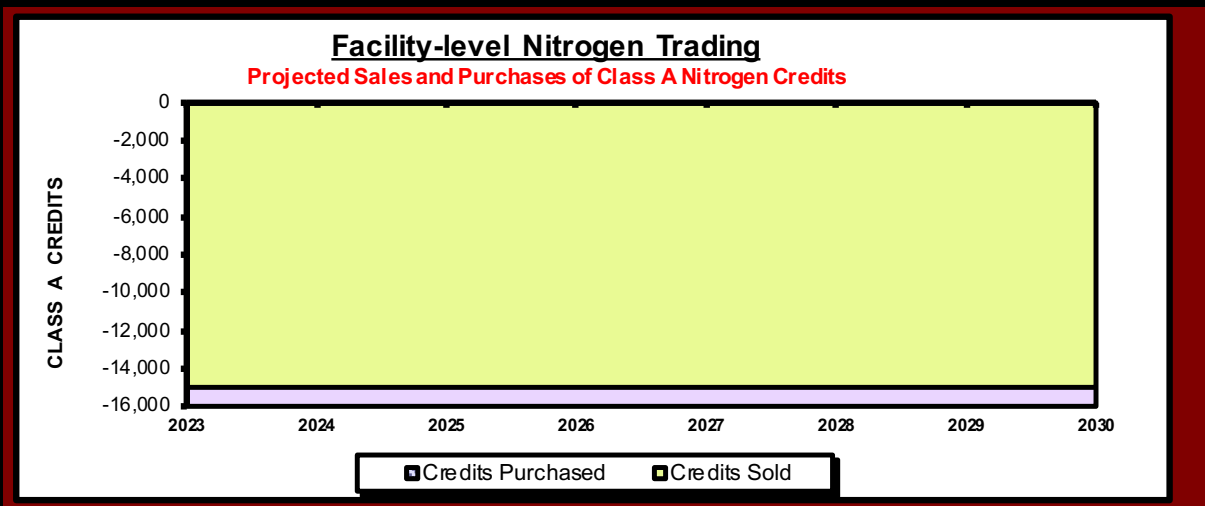
Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	
WQIF-Held Credits	
Expected Net Credits	
Class A Credit Sales (Purchases)	
Expected Class B Credits	

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Projected Flow (mgd)	1.31	1.33	1.43	1.64	1.59	1.59	1.59	1.59
Projected Avg. Annual Concentration (mg/L)	1.90	2.05	1.98	1.82	1.77	1.77	1.77	1.77
Discharged Load (end of pipe)	7,580	8,304	8,623	9,090	8,571	8,571	8,571	8,571
Delivery Factor	0.71	0.71	0.71	0.85	0.85	0.85	0.85	0.85
Expected Load	5,382	5,896	6,122	7,727	7,285	7,285	7,285	7,285
Delivered WLA	1,972	1,972	1,972	2,361	2,361	2,361	2,361	2,361
Expected Credits (delivered)	(3,410)	(3,924)	(4,150)	(5,366)	(4,924)	(4,924)	(4,924)	(4,924)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	(3,410)	(3,924)	(4,150)	(5,366)	(4,924)	(4,924)	(4,924)	(4,924)
Class A Credit Sales (Purchases)	(3,410)	(3,924)	(4,150)	(5,366)	(4,924)	(4,924)	(4,924)	(4,924)
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

BWX Technologies, Inc

UPPER JAMES Trading Basin



Loading & Credit Summary

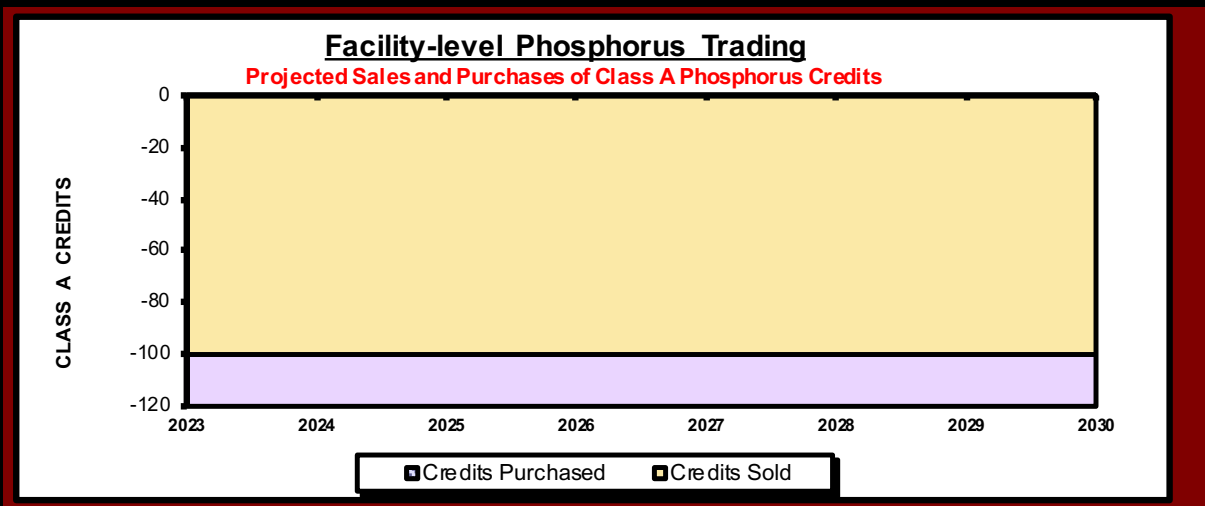
Design Flow (mgd)	1.00
Projected Flow (mgd)	0.48
Projected Avg. Annual Concentration (mg/L)	110.00
Discharged Load (end of pipe)	160,806
Delivery Factor	0.64
Expected Load	102,916
Delivered WLA	119,680
Expected Credits (delivered)	16,764
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	16,764
Class A Credit Sales (Purchases)	15,000
Expected Class B Credits	1,764

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Projected Flow (mgd)	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
Projected Avg. Annual Concentration (mg/L)	110.00	110.00	110.00	110.00	110.00	110.00	110.00	110.00
Discharged Load (end of pipe)	160,806	160,806	160,806	160,806	160,806	160,806	160,806	160,806
Delivery Factor	0.64	0.64	0.64	0.80	0.80	0.80	0.80	0.80
Expected Load	102,916	102,916	102,916	128,644	128,644	128,644	128,644	128,644
Delivered WLA	119,680	119,680	119,680	149,600	149,600	149,600	149,600	149,600
Expected Credits (delivered)	16,764	16,764	16,764	20,956	20,956	20,956	20,956	20,956
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	16,764	16,764	16,764	20,956	20,956	20,956	20,956	20,956
Class A Credit Sales (Purchases)	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Expected Class B Credits	1,764	1,764	1,764	5,956	5,956	5,956	5,956	5,956

PHOSPHORUS FACILITY SUMMARY

BWX Technologies, Inc

UPPER JAMES Trading Basin



Loading & Credit Summary

Design Flow (mgd)	1.00
Projected Flow (mgd)	0.48
Projected Avg. Annual Concentration (mg/L)	0.50
Discharged Load (end of pipe)	731
Delivery Factor	0.71
Expected Load	519
Delivered WLA	877
Expected Credits (delivered)	358
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	358
Class A Credit Sales (Purchases)	100
Expected Class B Credits	258

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Projected Flow (mgd)	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
Projected Avg. Annual Concentration (mg/L)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Discharged Load (end of pipe)	731	731	731	731	731	731	731	731
Delivery Factor	0.71	0.71	0.71	0.55	0.55	0.55	0.55	0.55
Expected Load	519	519	519	402	402	402	402	402
Delivered WLA	877	877	877	679	679	679	679	679
Expected Credits (delivered)	358	358	358	277	277	277	277	277
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	358	358	358	277	277	277	277	277
Class A Credit Sales (Purchases)	100	100	100	100	100	100	100	100
Expected Class B Credits	258	258	258	177	177	177	177	177

Owner Bubble: Chesterfield County

The facilities listed below have received an aggregated mass load limit pursuant to 9 VAC 25-820-70, Part 1.B.2., which is also referred to as an “owner bubble”. Accordingly, compliance is determined solely on an aggregate basis rather than by comparison of individual facility loads with respective individual WLAs.

The “Credit Transferred within Bubble” section of each table forecasts the use of Credits within the owner bubble during each Compliance Year, and must necessarily sum to zero. The specific Credit transfers shown in this table are provided for internal planning purposes only and, accordingly, are not binding and may change based on the actual performance of individual facilities within the bubble.

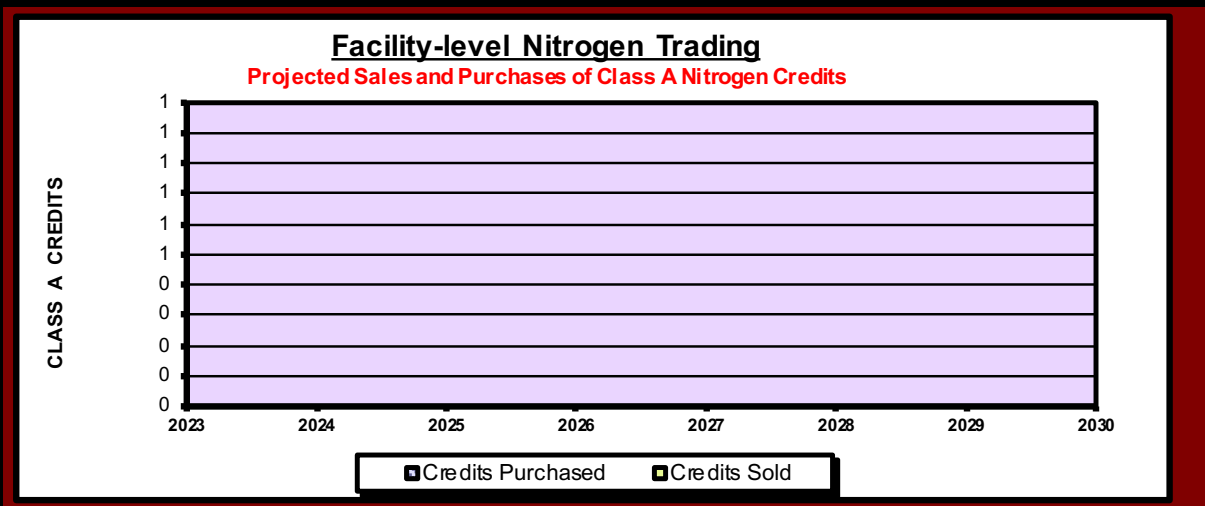
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply with the aggregate Delivered WLA of the bubble.

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
Falling Creek	-	-	-	-	-	-	-	-
Proctors Creek	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Falling Creek	22,846	22,846	22,846	22,846	22,846	22,846	22,846	22,846
Proctors Creek	165,679	160,349	155,019	149,690	144,360	139,030	133,700	128,371
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Credits	188,525	183,195	177,865	172,536	167,206	161,876	156,546	151,217
Private Exchanges	(50,000)	(50,000)	(50,000)	-	-	-	-	-
Expected Net Credits	138,525	133,195	127,865	172,536	167,206	161,876	156,546	151,217
Class A Sales (Purchases)	0	0	0	50,000	50,000	50,000	50,000	50,000
<i>Expected Class B Credits</i>	<i>138,525</i>	<i>133,195</i>	<i>127,865</i>	<i>122,536</i>	<i>117,206</i>	<i>111,876</i>	<i>106,546</i>	<i>101,217</i>
<i>WQIF-Held Credits</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>

PHOSPHORUS Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
Falling Creek	3,516	3,516	3,516	2,801	2,481	2,161	2,161	2,161
Proctors Creek	(3,516)	(3,516)	(3,516)	(2,801)	(2,481)	(2,161)	(2,161)	(2,161)
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Falling Creek	-	-	-	-	-	-	-	-
Proctors Creek	2,826	2,240	4,215	51	94	681	414	148
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Credits	2,826	2,240	4,215	51	94	681	414	148
Private Exchanges	(40)	(40)	(40)	(40)	(40)	(40)	(40)	(40)
Expected Net Credits	2,786	2,200	4,175	11	54	641	374	108
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
<i>Expected Class B Credits</i>	<i>2,786</i>	<i>2,200</i>	<i>4,175</i>	<i>11</i>	<i>54</i>	<i>641</i>	<i>374</i>	<i>108</i>
<i>WQIF-Held Credits</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>

NITROGEN FACILITY SUMMARY

Chesterfield-Falling Cr.
 UPPER JAMES Trading Basin

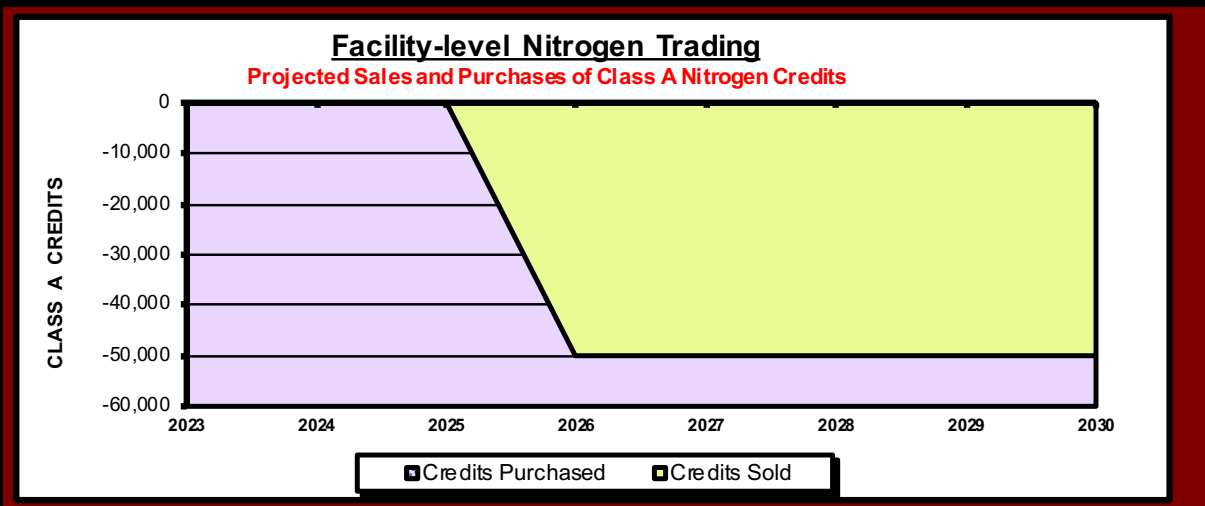


Loading & Credit Summary	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
Projected Flow (mgd)	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50
Projected Avg. Annual Concentration (mg/L)	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Discharged Load (end of pipe)	159,892	159,892	159,892	159,892	159,892	159,892	159,892	159,892
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	159,892	159,892	159,892	159,892	159,892	159,892	159,892	159,892
Delivered WLA	182,738	182,738	182,738	182,738	182,738	182,738	182,738	182,738
Expected Credits (delivered)	22,846	22,846	22,846	22,846	22,846	22,846	22,846	22,846
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	22,846	22,846	22,846	22,846	22,846	22,846	22,846	22,846
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	22,846	22,846	22,846	22,846	22,846	22,846	22,846	22,846

NITROGEN FACILITY SUMMARY

Chesterfield-Proctors Cr.

UPPER JAMES Trading Basin



Loading & Credit Summary

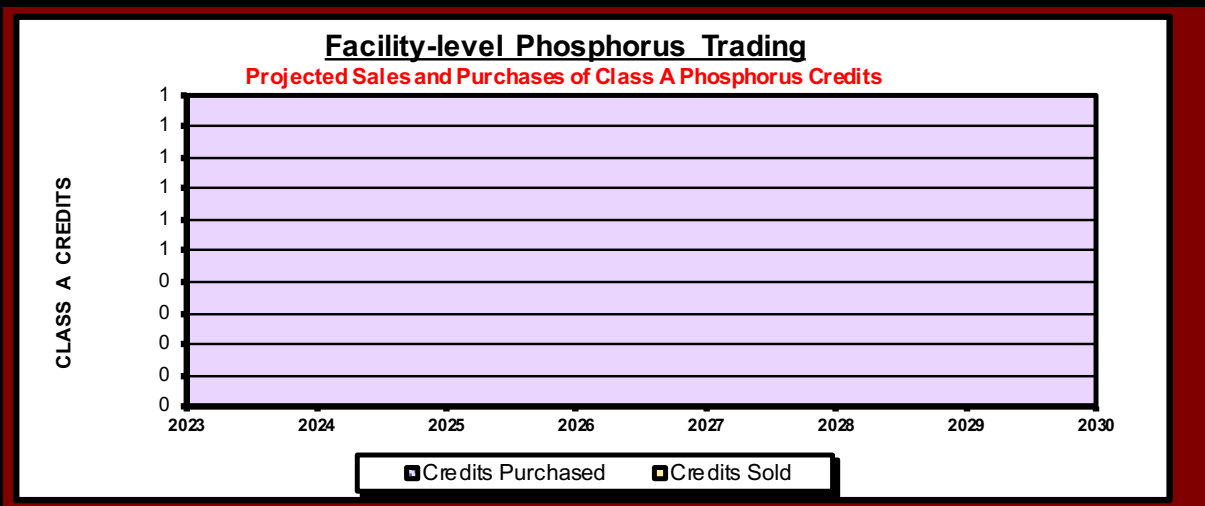
Design Flow (mgd)	27.00
Projected Flow (mgd)	16.12
Projected Avg. Annual Concentration (mg/L)	5.00
Discharged Load (end of pipe)	245,472
Delivery Factor	1.00
Expected Load	245,472
Delivered WLA	411,151
Expected Credits (delivered)	165,679
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange*	(50,000)
WQIF-Held Credits	0
Expected Net Credits	115,679
Class A Credit Sales (Purchases)	0
Expected Class B Credits	115,679

	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00
Projected Flow (mgd)	16.12	16.47	16.82	17.17	17.52	17.87	18.22	18.57
Projected Avg. Annual Concentration (mg/L)	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Discharged Load (end of pipe)	245,472	250,802	256,132	261,461	266,791	272,121	277,451	282,780
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	245,472	250,802	256,132	261,461	266,791	272,121	277,451	282,780
Delivered WLA	411,151	411,151	411,151	411,151	411,151	411,151	411,151	411,151
Expected Credits (delivered)	165,679	160,349	155,019	149,690	144,360	139,030	133,700	128,371
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange*	(50,000)	(50,000)	(50,000)	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	115,679	110,349	105,019	149,690	144,360	139,030	133,700	128,371
Class A Credit Sales (Purchases)	0	0	0	50,000	50,000	50,000	50,000	50,000
Expected Class B Credits	115,679	110,349	105,019	99,690	94,360	89,030	83,700	78,371

* Represents a Private Exchange of Credits with South Central Wastewater Authority

PHOSPHORUS FACILITY SUMMARY

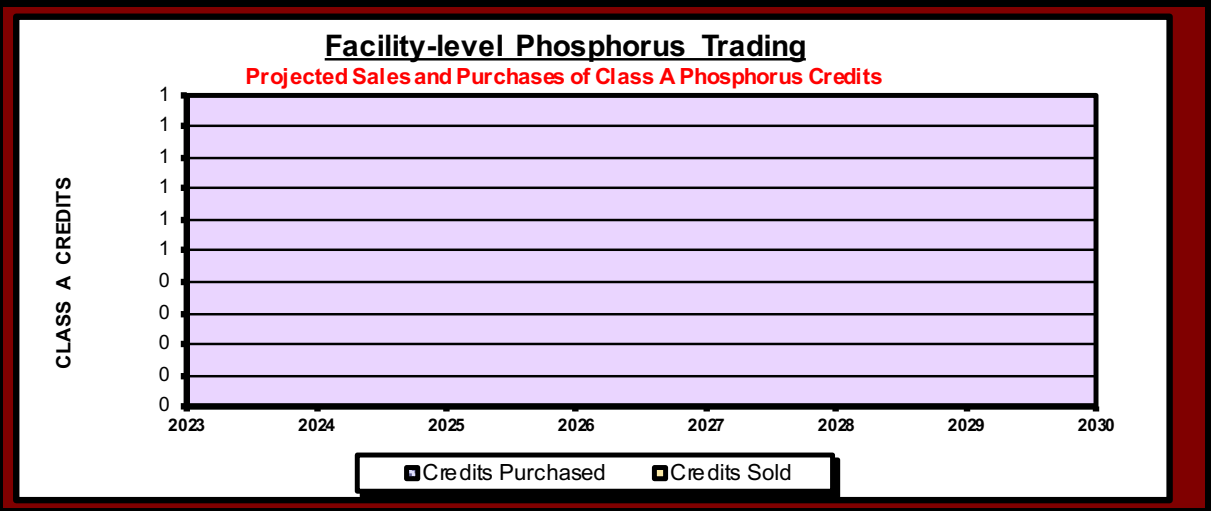
Chesterfield-Falling Cr.
 UPPER JAMES Trading Basin



Loading & Credit Summary	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
Projected Flow (mgd)	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50
Projected Avg. Annual Concentration (mg/L)	0.50	0.50	0.50	0.28	0.27	0.26	0.26	0.26
Discharged Load (end of pipe)	15,989	15,989	15,989	8,954	8,634	8,314	8,314	8,314
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	15,989	15,989	15,989	8,954	8,634	8,314	8,314	8,314
Delivered WLA	12,473	12,473	12,473	6,153	6,153	6,153	6,153	6,153
Expected Credits (delivered)	(3,516)	(3,516)	(3,516)	(2,801)	(2,481)	(2,161)	(2,161)	(2,161)
Transfers In (Out) within Owner Bubble	3,516	3,516	3,516	2,801	2,481	2,161	2,161	2,161
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Chesterfield-Proctors Cr.
UPPER JAMES Trading Basin



Loading & Credit Summary	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00
Projected Flow (mgd)	16.12	16.47	16.82	17.17	17.52	17.87	18.22	18.57
Projected Avg. Annual Concentration (mg/L)	0.55	0.55	0.50	0.26	0.26	0.25	0.25	0.25
Discharged Load (end of pipe)	27,002	27,588	25,613	13,596	13,873	13,606	13,873	14,139
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	27,002	27,588	25,613	13,596	13,873	13,606	13,873	14,139
Delivered WLA	33,344	33,344	33,344	16,448	16,448	16,448	16,448	16,448
Expected Credits (delivered)	6,342	5,756	7,731	2,852	2,575	2,842	2,575	2,309
Transfers In (Out) within Owner Bubble	(3,516)	(3,516)	(3,516)	(2,801)	(2,481)	(2,161)	(2,161)	(2,161)
Transfers In (Out) from Private Exchange*	(40)	(40)	(40)	(40)	(40)	(40)	(40)	(40)
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	2,786	2,200	4,175	11	54	641	374	108
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	2,786	2,200	4,175	11	54	641	374	108

* Represents a Private Exchange of Credits with Dominion-Chesterfield

FACILITY (OR OWNER BUBBLE) NAME: Chesterfield County (Bubble);
Falling Creek WWTP / Proctor's Creek WWTP

**COMPLIANCE SCHEDULE STATEMENT FOR FACILITIES SUBJECT TO
REDUCED WASTELOAD ALLOCATIONS**

Basin/Nutrient(s): James River Basin /Nitrogen & Phosphorus

**Compliance Information Required by 9 VAC 25-820-40 and -820 Part I, C.
(Check Option 1 or Option 2)**

Option 1: Permittee hereby requests WLA to be effective as of January 1, 2023.

Option 2: Additional capital project(s) is needed to ensure continued compliance with the WLA through the applicable compliance schedule deadline. (Note: Checking Option 2 does not preclude use of credit purchase as means of compliance.) If Option 2 is checked, briefly describe need for additional projects:

Nutrient improvement projects which will likely include increased chemical storage and chemical feed systems anticipated at both Falling Creek WWTP and Proctor's Creek WWTP to reliably meet new phosphorus WLA.

Implementation Schedule

1. Does permittee anticipate using credit purchase to comply?

NO YES

2. Is permittee implementing a capital project to comply?

NO YES

(If YES, compliance is required as soon as possible but no later than for Compliance Year 2026.)

3. Capital Project Milestone Schedule (Specify estimated date for each milestone. (For bubbles, specify facility name(s) and list multiple facility schedules if applicable.)

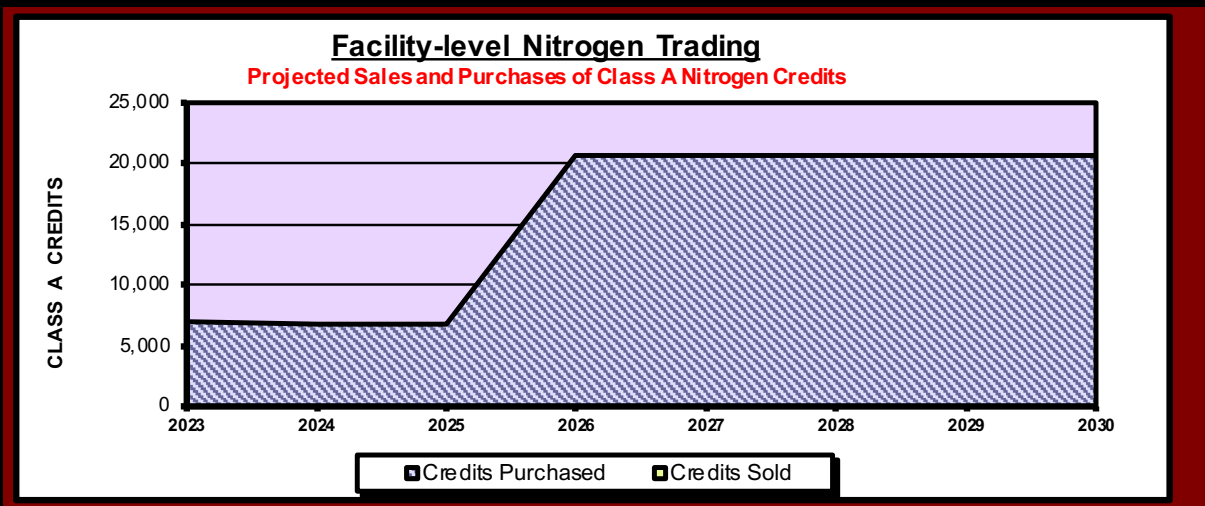
Engineer selection	<u>1/1/2023</u>
PER/CER to DEQ	<u>9/1/2023</u>
Plans & Specifications to DEQ	<u>9/1/2024</u>
Commence construction	<u>1/1/2025</u>
Complete construction	<u>1/1/2026</u>
CTO Request to DEQ (POTWs only)	<u>1/1/2026</u>

4. Additional Information (insert below if applicable).

Schedule above representative applies to both Falling Creek WWTP and Proctor's Creek WWTP covered by Bubble.

NITROGEN FACILITY SUMMARY

Covington
 UPPER JAMES Trading Basin

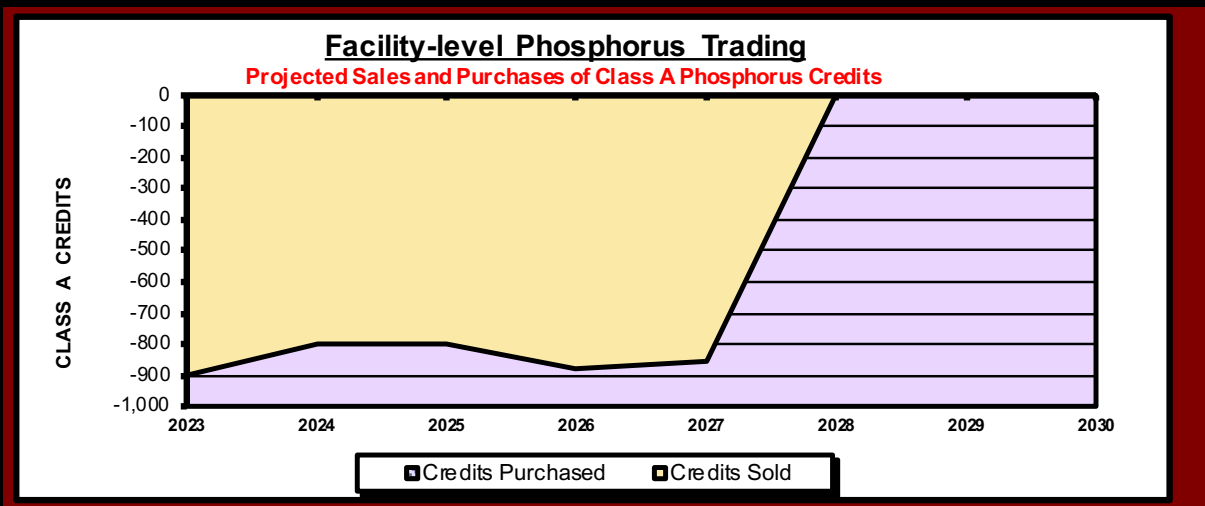


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Projected Flow (mgd)	2.10	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Projected Avg. Annual Concentration (mg/L)	13.72	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Discharged Load (end of pipe)	87,749	87,103	87,103	87,103	87,103	87,103	87,103	87,103
Delivery Factor	0.21	0.21	0.21	0.64	0.64	0.64	0.64	0.64
Expected Load	18,427	18,292	18,292	55,746	55,746	55,746	55,746	55,746
Delivered WLA	11,512	11,512	11,512	35,085	35,085	35,085	35,085	35,085
Expected Credits (delivered)	(6,915)	(6,780)	(6,780)	(20,661)	(20,661)	(20,661)	(20,661)	(20,661)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	(6,915)	(6,780)	(6,780)	(20,661)	(20,661)	(20,661)	(20,661)	(20,661)
Class A Credit Sales (Purchases)	(6,915)	(6,780)	(6,780)	(20,661)	(20,661)	(20,661)	(20,661)	(20,661)
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Covington
 UPPER JAMES Trading Basin



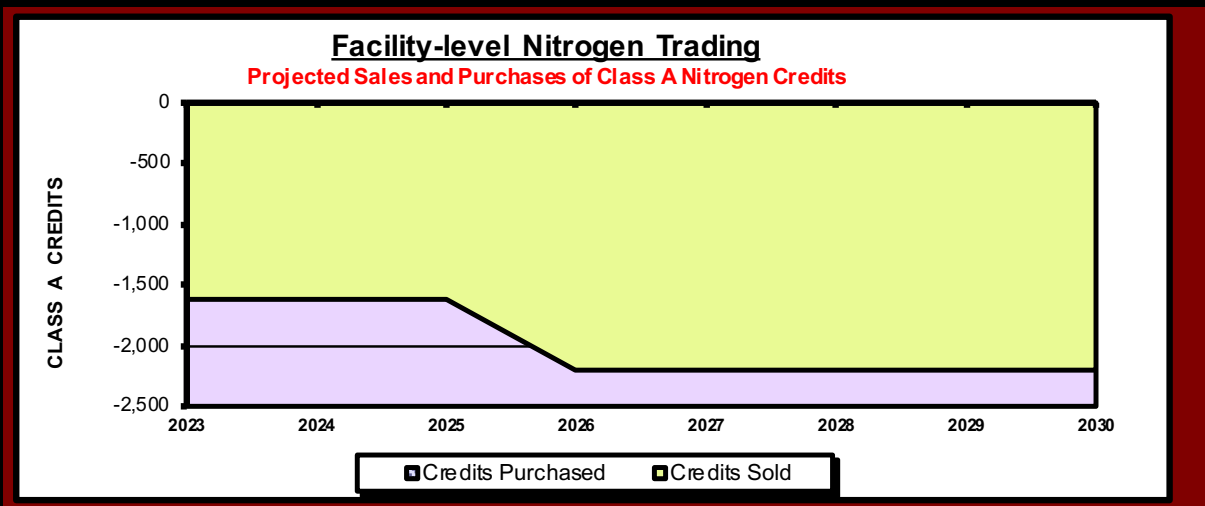
Loading & Credit Summary

Design Flow (mgd)	3.00
Projected Flow (mgd)	2.10
Projected Avg. Annual Concentration (mg/L)	0.38
Discharged Load (end of pipe)	2,430
Delivery Factor	0.71
Expected Load	1,726
Delivered WLA	2,631
Expected Credits (delivered)	905
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	905
Class A Credit Sales (Purchases)	900
Expected Class B Credits	5

	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Projected Flow (mgd)	2.10	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Projected Avg. Annual Concentration (mg/L)	0.38	0.38	0.38	0.41	0.41	0.41	0.41	0.41
Discharged Load (end of pipe)	2,430	2,546	2,546	2,719	2,747	2,747	2,747	2,747
Delivery Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.89	0.89
Expected Load	1,726	1,808	1,808	2,420	2,445	2,445	2,445	2,445
Delivered WLA	2,631	2,631	2,631	3,297	3,297	3,297	3,297	3,297
Expected Credits (delivered)	905	823	823	877	852	852	852	852
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	905	823	823	877	852	852	852	852
Class A Credit Sales (Purchases)	900	800	800	877	852	0	0	0
Expected Class B Credits	5	23	23	0	0	852	852	852

NITROGEN FACILITY SUMMARY

Crewe
 UPPER JAMES Trading Basin



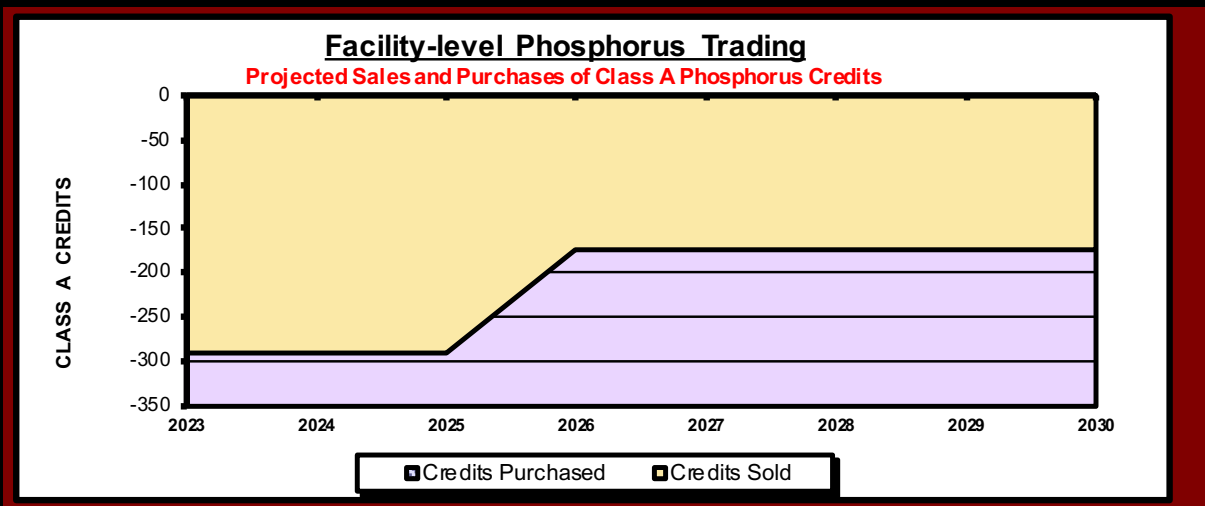
Loading & Credit Summary

Design Flow (mgd)	0.50
Projected Flow (mgd)	0.23
Projected Avg. Annual Concentration (mg/L)	3.80
Discharged Load (end of pipe)	2,662
Delivery Factor	0.25
Expected Load	665
Delivered WLA	2,284
Expected Credits (delivered)	1,619
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	1,619
Class A Credit Sales (Purchases)	1,619
Expected Class B Credits	0

	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Projected Flow (mgd)	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Projected Avg. Annual Concentration (mg/L)	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80
Discharged Load (end of pipe)	2,662	2,662	2,662	2,662	2,662	2,662	2,662	2,662
Delivery Factor	0.25	0.25	0.25	0.34	0.34	0.34	0.34	0.34
Expected Load	665	665	665	905	905	905	905	905
Delivered WLA	2,284	2,284	2,284	3,107	3,107	3,107	3,107	3,107
Expected Credits (delivered)	1,619	1,619	1,619	2,202	2,202	2,202	2,202	2,202
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	1,619	1,619	1,619	2,202	2,202	2,202	2,202	2,202
Class A Credit Sales (Purchases)	1,619	1,619	1,619	2,202	2,202	2,202	2,202	2,202
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Crewe
 UPPER JAMES Trading Basin



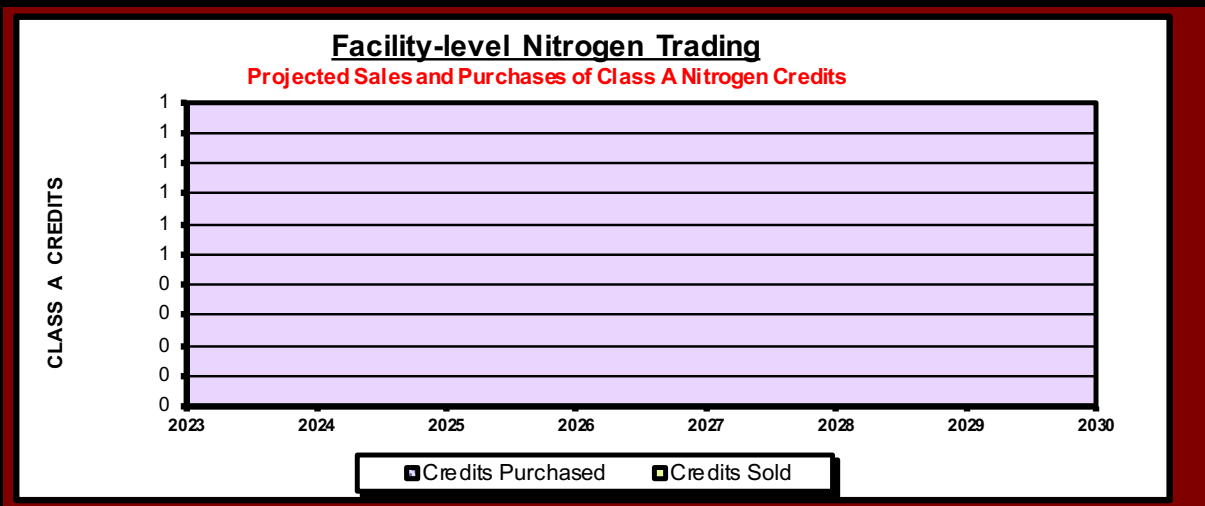
Loading & Credit Summary

Design Flow (mgd)	0.50
Projected Flow (mgd)	0.23
Projected Avg. Annual Concentration (mg/L)	0.10
Discharged Load (end of pipe)	70
Delivery Factor	0.53
Expected Load	37
Delivered WLA	327
Expected Credits (delivered)	290
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	290
Class A Credit Sales (Purchases)	290
Expected Class B Credits	0

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Projected Flow (mgd)	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Projected Avg. Annual Concentration (mg/L)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Discharged Load (end of pipe)	70	70	70	70	70	70	70	70
Delivery Factor	0.53	0.53	0.53	0.32	0.32	0.32	0.32	0.32
Expected Load	37	37	37	22	22	22	22	22
Delivered WLA	327	327	327	197	197	197	197	197
Expected Credits (delivered)	290	290	290	175	175	175	175	175
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	290	290	290	175	175	175	175	175
Class A Credit Sales (Purchases)	290	290	290	175	175	175	175	175
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

Dominion-Chesterfield
<i>UPPER JAMES Trading Basin</i>



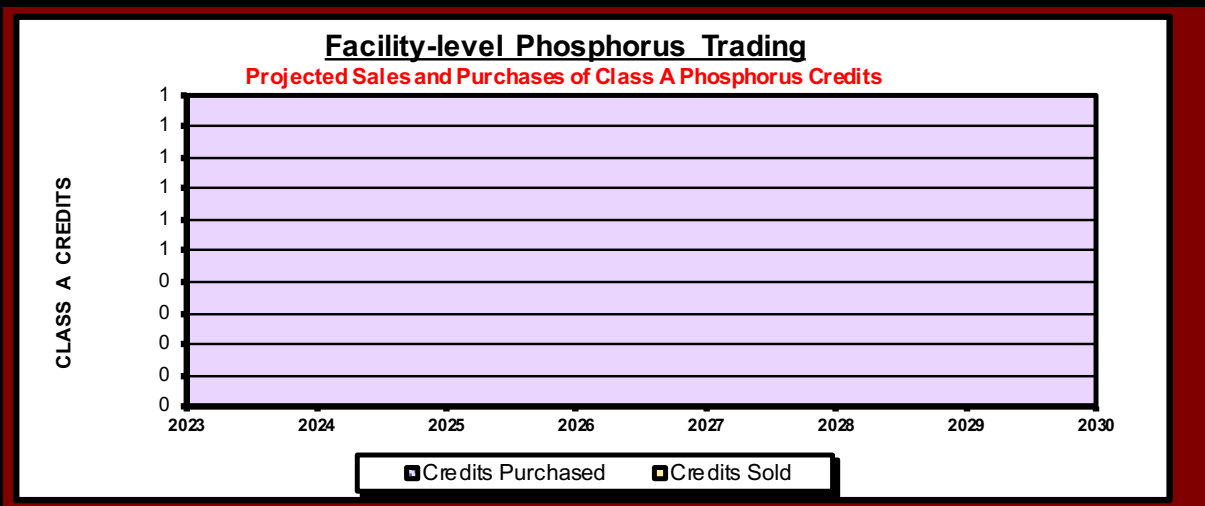
Loading & Credit Summary	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50
Projected Flow (mgd)	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Projected Avg. Annual Concentration (mg/L)	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35
Discharged Load (end of pipe)	189,070	189,070	189,070	189,070	189,070	189,070	189,070	189,129
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	189,070	189,070	189,070	189,070	189,070	189,070	189,070	189,129
Delivered WLA*	243,099	243,099	243,099	243,099	243,099	243,099	243,099	243,099
Expected Credits (delivered)	54,029	54,029	54,029	54,029	54,029	54,029	54,029	53,970
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	54,029	54,029	54,029	54,029	54,029	54,029	54,029	53,970
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	54,029	54,029	54,029	54,029	54,029	54,029	54,029	53,970

* Reflects allocation transfers to Vastly/Tranlin (80,000 pounds) and Chesterfield County's Falling Creek facility (28,937 pounds)

PHOSPHORUS FACILITY SUMMARY

Dominion-Chesterfield

UPPER JAMES Trading Basin



Loading & Credit Summary

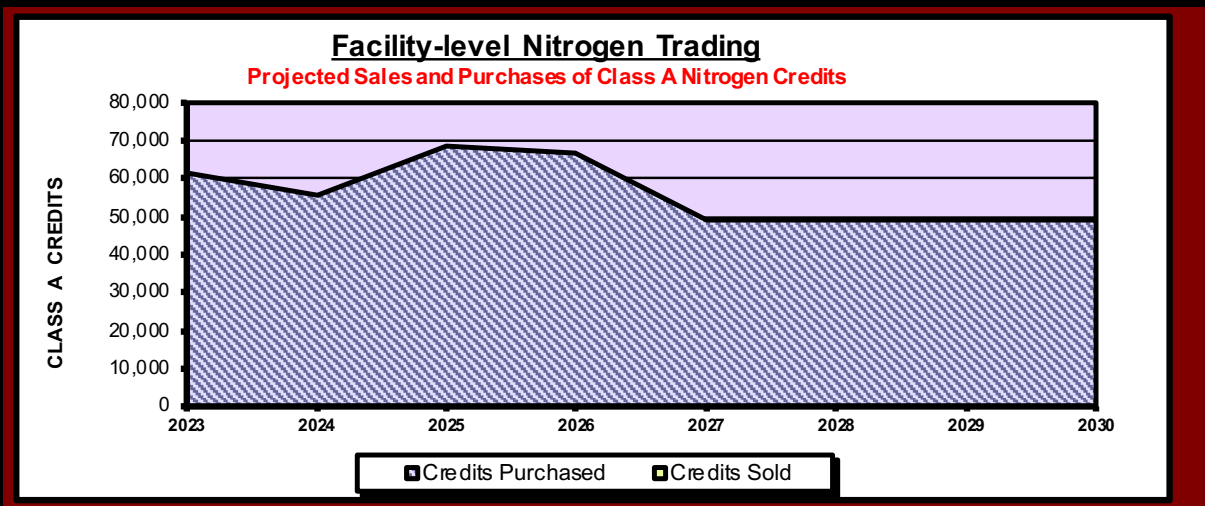
Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange*
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50
Projected Flow (mgd)	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Projected Avg. Annual Concentration (mg/L)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Discharged Load (end of pipe)	210	210	210	210	210	210	210	210
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	210	210	210	210	210	210	210	210
Delivered WLA	170	170	170	170	170	170	170	170
Expected Credits (delivered)	(40)	(40)	(40)	(40)	(40)	(40)	(40)	(40)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange*	40	40	40	40	40	40	40	40
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

* Represents a Private Exchange of Credits with Chesterfield County

NITROGEN FACILITY SUMMARY

DuPont-Spruance
 UPPER JAMES Trading Basin

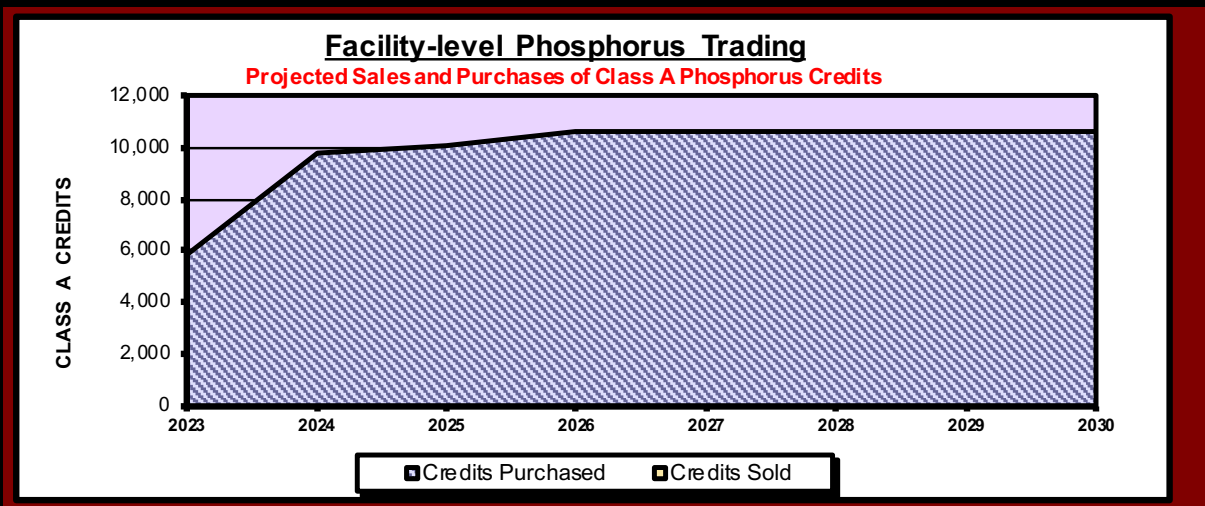


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	23.33	23.33	23.33	23.33	23.33	23.33	23.33	23.33
Projected Flow (mgd)	34.01	32.64	27.10	26.93	26.93	26.93	26.93	26.93
Projected Avg. Annual Concentration (mg/L)	2.53	2.58	3.27	3.26	3.05	3.05	3.05	3.05
Discharged Load (end of pipe)	262,470	256,780	269,667	267,523	250,004	250,004	250,004	250,004
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	262,470	256,780	269,667	267,523	250,004	250,004	250,004	250,004
Delivered WLA	201,080	201,080	201,080	201,080	201,080	201,080	201,080	201,080
Expected Credits (delivered)	(61,390)	(55,700)	(68,587)	(66,443)	(48,924)	(48,924)	(48,924)	(48,924)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	(61,390)	(55,700)	(68,587)	(66,443)	(48,924)	(48,924)	(48,924)	(48,924)
Class A Credit Sales (Purchases)	(61,390)	(55,700)	(68,587)	(66,443)	(48,924)	(48,924)	(48,924)	(48,924)
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

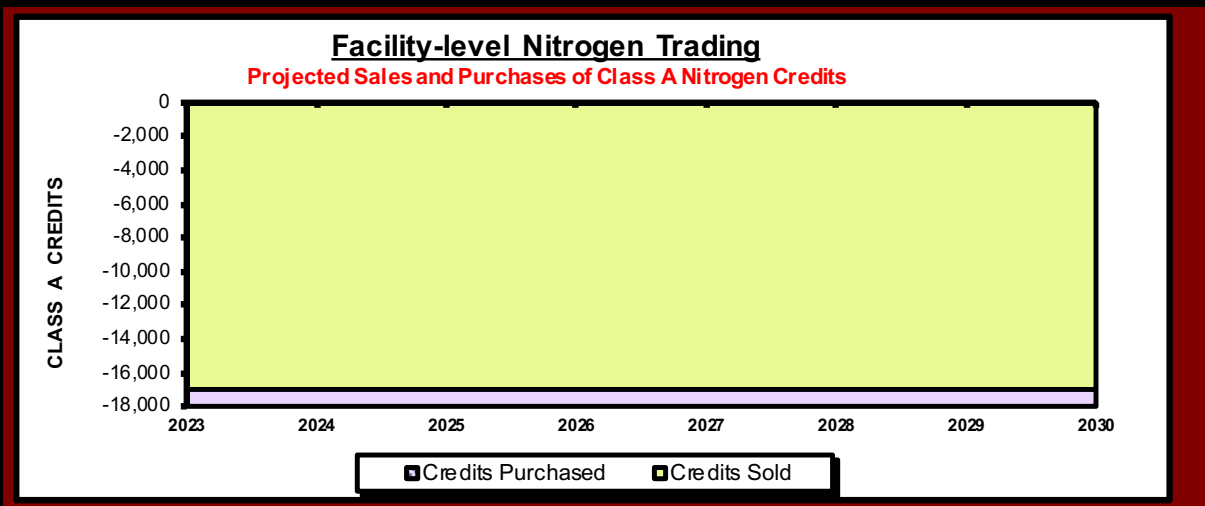
DuPont-Spruance
 UPPER JAMES Trading Basin



Loading & Credit Summary	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	23.33	23.33	23.33	23.33	23.33	23.33	23.33	23.33
Projected Flow (mgd)	34.01	32.64	27.10	26.93	26.93	26.93	26.93	26.93
Projected Avg. Annual Concentration (mg/L)	0.12	0.16	0.20	0.21	0.21	0.21	0.21	0.21
Discharged Load (end of pipe)	12,222	16,115	16,426	16,945	16,945	16,945	16,945	16,945
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	12,222	16,115	16,426	16,945	16,945	16,945	16,945	16,945
Delivered WLA	6,339	6,339	6,339	6,339	6,339	6,339	6,339	6,339
Expected Credits (delivered)	(5,883)	(9,776)	(10,087)	(10,606)	(10,606)	(10,606)	(10,606)	(10,606)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	(5,883)	(9,776)	(10,087)	(10,606)	(10,606)	(10,606)	(10,606)	(10,606)
Class A Credit Sales (Purchases)	(5,883)	(9,776)	(10,087)	(10,606)	(10,606)	(10,606)	(10,606)	(10,606)
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

Georgia-Pacific
 UPPER JAMES Trading Basin



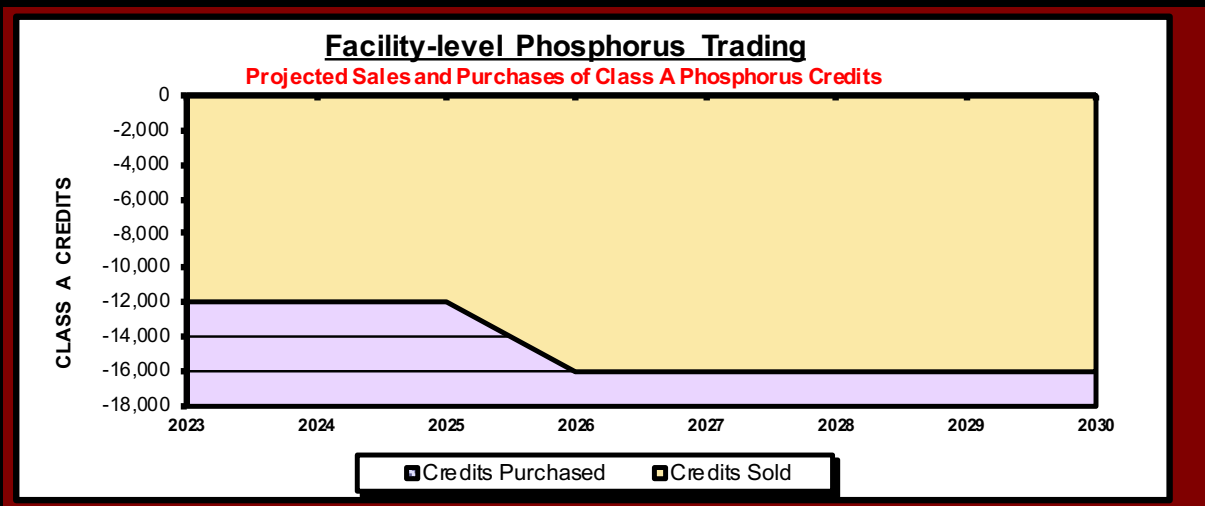
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	10.87	10.87	10.87	10.87	10.87	10.87	10.87	10.87
Projected Flow (mgd)	8.75	9.25	9.25	10.00	10.00	10.00	10.00	10.00
Projected Avg. Annual Concentration (mg/L)	3.25	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Discharged Load (end of pipe)	86,608	84,514	84,514	91,367	91,367	91,367	91,367	91,367
Delivery Factor	0.60	0.60	0.60	0.65	0.65	0.65	0.65	0.65
Expected Load	51,965	50,709	50,709	59,388	59,388	59,388	59,388	59,388
Delivered WLA	73,493	73,493	73,493	79,618	79,618	79,618	79,618	79,618
Expected Credits (delivered)	21,528	22,784	22,784	20,230	20,230	20,230	20,230	20,230
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	21,528	22,784	22,784	20,230	20,230	20,230	20,230	20,230
Class A Credit Sales (Purchases)	17,000	17,000	17,000	17,000	17,000	17,000	17,000	17,000
Expected Class B Credits	4,528	5,784	5,784	3,230	3,230	3,230	3,230	3,230

PHOSPHORUS FACILITY SUMMARY

Georgia-Pacific
 UPPER JAMES Trading Basin



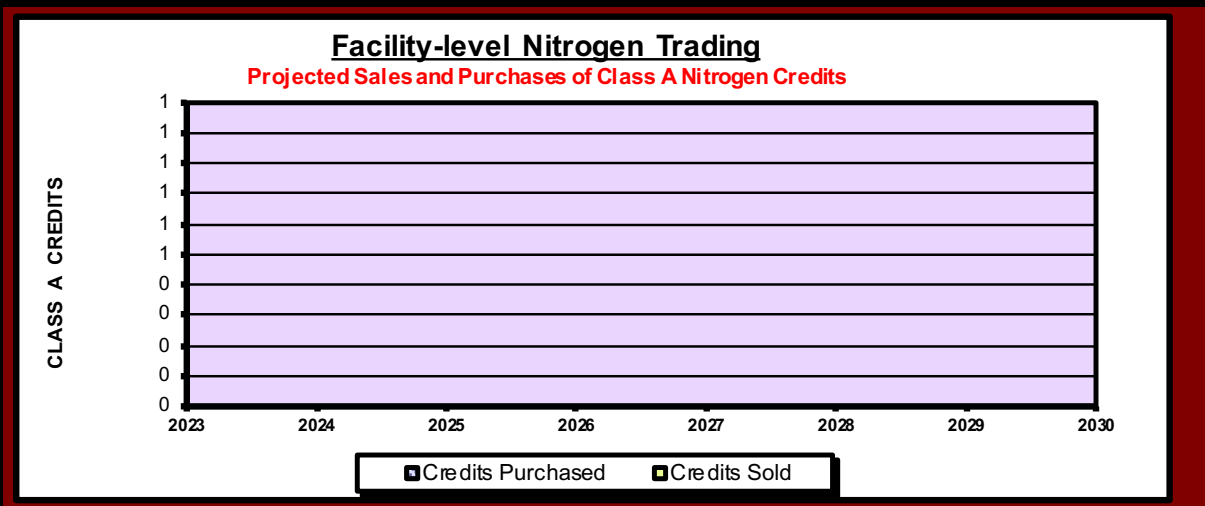
Loading & Credit Summary

Design Flow (mgd)	10.87
Projected Flow (mgd)	8.75
Projected Avg. Annual Concentration (mg/L)	0.70
Discharged Load (end of pipe)	18,654
Delivery Factor	0.71
Expected Load	13,244
Delivered WLA	28,594
Expected Credits (delivered)	15,350
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	15,350
Class A Credit Sales (Purchases)	12,000
Expected Class B Credits	3,350

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	10.87	10.87	10.87	10.87	10.87	10.87	10.87	10.87
Projected Flow (mgd)	8.75	9.25	9.25	10.00	10.00	10.00	10.00	10.00
Projected Avg. Annual Concentration (mg/L)	0.70	0.70	0.70	0.50	0.50	0.50	0.50	0.50
Discharged Load (end of pipe)	18,654	19,720	19,720	15,228	15,228	15,228	15,228	15,228
Delivery Factor	0.71	0.71	0.71	0.78	0.78	0.78	0.78	0.78
Expected Load	13,244	14,001	14,001	11,878	11,878	11,878	11,878	11,878
Delivered WLA	28,594	28,594	28,594	31,413	31,413	31,413	31,413	31,413
Expected Credits (delivered)	15,350	14,593	14,593	19,535	19,535	19,535	19,535	19,535
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	15,350	14,593	14,593	19,535	19,535	19,535	19,535	19,535
Class A Credit Sales (Purchases)	12,000	12,000	12,000	16,000	16,000	16,000	16,000	16,000
Expected Class B Credits	3,350	2,593	2,593	3,535	3,535	3,535	3,535	3,535

NITROGEN FACILITY SUMMARY

Greif Packaging
 UPPER JAMES Trading Basin



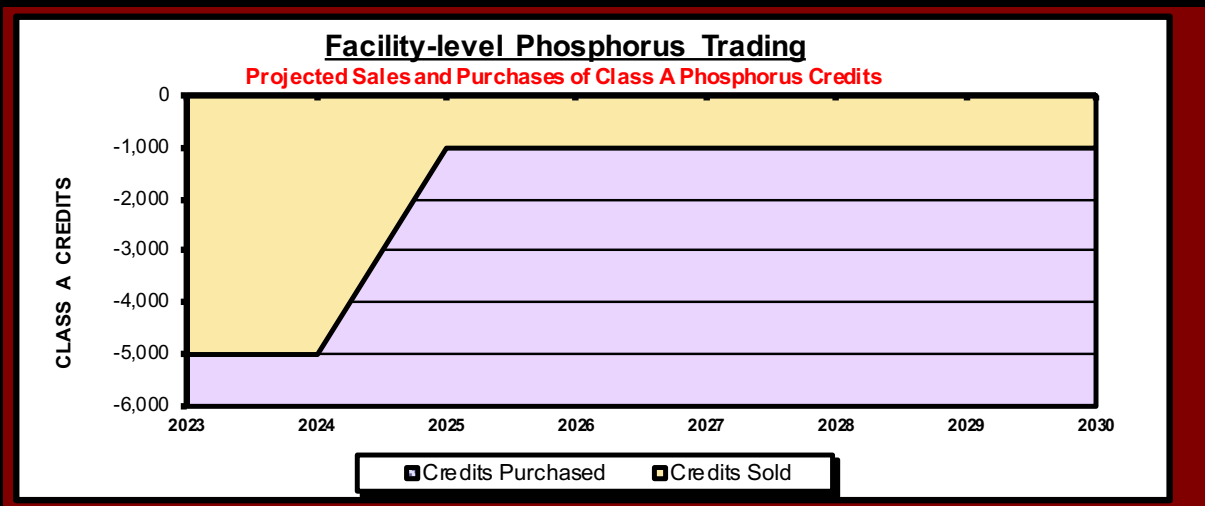
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Projected Flow (mgd)	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Projected Avg. Annual Concentration (mg/L)	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70
Discharged Load (end of pipe)	73,246	73,246	73,246	73,246	73,246	73,246	73,246	73,246
Delivery Factor	0.64	0.64	0.64	0.72	0.72	0.72	0.72	0.72
Expected Load	46,877	46,877	46,877	52,737	52,737	52,737	52,737	52,737
Delivered WLA	46,877	46,877	46,877	52,737	52,737	52,737	52,737	52,737
Expected Credits (delivered)	0	0	0	0	0	0	0	0
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Greif Packaging
 UPPER JAMES Trading Basin



Loading & Credit Summary

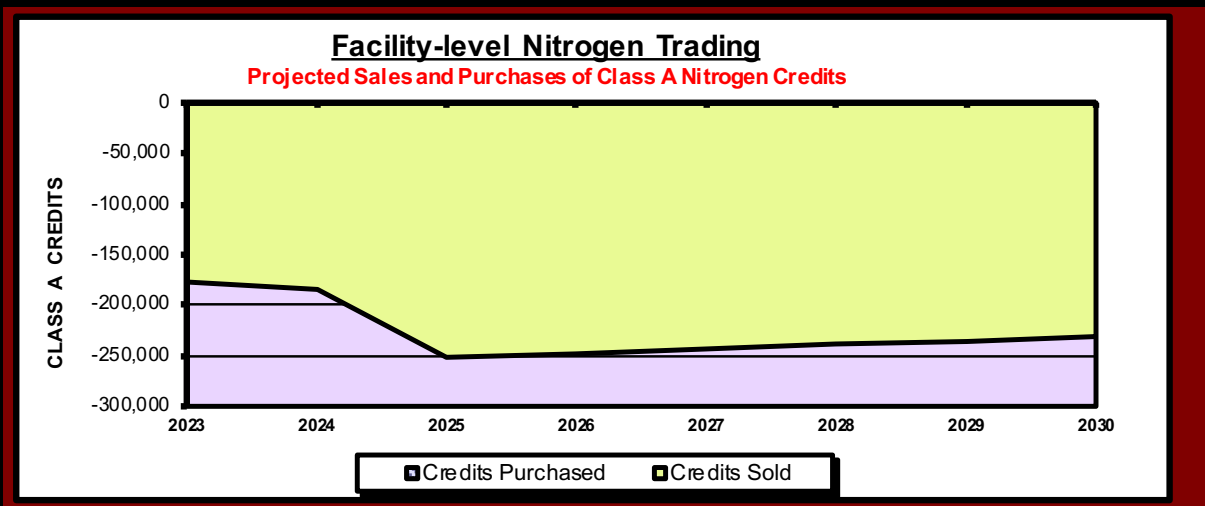
Design Flow (mgd)	6.50
Projected Flow (mgd)	6.50
Projected Avg. Annual Concentration (mg/L)	0.80
Discharged Load (end of pipe)	15,837
Delivery Factor	0.71
Expected Load	11,244
Delivered WLA	17,098
Expected Credits (delivered)	5,854
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	5,854
Class A Credit Sales (Purchases)	5,000
Expected Class B Credits	854

	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Projected Flow (mgd)	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Projected Avg. Annual Concentration (mg/L)	0.80	0.80	1.10	1.10	1.10	1.10	1.10	1.10
Discharged Load (end of pipe)	15,837	15,837	21,776	21,776	21,776	21,776	21,776	21,776
Delivery Factor	0.71	0.71	0.71	0.69	0.69	0.69	0.69	0.69
Expected Load	11,244	11,244	15,461	15,025	15,025	15,025	15,025	15,025
Delivered WLA	17,098	17,098	17,098	16,617	16,617	16,617	16,617	16,617
Expected Credits (delivered)	5,854	5,854	1,637	1,592	1,592	1,592	1,592	1,592
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	5,854	5,854	1,637	1,592	1,592	1,592	1,592	1,592
Class A Credit Sales (Purchases)	5,000	5,000	1,000	1,000	1,000	1,000	1,000	1,000
Expected Class B Credits	854	854	637	592	592	592	592	592

NITROGEN FACILITY SUMMARY

Henrico Co

UPPER JAMES Trading Basin

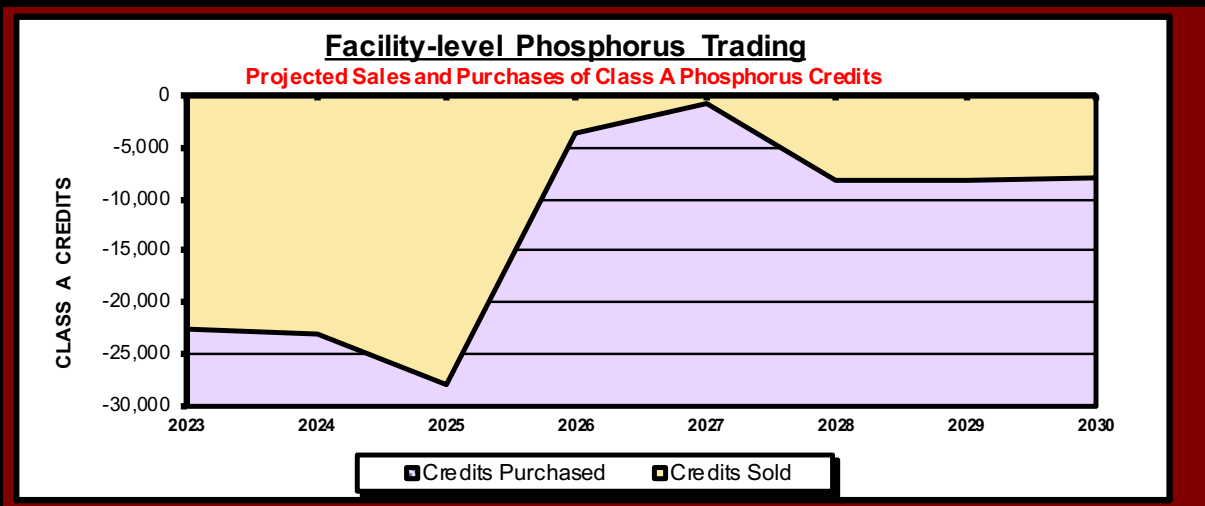


Loading & Credit Summary	
Design Flow (mgd)	75.00
Projected Flow (mgd)	49.00
Projected Avg. Annual Concentration (mg/L)	4.90
Discharged Load (end of pipe)	731,239
Delivery Factor	1.00
Expected Load	731,239
Delivered WLA	1,142,085
Expected Credits (delivered)	410,846
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	410,846
Class A Credit Sales (Purchases)	177,431
Expected Class B Credits	233,415

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
Projected Flow (mgd)	49.00	50.00	51.00	53.00	58.40	58.70	59.00	59.30
Projected Avg. Annual Concentration (mg/L)	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.90
Discharged Load (end of pipe)	731,239	746,162	761,085	790,932	871,517	875,994	880,471	884,948
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	731,239	746,162	761,085	790,932	871,517	875,994	880,471	884,948
Delivered WLA	1,142,085	1,142,085	1,142,085	1,142,085	1,142,085	1,142,085	1,142,085	1,142,085
Expected Credits (delivered)	410,846	395,923	381,000	351,153	270,568	266,091	261,614	257,137
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	410,846	395,923	381,000	351,153	270,568	266,091	261,614	257,137
Class A Credit Sales (Purchases)	177,431	183,475	251,569	247,541	243,511	239,482	235,453	231,423
Expected Class B Credits	233,415	212,448	129,431	103,612	27,057	26,609	26,161	25,714

PHOSPHORUS FACILITY SUMMARY

Henrico Co
 UPPER JAMES Trading Basin



Loading & Credit Summary

Design Flow (mgd)	75.00
Projected Flow (mgd)	49.00
Projected Avg. Annual Concentration (mg/L)	0.35
Discharged Load (end of pipe)	52,231
Delivery Factor	1.00
Expected Load	52,231
Delivered WLA	92,623
Expected Credits (delivered)	40,392
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	40,392
Class A Credit Sales (Purchases)	22,614
Expected Class B Credits	17,778

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
Projected Flow (mgd)	49.00	50.00	51.00	53.00	58.40	58.70	59.00	59.30
Projected Avg. Annual Concentration (mg/L)	0.35	0.35	0.35	0.25	0.25	0.19	0.19	0.19
Discharged Load (end of pipe)	52,231	53,297	54,363	40,354	44,465	33,967	34,141	34,314
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	52,231	53,297	54,363	40,354	44,465	33,967	34,141	34,314
Delivered WLA	92,623	92,623	92,623	45,689	45,689	45,689	45,689	45,689
Expected Credits (delivered)	40,392	39,326	38,260	5,335	1,224	11,722	11,548	11,375
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	40,392	39,326	38,260	5,335	1,224	11,722	11,548	11,375
Class A Credit Sales (Purchases)	22,614	23,046	27,910	3,735	857	8,205	8,084	7,963
Expected Class B Credits	17,778	16,280	10,350	1,600	367	3,517	3,464	3,412

FACILITY (OR OWNER BUBBLE) NAME: Henrico County WRF

COMPLIANCE SCHEDULE STATEMENT FOR FACILITIES SUBJECT TO REDUCED WASTELOAD ALLOCATIONS

Basin/Nutrient(s): James (middle) / Total Phosphorus

Compliance Information Required by 9 VAC 25-820-40 and -820 Part I, C.
(Check Option 1 or Option 2)

_____ Option 1: Permittee hereby requests WLA to be effective as of January 1, 2023.

X Option 2: Additional capital project(s) is needed to ensure continued compliance with the WLA through the applicable compliance schedule deadline. (Note: Checking Option 2 does not preclude use of credit purchase as means of compliance.) If Option 2 is checked, briefly describe need for additional projects:

The current design does not provide facilities that will comply with an annual WLA based on 0.2 mg/L total phosphorus. Preliminary engineering is required to understand current design capabilities and what additional facilities and/or technologies may be required. Preliminary engineering work is scheduled to begin in October 2022 (a task order proposal with Hazen is being developed now).

Implementation Schedule

1. Does permittee anticipate using credit purchase to comply?

_____ NO X YES

2. Is permittee implementing a capital project to comply?

_____ NO X YES

(If YES, compliance is required as soon as possible but no later than for Compliance Year 2026.)

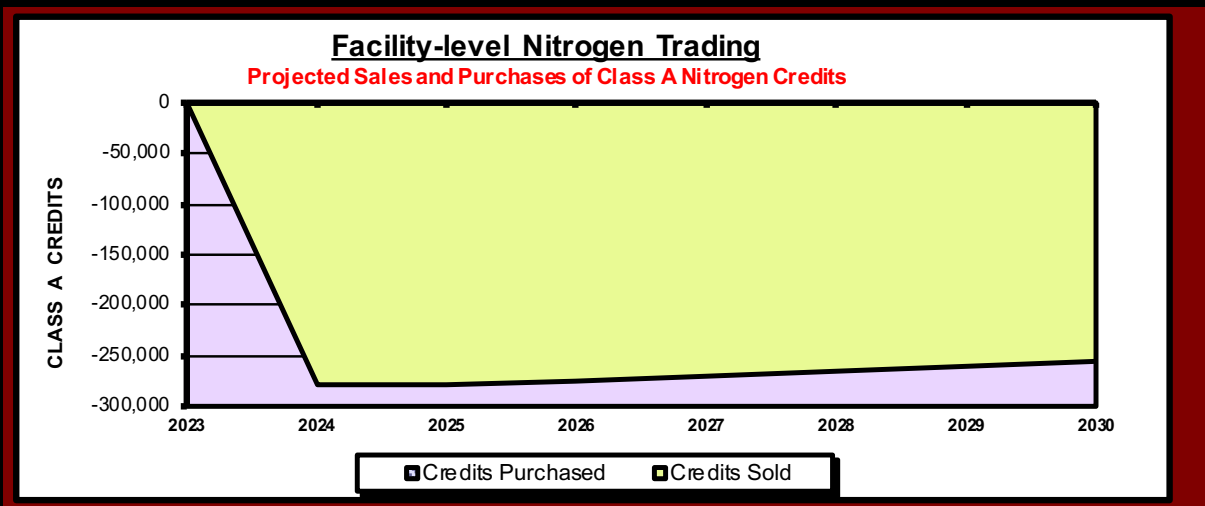
3. Capital Project Milestone Schedule (Specify estimated date for each milestone. (For bubbles, specify facility name(s) and list multiple facility schedules if applicable.)

Engineer selection	<u>January 2023</u>
PER/CER to DEQ	<u>To Be Determined</u>
Plans & Specifications to DEQ	<u>To Be Determined</u>
Commence construction	<u>To Be Determined</u>
Complete construction	<u>To Be Determined</u>
CTO Request to DEQ (POTWs only)	<u>To Be Determined</u>

4. Additional Information (insert below if applicable).

NITROGEN FACILITY SUMMARY

Hopewell Water Renewal
 UPPER JAMES Trading Basin



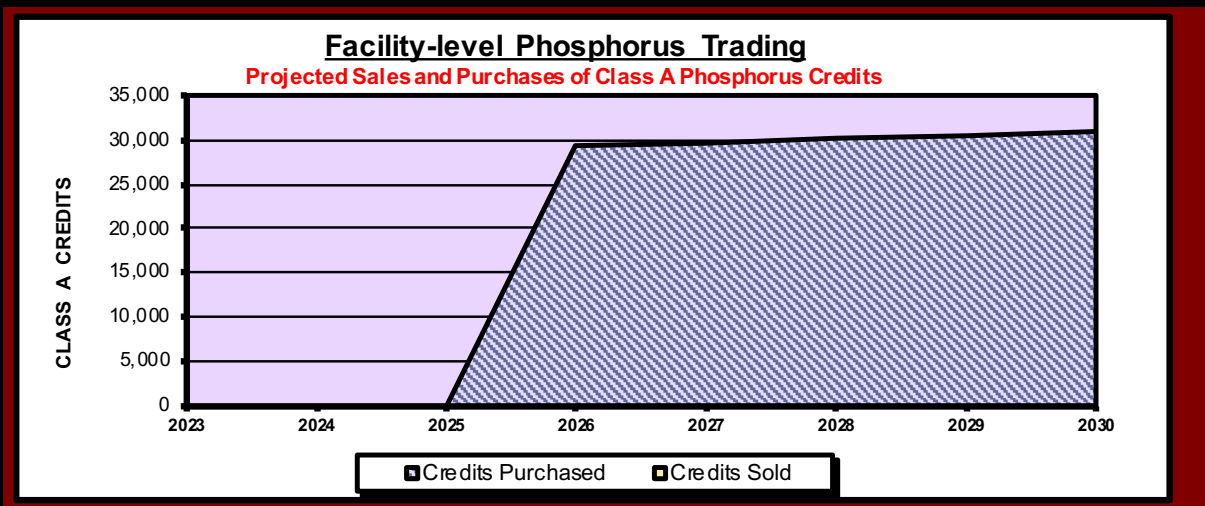
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Projected Flow (mgd)	27.60	27.80	27.80	28.00	28.20	28.40	28.60	28.80
Projected Avg. Annual Concentration (mg/L)	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Discharged Load (end of pipe)	1,260,862	1,269,999	1,269,999	1,279,135	1,288,272	1,297,409	1,306,545	1,315,682
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	1,260,862	1,269,999	1,269,999	1,279,135	1,288,272	1,297,409	1,306,545	1,315,682
Delivered WLA	1,827,336	1,827,336	1,827,336	1,827,336	1,827,336	1,827,336	1,827,336	1,827,336
Expected Credits (delivered)	566,474	557,337	557,337	548,201	539,064	529,927	520,791	511,654
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	566,474	557,337	557,337	548,201	539,064	529,927	520,791	511,654
Class A Credit Sales (Purchases)	0	278,669	278,669	274,101	269,532	264,964	260,398	255,827
Expected Class B Credits	566,474	278,668	278,668	274,100	269,532	264,963	260,393	255,827

PHOSPHORUS FACILITY SUMMARY

Hopewell Water Renewal
 UPPER JAMES Trading Basin



Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Projected Flow (mgd)	27.60	27.80	27.80	28.00	28.20	28.40	28.60	28.80
Projected Avg. Annual Concentration (mg/L)	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Discharged Load (end of pipe)	58,840	59,267	59,267	59,693	60,119	60,546	60,972	61,398
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	58,840	59,267	59,267	59,693	60,119	60,546	60,972	61,398
Delivered WLA	61,749	61,749	61,749	30,459	30,459	30,459	30,459	30,459
Expected Credits (delivered)	2,909	2,482	2,482	(29,234)	(29,660)	(30,087)	(30,513)	(30,939)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	2,909	2,482	2,482	(29,234)	(29,660)	(30,087)	(30,513)	(30,939)
Class A Credit Sales (Purchases)	0	0	0	(29,234)	(29,660)	(30,087)	(30,513)	(30,939)
Expected Class B Credits	2,909	2,482	2,482	0	0	0	0	0

FACILITY (OR OWNER BUBBLE) NAME: Hopewell Water Renewal

COMPLIANCE SCHEDULE STATEMENT FOR FACILITIES SUBJECT TO REDUCED WASTELOAD ALLOCATIONS

Basin/Nutrient(s): James River /Phosphorus

**Compliance Information Required by 9 VAC 25-820-40 and -820 Part I, C.
(Check Option 1 or Option 2)**

Option 1: Permittee hereby requests WLA to be effective as of January 1, 2023.

Option 2: Additional capital project(s) is needed to ensure continued compliance with the WLA through the applicable compliance schedule deadline. (Note: Checking Option 2 does not preclude use of credit purchase as means of compliance.) If Option 2 is checked, briefly describe need for additional projects:

A major capital project to remove phosphorus would be necessary to comply with the facility's reduced phosphorus WLA. This project is projected to cost \$60-80M. (As described below, the City intends to comply by purchasing phosphorus credits from the Exchange or through a private agreement with another discharger.)

Implementation Schedule

1. Does permittee anticipate using credit purchase to comply?
 NO YES

2. Is permittee implementing a capital project to comply?
 NO YES
(If YES, compliance is required as soon as possible but no later than for Compliance Year 2026.)

3. Capital Project Milestone Schedule (Specify estimated date for each milestone. (For bubbles, specify facility name(s) and list multiple facility schedules if applicable.)

Engineer selection	N/A
PER/CER to DEQ	N/A
Plans & Specifications to DEQ	N/A
Commence construction	N/A
Complete construction	N/A
CTO Request to DEQ (POTWs only)	N/A

4. Additional Information (insert below if applicable).

Hampton Roads Sanitation District: James River Aggregate

The HRSD James River Aggregate is an aggregate regional allocation that is neither derived from nor limiting upon individual facilities on a facility-specific basis (or their associated design flows and specific removal efficiencies) for the regional system. The HRSD James River Aggregate TN WLA and TP WLA are binding upon HRSD's regional system as a whole. The aggregate WLAs reflect: (1) the original aggregate allocations established by DEQ in 2005; (2) the EPA Chesapeake Bay TMDL Appendix X Stage 1 reductions (including Phases 1 and 2 as defined in the WGP Fact Sheet); (3) the subsequent allocation transfer to G. Robert House, Jr. WTP (9,011 lbs/yr TP); (4) acquisition of allocation by consolidation of the J.H. Miles facility (153,500 lbs/yr TN and 17,437 lbs/yr TP); (5) an offset allocation provided to the Chesapeake Tunnel Joint Venture from 2019 through 2026 (100 lbs/yr TN and 550 lbs/yr TP); and (6) an offset allocation provided to the Hampton Roads Connector Partnership from 2020 through 2025 (4,000 lbs/yr TN and 2,000 lbs/yr TP). Beginning in 2020, HRSD further reduced its WLA by 100 lbs/yr TN and 10 lbs/yr TP, on a permanent basis, to provide an off-site credit reserve for HRSD's land disturbance projects.

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Aggregate WLA								
Delivered WLA (Bubble)	3,549,300	3,549,300	3,549,300	2,047,866	2,047,966	2,047,966	2,047,966	2,047,966
Projected Delivered Loads	2023	2024	2025	2026	2027	2028	2029	2030
Army Base	140,274	143,196	142,839	127,287	124,381	124,381	124,381	124,381
Boat Harbor	1,305,253	1,323,973	1,300,639	300,362	-	-	-	-
Ches/Eliz*	-	-	-	-	-	-	-	-
James River	361,496	366,075	361,377	160,850	162,511	162,633	162,877	60,058
Lawnes Point	-	-	-	-	-	-	-	-
Nansemond	296,245	292,735	284,378	229,955	393,486	395,801	398,237	400,674
VIP	422,161	419,066	412,100	367,207	336,961	338,057	339,154	340,372
Williamsburg	272,659	272,724	270,597	109,455	105,011	106,107	107,082	108,178
TOTAL Delivered Loads	2,798,088	2,817,769	2,771,930	1,295,116	1,122,350	1,126,979	1,131,731	1,033,663
Net Credits Available	2023	2024	2025	2026	2027	2028	2029	2030
Expected Credits	751,212	731,531	777,370	752,750	925,616	920,987	916,235	1,014,303
Private Exchanges**	(2,678)	(2,678)	(2,678)	(27,717)	(27,717)	(32,592)	(32,592)	(32,592)
Expected Net Credits	748,534	728,853	774,692	725,033	897,899	888,395	883,643	981,711
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	748,534	728,853	774,692	725,033	897,899	888,395	883,643	981,711
WQIF-Held Credits	0	0	0	0	0	0	0	0

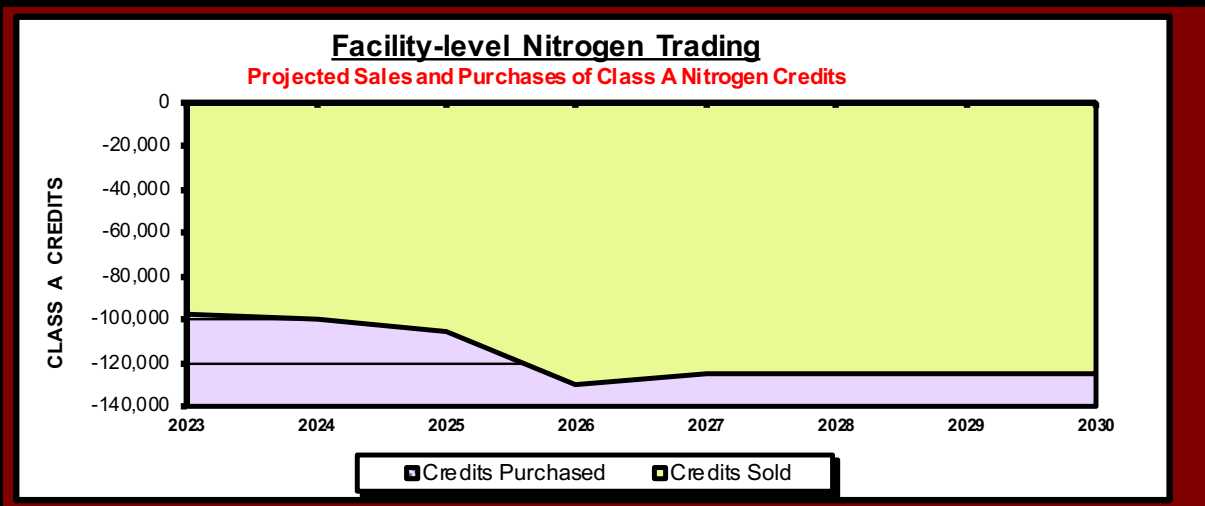
PHOSPHORUS Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Aggregate WLA								
Delivered WLA (Bubble)	315,876	315,876	315,876	244,687	245,237	245,237	245,237	197,872
Projected Delivered Loads	2023	2024	2025	2026	2027	2028	2029	2030
Army Base	24,938	25,457	25,394	25,457	24,876	24,876	24,876	21,767
Boat Harbor	36,007	36,523	35,880	35,864	-	-	-	-
Ches/Eliz*	-	-	-	-	-	-	-	-
James River	32,133	32,540	32,122	32,170	32,502	12,197	12,216	4,504
Lawnes Point	-	-	-	-	-	-	-	-
Nansemond	71,099	70,256	68,251	45,991	78,697	79,160	79,647	60,101
VIP	75,051	74,501	73,262	73,441	67,392	67,611	67,831	59,565
Williamsburg	21,813	21,818	21,648	21,891	21,002	21,221	21,416	18,931
TOTAL Delivered Loads	261,041	261,095	256,557	234,814	224,469	205,065	205,986	164,868
Net Credits Available	2023	2024	2025	2026	2027	2028	2029	2030
Expected Credits	54,835	54,781	59,319	9,873	20,768	40,172	39,251	33,004
Private Exchanges**	(620)	(620)	(620)	(6,826)	(6,826)	(7,962)	(7,962)	(7,962)
Expected Net Credits	54,215	54,161	58,699	3,047	13,942	32,210	31,289	25,042
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	54,215	54,161	58,699	3,047	13,942	32,210	31,289	25,042
WQIF-Held Credits	0	0	0	0	0	0	0	0

* HRSD plans to consolidate the Chesapeake-Elizabeth STP within its regional system by the 2022 calendar year. The TN (454,596 lbs/yr) and TP (41,450 lbs/yr) waste load allocations for this facility are transferred to the Nutrient Offset Fund, effective January 1, 2026.

** Reflects private trade with the Department of Energy - Jefferson Lab and other private trades to offset MS4 requirements

NITROGEN FACILITY SUMMARY

Lynchburg
UPPER JAMES Trading Basin



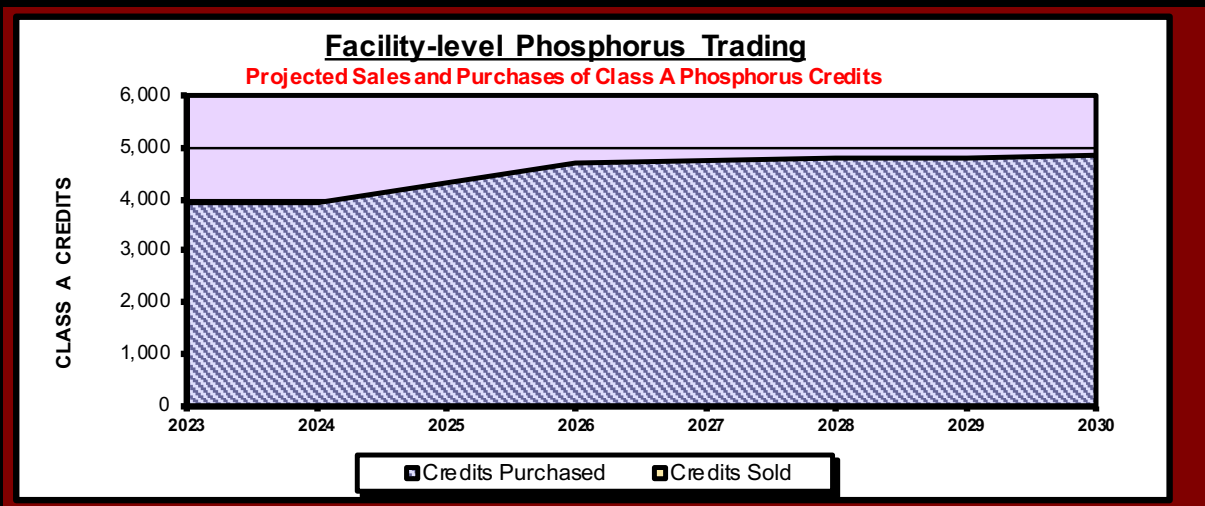
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00
Projected Flow (mgd)	13.94	13.96	13.98	14.34	14.36	14.38	14.40	14.42
Projected Avg. Annual Concentration (mg/L)	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90
Discharged Load (end of pipe)	335,395	335,877	336,358	345,019	345,501	345,982	346,463	346,944
Delivery Factor	0.64	0.64	0.64	0.82	0.82	0.82	0.82	0.82
Expected Load	214,653	214,961	215,269	282,916	283,310	283,705	284,100	284,494
Delivered WLA	343,052	343,052	343,052	439,536	439,536	439,536	439,536	439,536
Expected Credits (delivered)	128,399	128,091	127,783	156,620	156,226	155,831	155,436	155,042
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	128,399	128,091	127,783	156,620	156,226	155,831	155,436	155,042
Class A Credit Sales (Purchases)	97,000	100,000	105,000	130,000	125,000	125,000	125,000	125,000
Expected Class B Credits	31,399	28,091	22,783	26,620	31,226	30,831	30,436	30,042

PHOSPHORUS FACILITY SUMMARY

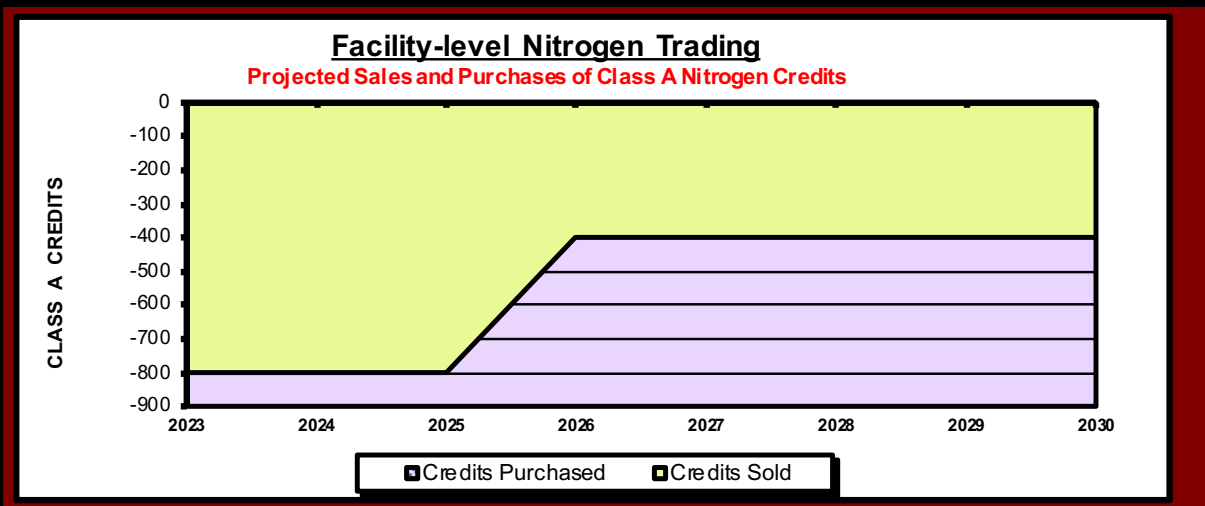
Lynchburg
 UPPER JAMES Trading Basin



Loading & Credit Summary	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00
Projected Flow (mgd)	13.94	13.96	13.98	14.34	14.36	14.38	14.40	14.42
Projected Avg. Annual Concentration (mg/L)	0.77	0.77	0.78	0.75	0.75	0.75	0.75	0.75
Discharged Load (end of pipe)	32,690	32,737	33,210	32,755	32,801	32,846	32,892	32,938
Delivery Factor	0.71	0.71	0.71	0.84	0.84	0.84	0.84	0.84
Expected Load	23,210	23,244	23,579	27,514	27,553	27,591	27,629	27,668
Delivered WLA	19,290	19,290	19,290	22,822	22,822	22,822	22,822	22,822
Expected Credits (delivered)	(3,920)	(3,954)	(4,289)	(4,692)	(4,731)	(4,769)	(4,807)	(4,846)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	(3,920)	(3,954)	(4,289)	(4,692)	(4,731)	(4,769)	(4,807)	(4,846)
Class A Credit Sales (Purchases)	(3,920)	(3,954)	(4,289)	(4,692)	(4,731)	(4,769)	(4,807)	(4,846)
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

MSA-Lexington
 UPPER JAMES Trading Basin



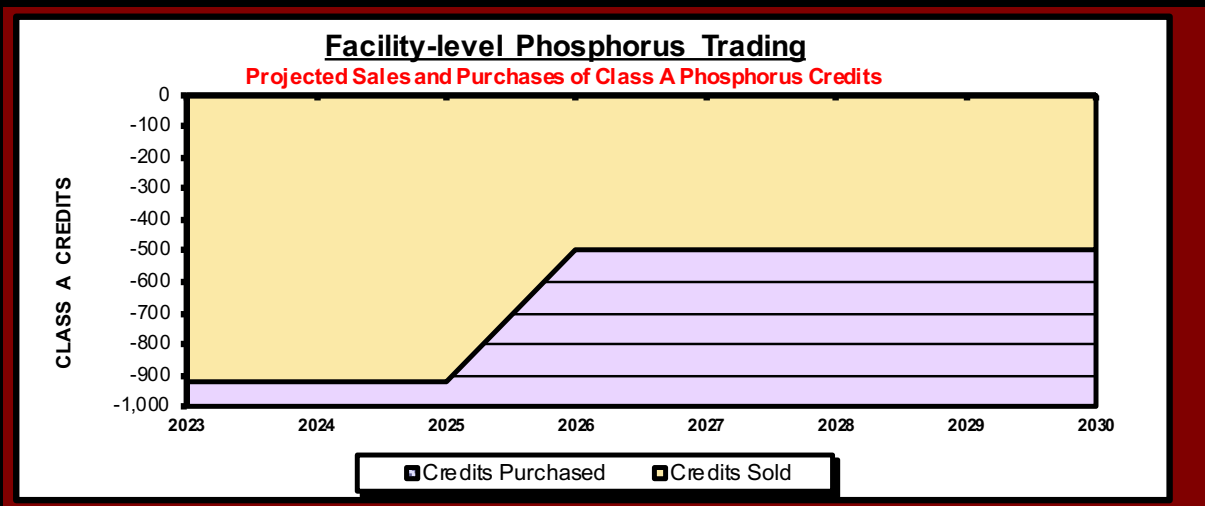
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Projected Flow (mgd)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Projected Avg. Annual Concentration (mg/L)	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Discharged Load (end of pipe)	15,228	15,228	15,228	15,228	15,228	15,228	15,228	15,228
Delivery Factor	0.31	0.31	0.31	0.57	0.57	0.57	0.57	0.57
Expected Load	4,721	4,721	4,721	8,680	8,680	8,680	8,680	8,680
Delivered WLA	16,994	16,994	16,994	31,247	31,247	31,247	31,247	31,247
Expected Credits (delivered)	12,273	12,273	12,273	22,567	22,567	22,567	22,567	22,567
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	12,273	12,273	12,273	22,567	22,567	22,567	22,567	22,567
Class A Credit Sales (Purchases)	800	800	800	400	400	400	400	400
Expected Class B Credits	11,473	11,473	11,473	22,167	22,167	22,167	22,167	22,167

PHOSPHORUS FACILITY SUMMARY

MSA-Lexington
 UPPER JAMES Trading Basin



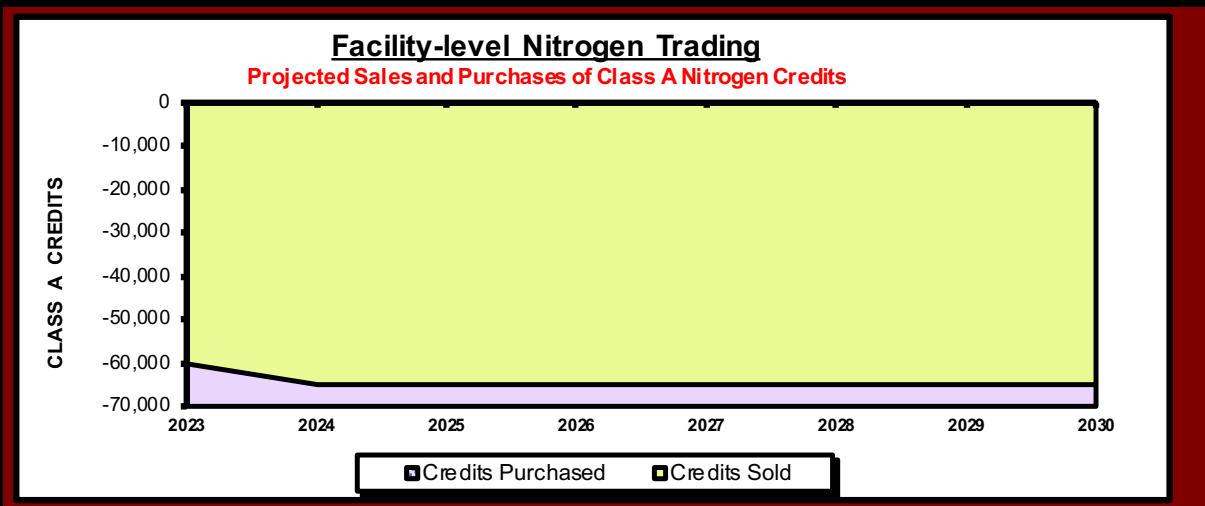
Loading & Credit Summary

Design Flow (mgd)	3.00
Projected Flow (mgd)	1.00
Projected Avg. Annual Concentration (mg/L)	0.30
Discharged Load (end of pipe)	914
Delivery Factor	0.71
Expected Load	649
Delivered WLA	2,631
Expected Credits (delivered)	1,982
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	1,982
Class A Credit Sales (Purchases)	921
Expected Class B Credits	1,061

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Projected Flow (mgd)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Projected Avg. Annual Concentration (mg/L)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	914	914	914	914	914	914	914	914
Delivery Factor	0.71	0.71	0.71	0.83	0.83	0.83	0.83	0.83
Expected Load	649	649	649	758	758	758	758	758
Delivered WLA	2,631	2,631	2,631	3,075	3,075	3,075	3,075	3,075
Expected Credits (delivered)	1,982	1,982	1,982	2,317	2,317	2,317	2,317	2,317
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	1,982	1,982	1,982	2,317	2,317	2,317	2,317	2,317
Class A Credit Sales (Purchases)	921	921	921	500	500	500	500	500
Expected Class B Credits	1,061	1,061	1,061	1,817	1,817	1,817	1,817	1,817

NITROGEN FACILITY SUMMARY

Philip Morris
 UPPER JAMES Trading Basin



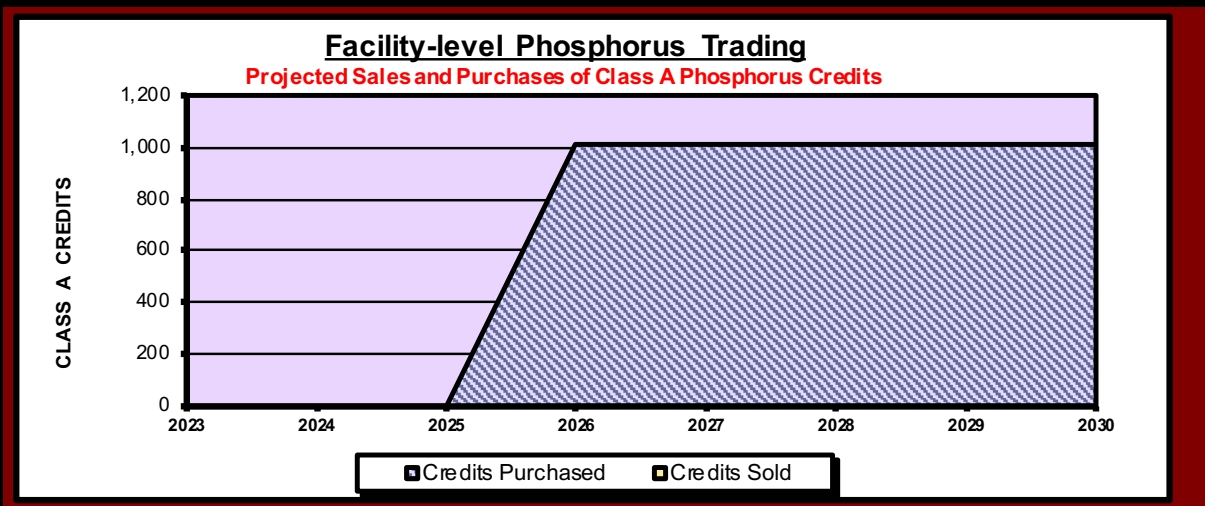
Loading & Credit Summary

Design Flow (mgd)	2.90
Projected Flow (mgd)	1.00
Projected Avg. Annual Concentration (mg/L)	15.00
Discharged Load (end of pipe)	45,683
Delivery Factor	1.00
Expected Load	45,683
Delivered WLA	139,724
Expected Credits (delivered)	94,041
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	94,041
Class A Credit Sales (Purchases)	60,000
Expected Class B Credits	34,041

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90
Projected Flow (mgd)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Projected Avg. Annual Concentration (mg/L)	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Discharged Load (end of pipe)	45,683	45,683	45,683	45,683	45,683	45,683	45,683	45,683
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	45,683	45,683	45,683	45,683	45,683	45,683	45,683	45,683
Delivered WLA	139,724	139,724	139,724	139,724	139,724	139,724	139,724	139,724
Expected Credits (delivered)	94,041	94,041	94,041	94,041	94,041	94,041	94,041	94,041
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	94,041	94,041	94,041	94,041	94,041	94,041	94,041	94,041
Class A Credit Sales (Purchases)	60,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000
Expected Class B Credits	34,041	29,041	29,041	29,041	29,041	29,041	29,041	29,041

PHOSPHORUS FACILITY SUMMARY

Philip Morris
 UPPER JAMES Trading Basin



Loading & Credit Summary

Design Flow (mgd)	2.90
Projected Flow (mgd)	1.00
Projected Avg. Annual Concentration (mg/L)	0.60
Discharged Load (end of pipe)	1,827
Delivery Factor	1.00
Expected Load	1,827
Delivered WLA	2,149
Expected Credits (delivered)	322
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	322
Class A Credit Sales (Purchases)	0
Expected Class B Credits	322

	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90
Projected Flow (mgd)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Projected Avg. Annual Concentration (mg/L)	0.60	0.60	0.60	0.68	0.68	0.68	0.68	0.68
Discharged Load (end of pipe)	1,827	1,827	1,827	2,071	2,071	2,071	2,071	2,071
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	1,827	1,827	1,827	2,071	2,071	2,071	2,071	2,071
Delivered WLA	2,149	2,149	2,149	1,060	1,060	1,060	1,060	1,060
Expected Credits (delivered)	322	322	322	(1,011)	(1,011)	(1,011)	(1,011)	(1,011)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	322	322	322	(1,011)	(1,011)	(1,011)	(1,011)	(1,011)
Class A Credit Sales (Purchases)	0	0	0	(1,011)	(1,011)	(1,011)	(1,011)	(1,011)
Expected Class B Credits	322	322	322	0	0	0	0	0

FACILITY (OR OWNER BUBBLE) NAME: Philip Morris – Park 500

COMPLIANCE SCHEDULE STATEMENT FOR FACILITIES SUBJECT TO REDUCED WASTELOAD ALLOCATIONS

Basin/Nutrient(s): James River / Total Phosphorus

**Compliance Information Required by 9 VAC 25-820-40 and -820 Part I, C.
(Check Option 1 or Option 2)**

Option 1: Permittee hereby requests WLA to be effective as of January 1, 2023.

Option 2: Additional capital project(s) is needed to ensure continued compliance with the WLA through the applicable compliance schedule deadline. (Note: Checking Option 2 does not preclude use of credit purchase as means of compliance.) If Option 2 is checked, briefly describe need for additional projects:

Evaluation to determine equipment and operational changes needed to ensure reliable compliance with reduced phosphorus WLA under all operating conditions. As required, purchase and implement chemical feed equipment and sludge handling equipment.

Implementation Schedule

1. Does permittee anticipate using credit purchase to comply?
 NO YES

2. Is permittee implementing a capital project to comply?
 NO YES
(If YES, compliance is required as soon as possible but no later than for Compliance Year 2026.)

3. Capital Project Milestone Schedule (Specify estimated date for each milestone. (For bubbles, specify facility name(s) and list multiple facility schedules if applicable.)

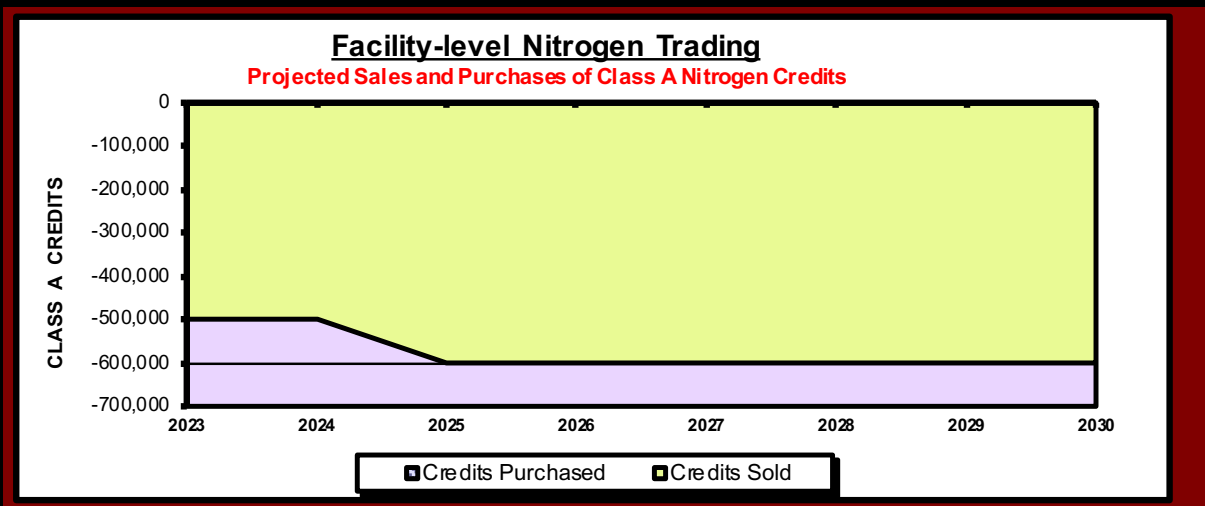
Engineer selection	_____
PER/CER to DEQ	_____
Plans & Specifications to DEQ	_____
Commence construction	_____
Complete construction	_____
CTO Request to DEQ (POTWs only)	_____

4. Additional Information (insert below if applicable).

NITROGEN FACILITY SUMMARY

Richmond

UPPER JAMES Trading Basin



Loading & Credit Summary	
Design Flow (mgd)	45.00
Projected Flow (mgd)	45.00
Projected Avg. Annual Concentration (mg/L)	4.00
Discharged Load (end of pipe)	548,201
Delivery Factor	1.00
Expected Load	548,201
Delivered WLA*	1,093,652
Expected Credits (delivered)	545,451
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange**	(5)
WQIF-Held Credits	0
Expected Net Credits	545,451
Class A Credit Sales (Purchases)	500,000
Expected Class B Credits	45,451

	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00
Projected Flow (mgd)	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00
Projected Avg. Annual Concentration (mg/L)	4.00	3.75	3.50	3.00	3.00	3.00	3.00	3.00
Discharged Load (end of pipe)	548,201	513,938	479,676	411,151	411,151	411,151	411,151	411,151
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	548,201	513,938	479,676	411,151	411,151	411,151	411,151	411,151
Delivered WLA*	1,093,652	1,093,652	1,093,652	1,093,652	1,093,652	1,093,652	1,093,652	1,093,652
Expected Credits (delivered)	545,451	579,714	613,976	682,501	682,501	682,501	682,501	682,501
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange**	0	(5)	(5)	(5)	(5)	(5)	(5)	(5)
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	545,451	579,709	613,971	682,496	682,496	682,496	682,496	682,496
Class A Credit Sales (Purchases)	500,000	500,000	600,000	600,000	600,000	600,000	600,000	600,000
Expected Class B Credits	45,451	79,709	13,971	82,496	82,496	82,496	82,496	82,496

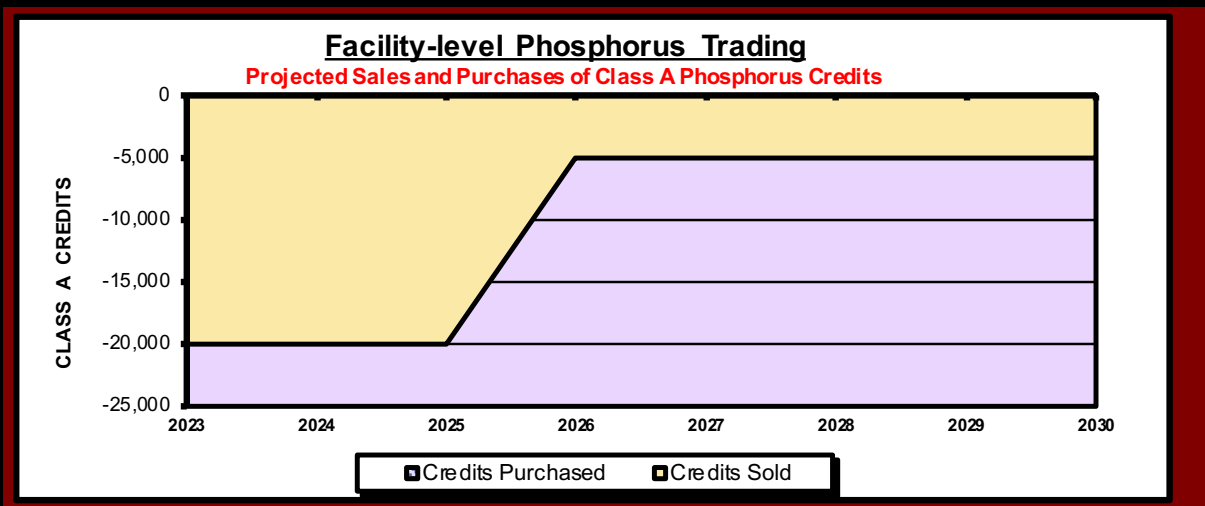
* Reflects allocation transfer to the Oilville WWTP of 2,750 delivered pounds of TN based on agreement with Goochland County

** Represents Credits used to meet City of Richmond stormwater requirements

PHOSPHORUS FACILITY SUMMARY

Richmond

UPPER JAMES Trading Basin



Loading & Credit Summary	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00
Projected Flow (mgd)	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00
Projected Avg. Annual Concentration (mg/L)	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Discharged Load (end of pipe)	20,558	20,558	20,558	20,558	20,558	20,558	20,558	20,558
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	20,558	20,558	20,558	20,558	20,558	20,558	20,558	20,558
Delivered WLA*	55,299	55,299	55,299	27,413	27,413	27,413	27,413	27,413
Expected Credits (delivered)	34,741	34,741	34,741	6,855	6,855	6,855	6,855	6,855
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange**	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	34,741	34,740	34,740	6,854	6,854	6,854	6,854	6,854
Class A Credit Sales (Purchases)	20,000	20,000	20,000	5,000	5,000	5,000	5,000	5,000
Expected Class B Credits	14,741	14,740	14,740	1,854	1,854	1,854	1,854	1,854

* Reflects allocation transfer to the Oilville WWTP of 275 delivered pounds of TP based on agreement with Goochland County

** Represents Credits used to meet City of Richmond stormwater requirements

FACILITY (OR OWNER BUBBLE) NAME: City of Richmond WWTP

COMPLIANCE SCHEDULE STATEMENT FOR FACILITIES SUBJECT TO REDUCED WASTELOAD ALLOCATIONS

Basin/Nutrient(s): James River/Phosphorus

**Compliance Information Required by 9 VAC 25-820-40 and -820 Part I, C.
(Check Option 1 or Option 2)**

_____ Option 1: Permittee hereby requests WLA to be effective as of January 1, 2023.

X Option 2: Additional capital project(s) is needed to ensure continued compliance with the WLA through the applicable compliance schedule deadline. (Note: Checking Option 2 does not preclude use of credit purchase as means of compliance.) If Option 2 is checked, briefly describe need for additional projects:
To reliably meet reduced phosphorus WLA, facility improvements are expected to include installation of automatic feed pumps and nutrient analyzers.

Implementation Schedule

1. Does permittee anticipate using credit purchase to comply?
_____ X _____ NO _____ YES

2. Is permittee implementing a capital project to comply?
_____ NO _____ X _____ YES
(If YES, compliance is required as soon as possible but no later than for Compliance Year 2026.)

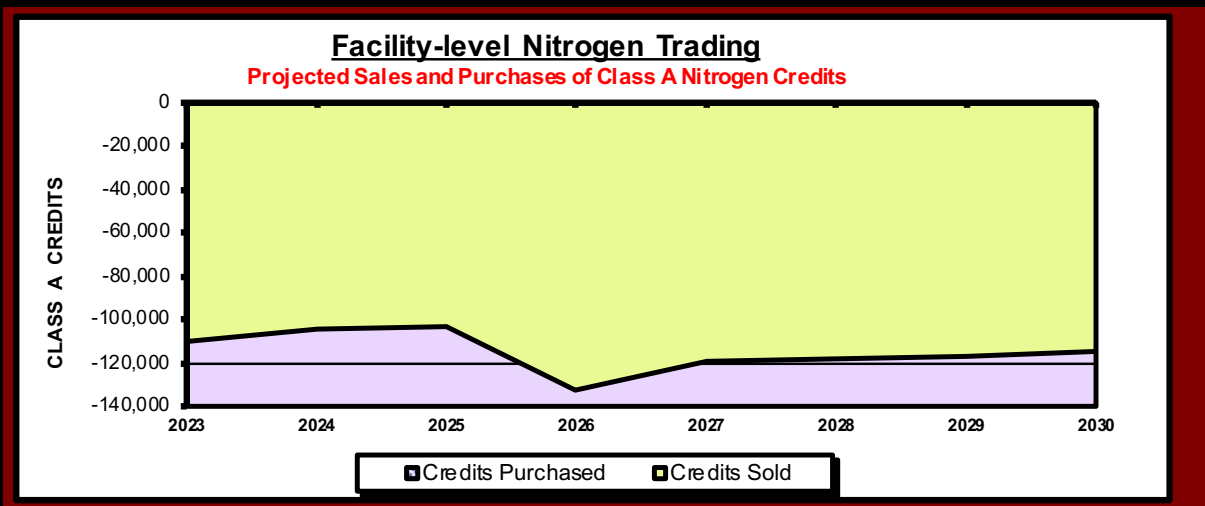
3. Capital Project Milestone Schedule (Specify estimated date for each milestone. (For bubbles, specify facility name(s) and list multiple facility schedules if applicable.)

Engineer selection	<u>10/1/2023</u>
PER/CER to DEQ	<u>4/1/2024</u>
Plans & Specifications to DEQ	<u>10/1/2024</u>
Commence construction	<u>4/1/2025</u>
Complete construction	<u>10/1/2025</u>
CTO Request to DEQ (POTWs only)	<u>11/1/2025</u>

4. Additional Information (insert below if applicable).

NITROGEN FACILITY SUMMARY

RWSA-Moores Creek
 UPPER JAMES Trading Basin



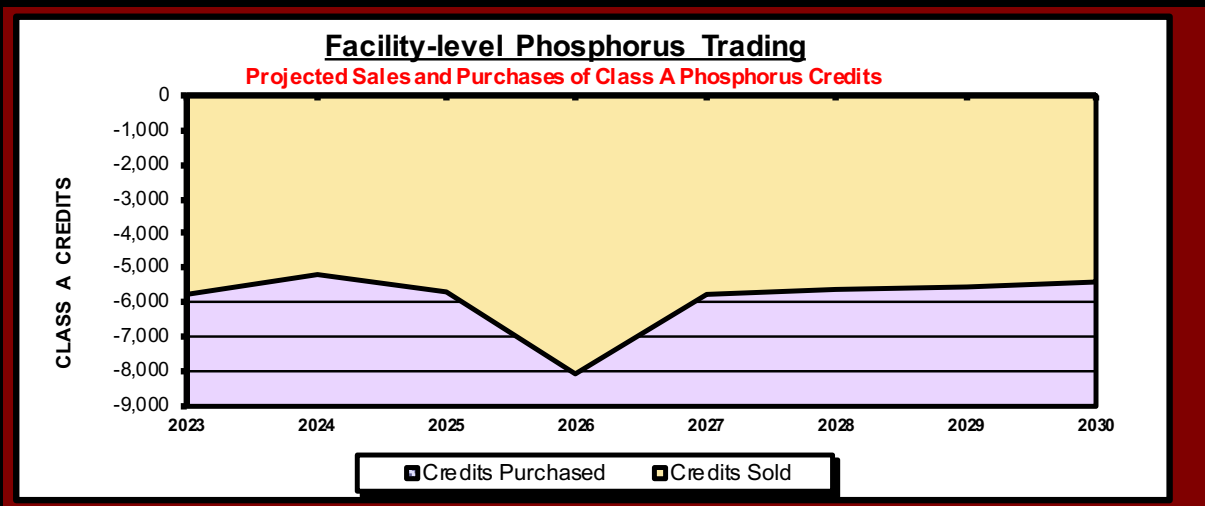
Loading & Credit Summary	
Design Flow (mgd)	15.00
Projected Flow (mgd)	11.30
Projected Avg. Annual Concentration (mg/L)	3.20
Discharged Load (end of pipe)	110,127
Delivery Factor	0.64
Expected Load	70,482
Delivered WLA*	181,116
Expected Credits (delivered)	110,634
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	110,634
Class A Credit Sales (Purchases)	110,470
Expected Class B Credits	164

	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Projected Flow (mgd)	11.30	12.20	11.46	10.40	11.96	12.14	12.32	12.52
Projected Avg. Annual Concentration (mg/L)	3.20	3.20	3.50	3.50	3.50	3.50	3.50	3.50
Discharged Load (end of pipe)	110,127	118,899	122,157	110,858	127,487	129,406	131,325	133,456
Delivery Factor	0.64	0.64	0.64	0.77	0.77	0.77	0.77	0.77
Expected Load	70,482	76,095	78,181	85,361	98,165	99,643	101,120	102,761
Delivered WLA*	181,116	181,116	181,116	217,905	217,905	217,905	217,905	217,905
Expected Credits (delivered)	110,634	105,021	102,935	132,544	119,740	118,262	116,785	115,144
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	110,634	105,021	102,935	132,544	119,740	118,262	116,785	115,144
Class A Credit Sales (Purchases)	110,470	104,858	102,935	132,544	119,740	118,262	116,785	115,144
Expected Class B Credits	164	163	0	0	0	0	0	0

* Wasteload allocation reflects the consolidation of the Camelot WWTP

PHOSPHORUS FACILITY SUMMARY

RWSA-Moores Creek
 UPPER JAMES Trading Basin



Loading & Credit Summary	
Design Flow (mgd)	15.00
Projected Flow (mgd)	11.30
Projected Avg. Annual Concentration (mg/L)	0.30
Discharged Load (end of pipe)	10,324
Delivery Factor	0.71
Expected Load	7,330
Delivered WLA*	13,153
Expected Credits (delivered)	5,823
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	5,823
Class A Credit Sales (Purchases)	5,763
Expected Class B Credits	60

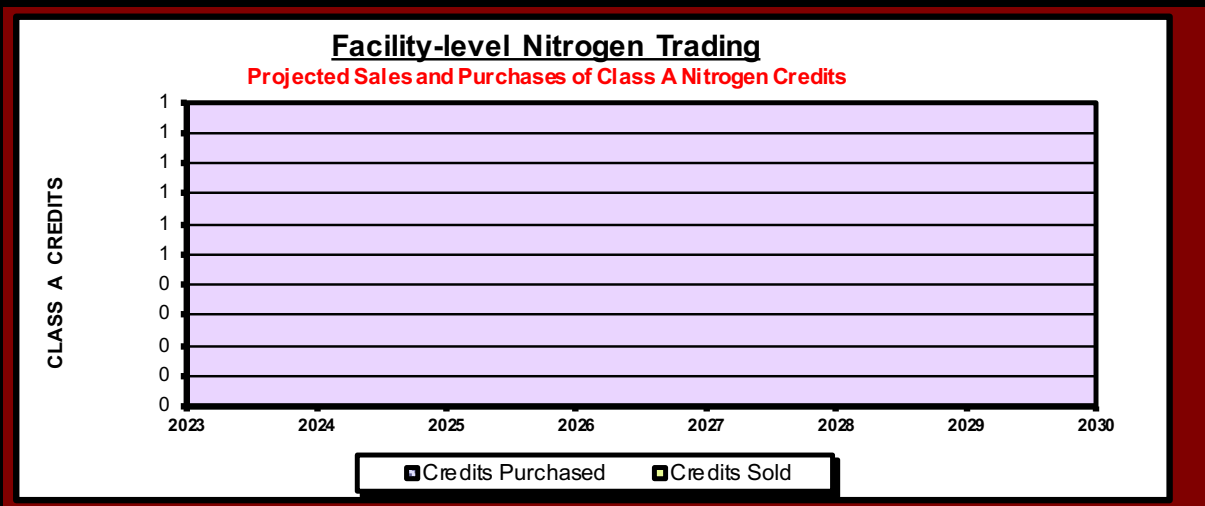
	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Projected Flow (mgd)	11.30	12.20	11.46	10.40	11.96	12.14	12.32	12.52
Projected Avg. Annual Concentration (mg/L)	0.30	0.30	0.30	0.25	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	10,324	11,147	10,471	7,918	10,927	11,092	11,256	11,439
Delivery Factor	0.71	0.71	0.71	0.76	0.76	0.76	0.76	0.76
Expected Load	7,330	7,914	7,434	6,018	8,305	8,430	8,555	8,694
Delivered WLA*	13,153	13,153	13,153	14,079	14,079	14,079	14,079	14,079
Expected Credits (delivered)	5,823	5,239	5,719	8,061	5,774	5,649	5,524	5,385
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	5,823	5,239	5,719	8,061	5,774	5,649	5,524	5,385
Class A Credit Sales (Purchases)	5,763	5,180	5,719	8,061	5,774	5,649	5,524	5,385
Expected Class B Credits	60	59	0	0	0	0	0	0

* Wasteload allocation reflects the consolidation of the Camelot WWTP

NITROGEN FACILITY SUMMARY

South Central WWA

UPPER JAMES Trading Basin

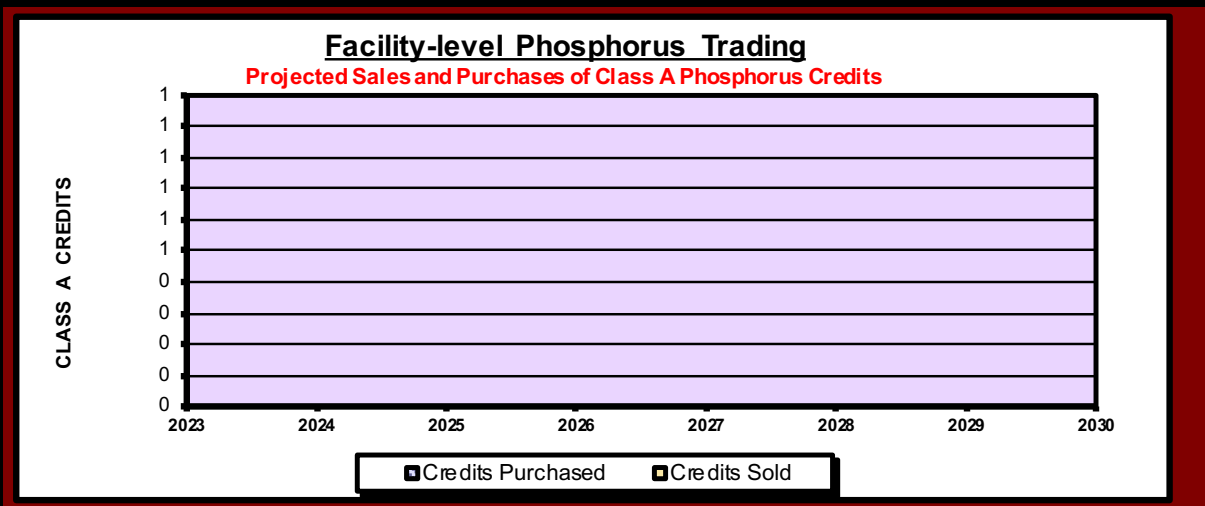


Loading & Credit Summary	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00
Projected Flow (mgd)	12.98	13.03	13.08	13.13	13.18	13.23	13.28	13.34
Projected Avg. Annual Concentration (mg/L)	10.13	10.09	10.05	4.00	4.00	4.00	4.00	4.00
Discharged Load (end of pipe)	400,189	400,220	400,238	159,969	160,593	161,216	161,840	162,463
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	400,189	400,220	400,238	159,969	160,593	161,216	161,840	162,463
Delivered WLA	350,239	350,239	350,239	350,239	350,239	350,239	350,239	350,239
Expected Credits (delivered)	(49,950)	(49,981)	(49,999)	190,270	189,646	189,023	188,399	187,776
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange*	50,000	50,000	50,000	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	50	19	1	190,270	189,646	189,023	188,399	187,776
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	50	19	1	190,270	189,646	189,023	188,399	187,776

* Represents Credits provided by Chesterfield County's Proctors Creek facility via Private Exchange

PHOSPHORUS FACILITY SUMMARY

South Central WWA
 UPPER JAMES Trading Basin



Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00
12.98	13.03	13.08	13.13	13.18	13.23	13.28	13.34	
0.60	0.60	0.60	0.30	0.30	0.30	0.30	0.30	0.30
23,715	23,808	23,902	11,998	12,044	12,091	12,138	12,185	
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
23,715	23,808	23,902	11,998	12,044	12,091	12,138	12,185	
28,404	28,404	28,404	14,011	14,011	14,011	14,011	14,011	14,011
4,689	4,596	4,502	2,013	1,967	1,920	1,873	1,826	
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
4,689	4,596	4,502	2,013	1,967	1,920	1,873	1,826	
0	0	0	0	0	0	0	0	0
4,689	4,596	4,502	2,013	1,967	1,920	1,873	1,826	

FACILITY (OR OWNER BUBBLE) NAME: South Central Wastewater Authority

COMPLIANCE SCHEDULE STATEMENT FOR FACILITIES SUBJECT TO REDUCED WASTELOAD ALLOCATIONS

Basin/Nutrient(s): Upper James / Total Phosphorus (TP)

**Compliance Information Required by 9 VAC 25-820-40 and -820 Part I, C.
(Check Option 1 or Option 2)**

Option 1: Permittee hereby requests WLA to be effective as of January 1, 2023.

Option 2: Additional capital project(s) is needed to ensure continued compliance with the WLA through the applicable compliance schedule deadline. (Note: Checking Option 2 does not preclude use of credit purchase as means of compliance.) If Option 2 is checked, briefly describe need for additional projects:
SCWWA facility is not capable of achieving 0.2 /mg/L TP. SCWWA is currently pursuing a multi-year Nutrient Reduction Project to reduce effluent levels to 4 mg/L TN and 0.3 mg/L TP. If the SCWWA is required to reduce TP discharge below 0.3 mg/L, additional upgrades would be needed and additional state funding would be required.

Implementation Schedule

1. Does permittee anticipate using credit purchase to comply?
 NO YES
2. Is permittee implementing a capital project to comply?
 NO YES
(If YES, compliance is required as soon as possible but no later than for Compliance Year 2026.)

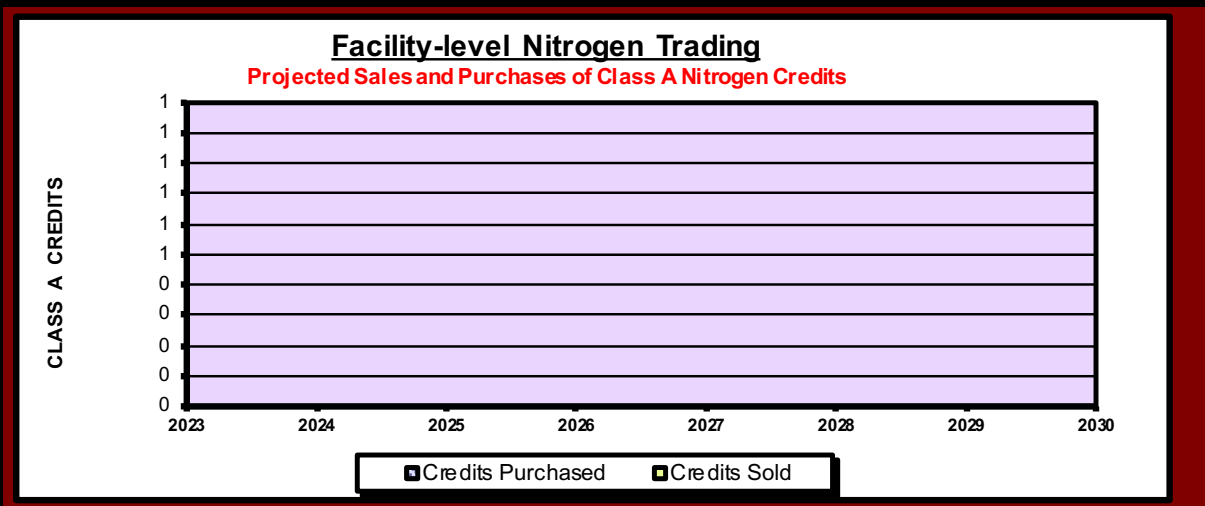
3. Capital Project Milestone Schedule (Specify estimated date for each milestone. (For bubbles, specify facility name(s) and list multiple facility schedules if applicable.)

Engineer selection	<u>2024</u>
PER/CER to DEQ	<u>2024</u>
Plans & Specifications to DEQ	<u>2025</u>
Commence construction	<u>TBD/Various</u>
Complete construction	<u>TBD/Various</u>
CTO Request to DEQ (POTWs only)	<u>TBD/Various</u>

4. Additional Information (insert below if applicable).
Under current VPDES permit and WQIF Grant Agreement, SCWWA is implementing a project to reduce discharge to 4.0 mg/L TN and 0.3 mg/L TP by January 1, 2026. If additional TP reduction is required further facility upgrades will be needed to reliably meet the reduced limit. Additional state funding would also be needed to fund these improvements.

NITROGEN FACILITY SUMMARY

Tyson Foods-Glen Allen
 UPPER JAMES Trading Basin



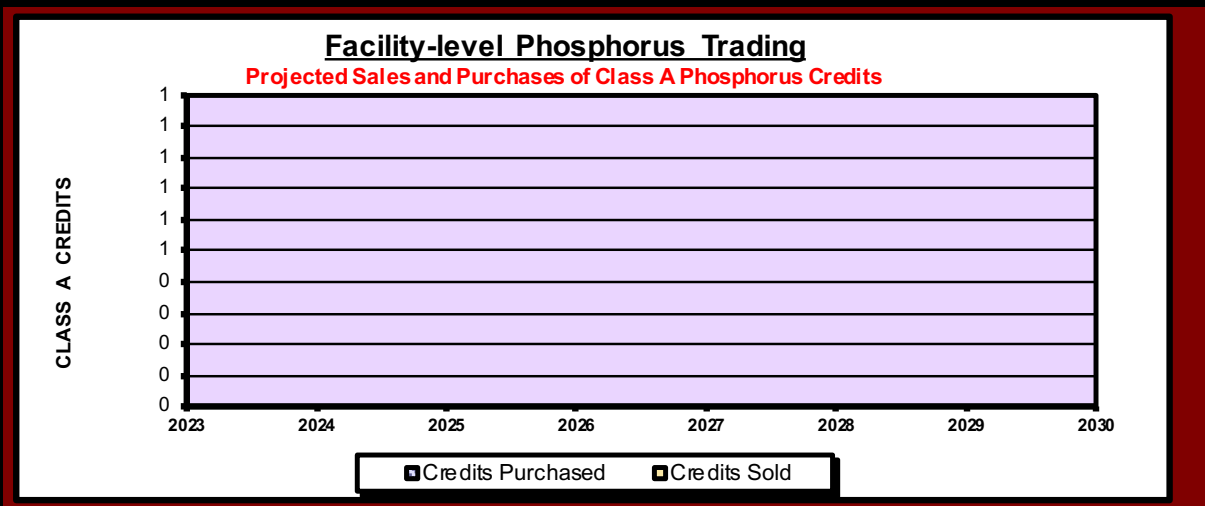
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Projected Flow (mgd)	1.10	1.10	1.10	1.07	1.07	1.07	1.07	1.07
Projected Avg. Annual Concentration (mg/L)	4.30	4.04	5.75	4.07	3.59	3.59	3.59	3.59
Discharged Load (end of pipe)	14,405	13,534	19,263	13,263	11,699	11,699	11,699	11,699
Delivery Factor	0.18	0.18	0.18	0.09	0.09	0.09	0.09	0.09
Expected Load	2,593	2,436	3,467	1,194	1,053	1,053	1,053	1,053
Delivered WLA	3,519	3,519	3,519	1,760	1,760	1,760	1,760	1,760
Expected Credits (delivered)	926	1,083	52	566	707	707	707	707
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	926	1,083	52	566	707	707	707	707
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	926	1,083	52	566	707	707	707	707

PHOSPHORUS FACILITY SUMMARY

Tyson Foods-Glen Allen
 UPPER JAMES Trading Basin



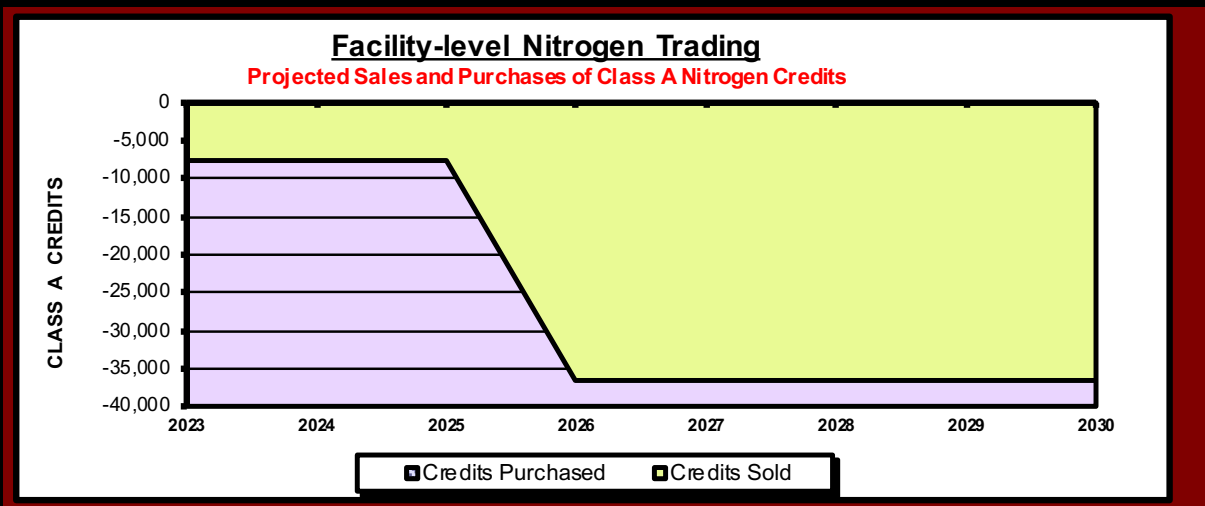
Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Projected Flow (mgd)	1.10	1.10	1.10	1.07	1.07	1.07	1.07	1.07
Projected Avg. Annual Concentration (mg/L)	0.07	0.07	0.05	0.05	0.04	0.04	0.04	0.04
Discharged Load (end of pipe)	235	235	168	163	130	130	130	130
Delivery Factor	0.36	0.36	0.36	0.04	0.04	0.04	0.04	0.04
Expected Load	84	84	60	7	5	5	5	5
Delivered WLA	147	147	147	16	16	16	16	16
Expected Credits (delivered)	63	63	87	9	11	11	11	11
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	63	63	87	9	11	11	11	11
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	63	63	87	9	11	11	11	11

NITROGEN FACILITY SUMMARY

WestRock-Covington
 UPPER JAMES Trading Basin



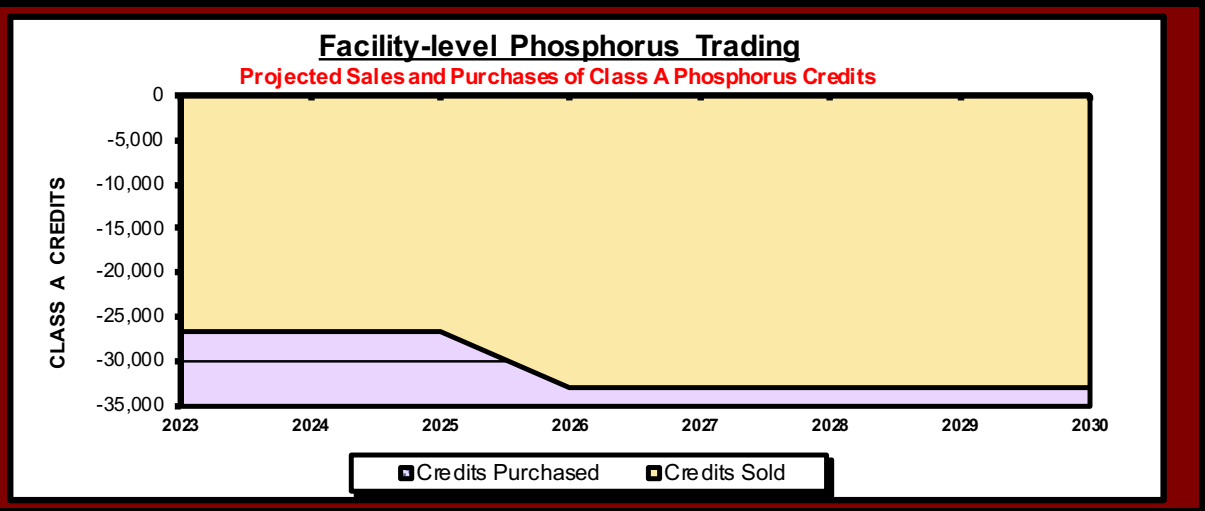
Loading & Credit Summary

Design Flow (mgd)	35.00
Projected Flow (mgd)	32.50
Projected Avg. Annual Concentration (mg/L)	3.30
Discharged Load (end of pipe)	326,636
Delivery Factor	0.11
Expected Load	35,930
Delivered WLA	43,384
Expected Credits (delivered)	7,454
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	7,454
Class A Credit Sales (Purchases)	7,454
Expected Class B Credits	0

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00
Projected Flow (mgd)	32.50	32.50	32.50	32.50	32.50	32.50	32.50	32.50
Projected Avg. Annual Concentration (mg/L)	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30
Discharged Load (end of pipe)	326,636	326,636	326,636	326,636	326,636	326,636	326,636	326,636
Delivery Factor	0.11	0.11	0.11	0.54	0.54	0.54	0.54	0.54
Expected Load	35,930	35,930	35,930	176,384	176,384	176,384	176,384	176,384
Delivered WLA	43,384	43,384	43,384	212,976	212,976	212,976	212,976	212,976
Expected Credits (delivered)	7,454	7,454	7,454	36,592	36,592	36,592	36,592	36,592
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	7,454	7,454	7,454	36,592	36,592	36,592	36,592	36,592
Class A Credit Sales (Purchases)	7,454	7,454	7,454	36,592	36,592	36,592	36,592	36,592
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

WestRock-Covington
 UPPER JAMES Trading Basin



Loading & Credit Summary

Design Flow (mgd)	35.00
Projected Flow (mgd)	32.50
Projected Avg. Annual Concentration (mg/L)	0.60
Discharged Load (end of pipe)	59,388
Delivery Factor	0.71
Expected Load	42,166
Delivered WLA	68,707
Expected Credits (delivered)	26,541
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	26,541
Class A Credit Sales (Purchases)	26,541
Expected Class B Credits	0

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00
Projected Flow (mgd)	32.50	32.50	32.50	32.50	32.50	32.50	32.50	32.50
Projected Avg. Annual Concentration (mg/L)	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Discharged Load (end of pipe)	59,388	59,388	59,388	59,388	59,388	59,388	59,388	59,388
Delivery Factor	0.71	0.71	0.71	0.88	0.88	0.88	0.88	0.88
Expected Load	42,166	42,166	42,166	52,262	52,262	52,262	52,262	52,262
Delivered WLA	68,707	68,707	68,707	85,158	85,158	85,158	85,158	85,158
Expected Credits (delivered)	26,541	26,541	26,541	32,896	32,896	32,896	32,896	32,896
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	26,541	26,541	26,541	32,896	32,896	32,896	32,896	32,896
Class A Credit Sales (Purchases)	26,541	26,541	26,541	32,896	32,896	32,896	32,896	32,896
Expected Class B Credits	0	0	0	0	0	0	0	0

SECTION 6

Eastern Shore Basin Exchange Compliance Plan

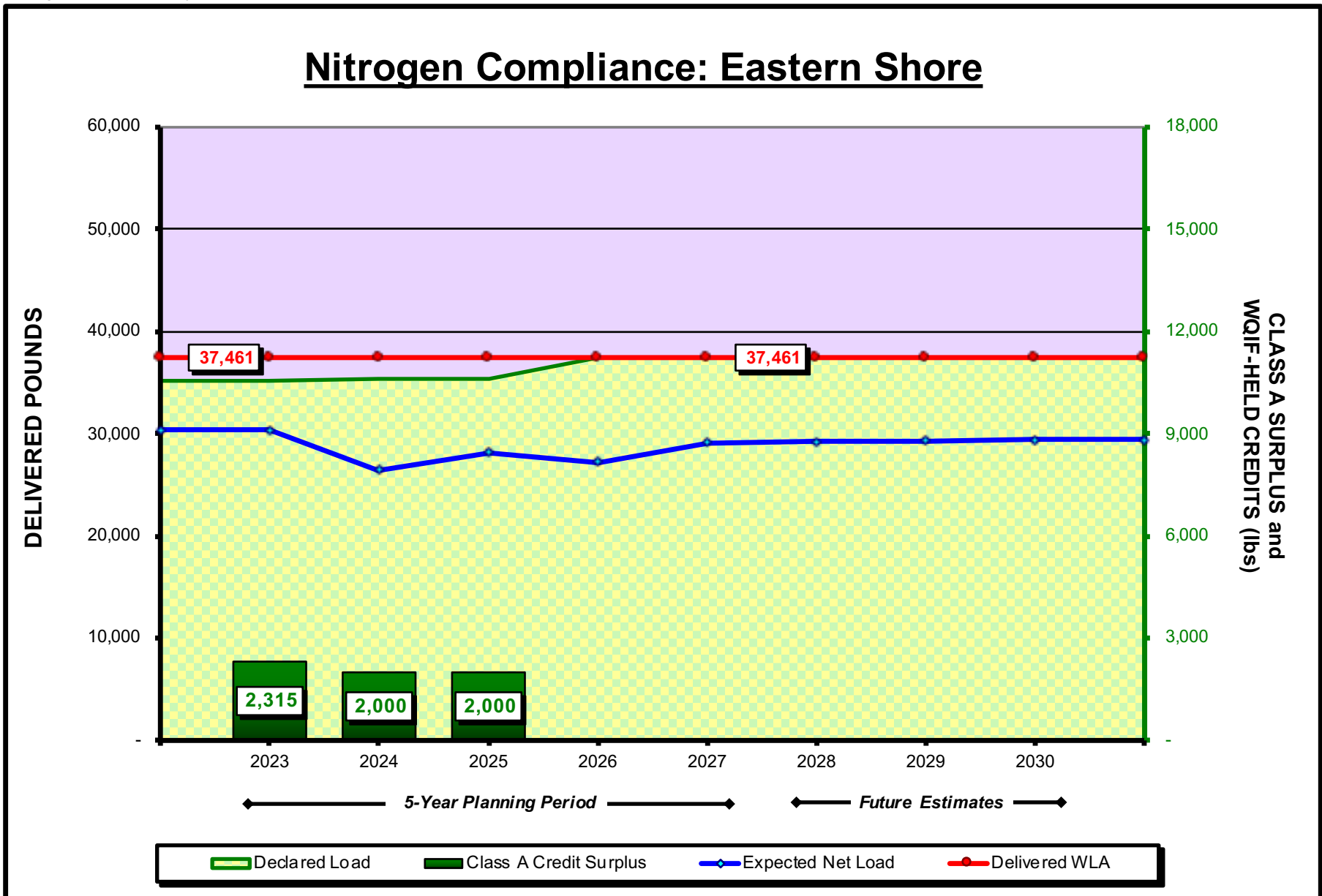


Consistent with similar disclosures made in conjunction with the original Exchange Compliance Plan dated July 31, 2007, and each annual update thereafter, Credit forecasts for the Eastern Shore basin may indicate a potential lack of Credit availability from facilities located within the Eastern Shore basin at various times during the 5-year Planning Period. This situation derives in part from the relatively small number of facilities and total allocations of the Eastern Shore basin.

In 2010, Virginia law governing nutrient allocation compliance and reporting was amended by House Bill 1290 (2010 Acts of Assembly Chapter 11) to amend the general limitation of trading to the tributary level by allowing that “permitted facilities in the Eastern Shore basin may also acquire credits from permitted facilities in the Potomac and Rappahannock tributaries.” Va. Code § 62.1-44.19:18.A.1.

Accordingly, this Annual Update incorporates use of Class A Credits from the Potomac basin – **when necessary** – to meet Eastern Shore Class A Credit purchase requests that cannot be satisfied from Class A Credit sales commitments by facilities in the Eastern Shore basin. This limited cross-basin trading is noted, as applicable, on the Credit ledgers in both this section and the Potomac section. The Nitrogen and Phosphorus compliance charts of the Eastern Shore basin illustrate the impact of Class A Credits provided by the Potomac basin (Declared Load forecast), while the Expected Load line represents the net Expected Credits of Eastern Shore facilities only.

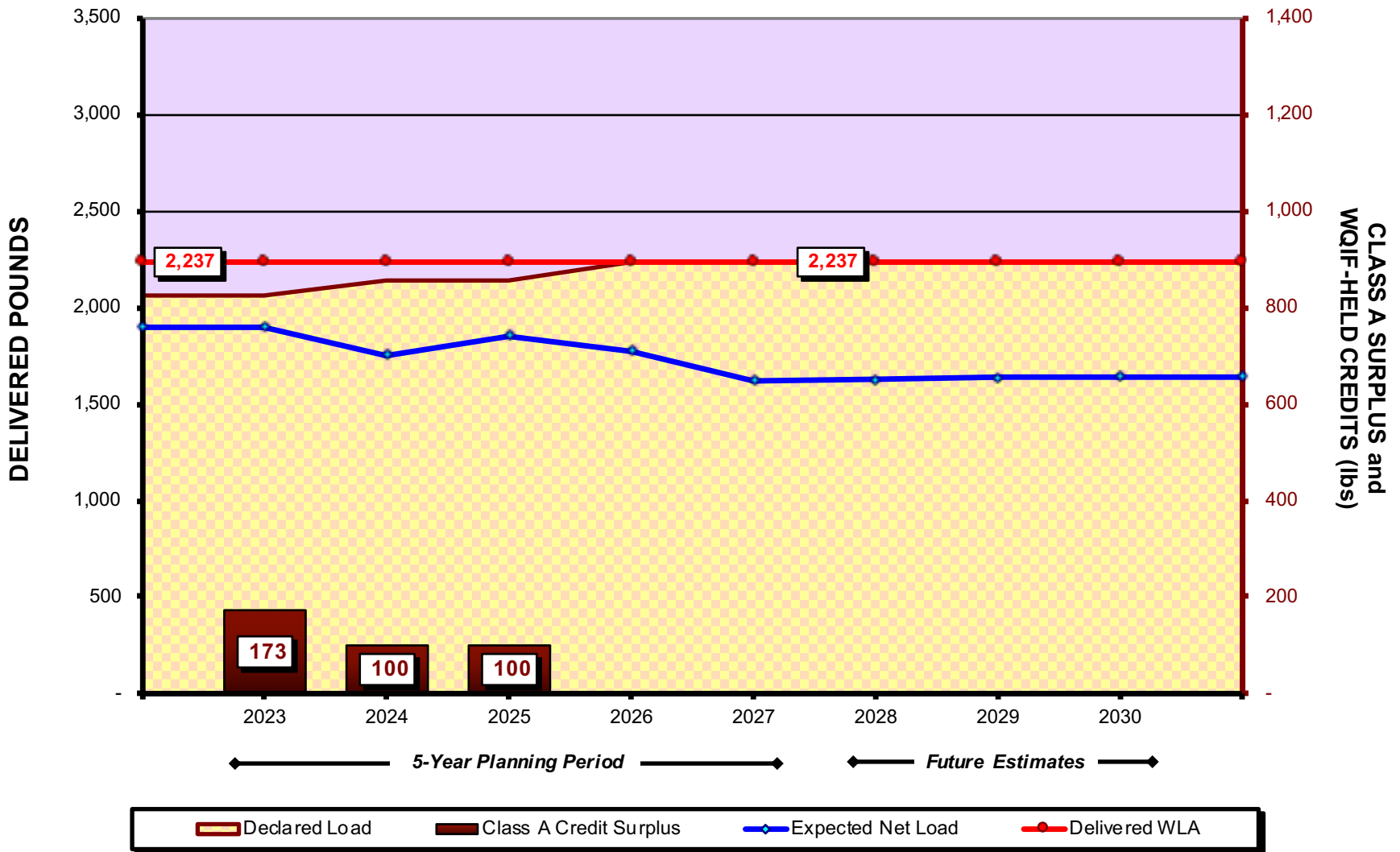
Nitrogen Compliance: Eastern Shore



EASTERN SHORE: Nitrogen Credit Ledger

Compliance Year:											
	2026	Credit Forecasts		Preliminary Use of Credits				Credit Exchange (Pounds)			
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits	PRICE:	Class A Sales	Class A* Purchases	Class B Sales**
The Exchange (group)	37,461	27,227	10,234	-	-	-	10,234	-	-	-	10,234
Cape Charles	3,046	2,558	488	-	-	-	488		-	-	488
HRSD-Nassawadox Riverside	-	-	-	-	-	-	-		-	-	-
HRSD-Onancock	10,355	7,309	3,046	-	-	-	3,046		-	-	3,046
Tangier Island	1,218	1,523	(305)	-	305	-	-		-	-	-
Tyson Foods-Temperanceville	22,842	15,837	7,005	-	(305)	-	6,700		-	-	6,700
Sale from Potomac Basin	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
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	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-	-	-
	-	-	-	-	-	-	-		-		

Phosphorus Compliance: Eastern Shore



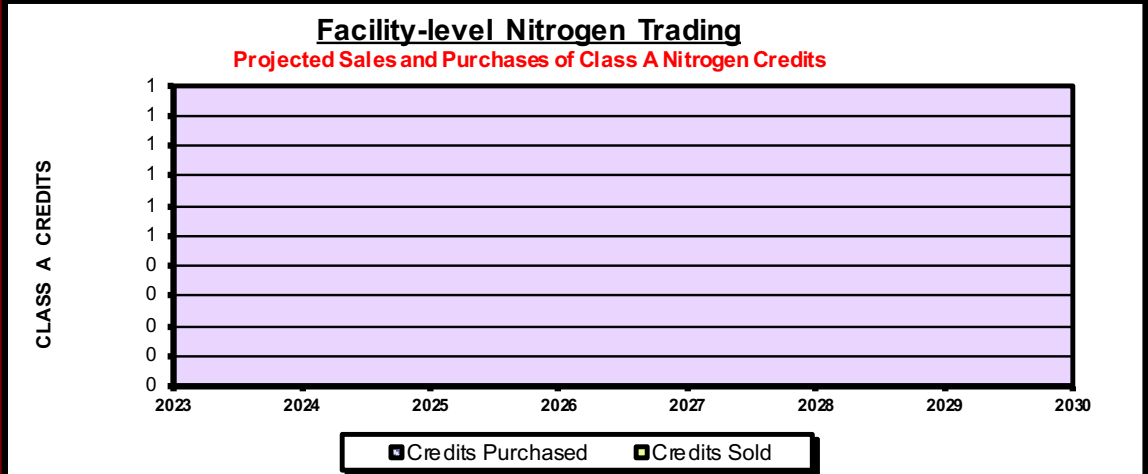
Eastern Shore Basin

Supplemental Information for Individual Facilities



NITROGEN FACILITY SUMMARY

Cape Charles
EASTERN SHORE Trading

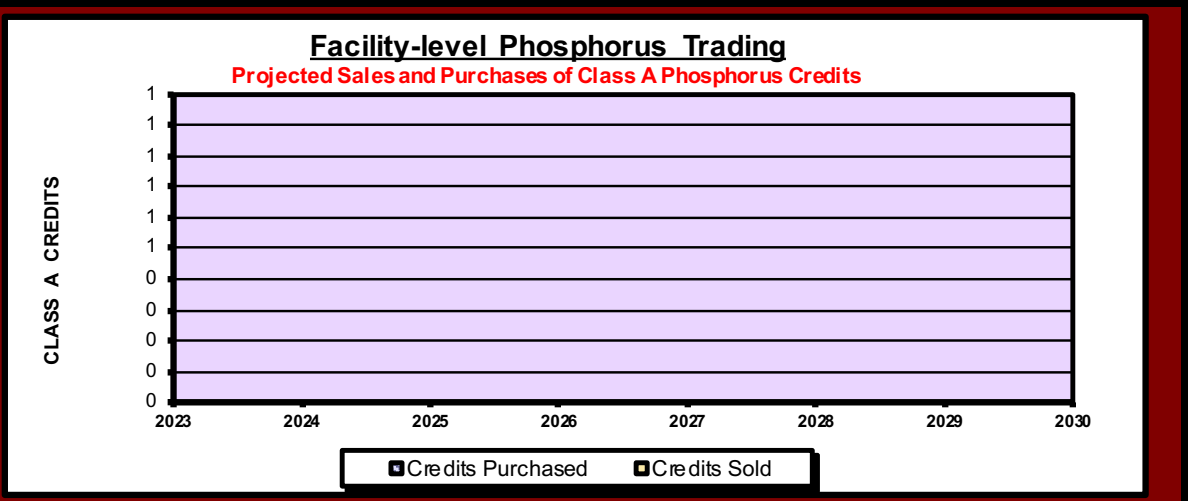


Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Projected Flow (mgd)	0.15	0.15	0.19	0.21	0.25	0.25	0.25	0.25
Projected Avg. Annual Concentration (mg/L)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Discharged Load (end of pipe)	1,827	1,827	2,339	2,558	3,046	3,046	3,046	3,046
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	1,827	1,827	2,339	2,558	3,046	3,046	3,046	3,046
Delivered WLA	3,046	3,046	3,046	3,046	3,046	3,046	3,046	3,046
Expected Credits (delivered)	1,219	1,219	707	488	0	0	0	0
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	1,219	1,219	707	488	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	1,219	1,219	707	488	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Cape Charles
EASTERN SHORE Trading



Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

2023	2024	2025	2026	2027	2028	2029	2030	
<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>			
0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
0.15	0.15	0.19	0.21	0.25	0.25	0.25	0.25	
0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	
137	137	175	192	228	228	228	228	
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
137	137	175	192	228	228	228	228	
228	228	228	228	228	228	228	228	
91	91	53	36	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
91	91	53	36	0	0	0	0	
0	0	0	0	0	0	0	0	
91	91	53	36	0	0	0	0	

Owner Bubble: HRSD (Eastern Shore)

The facilities listed below have received an aggregated mass load limit pursuant to 9 VAC 25-820-70, Part 1.B.2., which is also referred to as an “owner bubble”. Accordingly, compliance is determined solely on an aggregate basis rather than by comparison of individual facility loads with respective individual WLAs.

The “Credit Transferred within Bubble” section of each table forecasts the use of Credits within the owner bubble during each Compliance Year, and must necessarily sum to zero. The specific Credit transfers shown in this table are provided for internal planning purposes only and, accordingly, are not binding and may change based on the actual performance of individual facilities within the bubble.

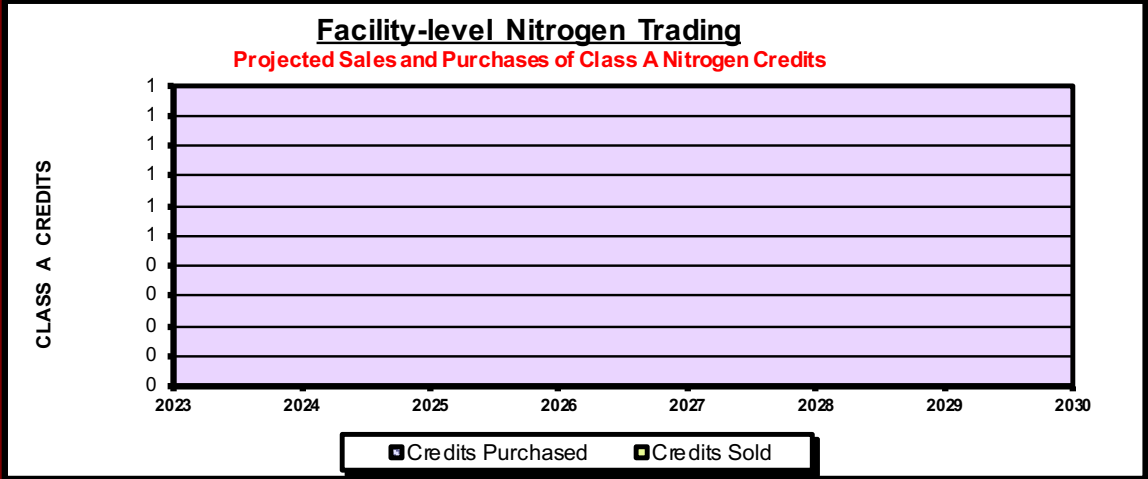
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply with the aggregate Delivered WLA of the bubble.

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
Nassawadox Riverside	-	-	-	-	-	-	-	-
Onancock	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Nassawadox Riverside	83	83	83	-	-	-	-	-
Onancock	2,315	2,315	2,315	3,046	5,599	5,494	5,387	5,276
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	2,398	2,398	2,398	3,046	5,599	5,494	5,387	5,276
Class A Sales (Purchases)	2,315	2,000	2,000	0	0	0	0	0
<i>Expected Class B Credits</i>	83	398	398	3,046	5,599	5,494	5,387	5,276
<i>WQIF-Held Credits</i>	0	0	0	0	0	0	0	0

PHOSPHORUS Credits	Exchange 5-year Planning Period					Future Projections		
	2023	2024	2025	2026	2027	2028	2029	2030
Credits Transferred within Bubble								
Nassawadox Riverside	-	-	-	-	-	-	-	-
Onancock	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Nassawadox Riverside	8	8	8	-	-	-	-	-
Onancock	173	173	173	228	419	411	403	395
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	181	181	181	228	419	411	403	395
Class A Sales (Purchases)	173	100	100	0	0	0	0	0
<i>Expected Class B Credits</i>	8	81	81	228	419	411	403	395
<i>WQIF-Held Credits</i>	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

HRSD-Nassawadox Riverside
EASTERN SHORE Trading



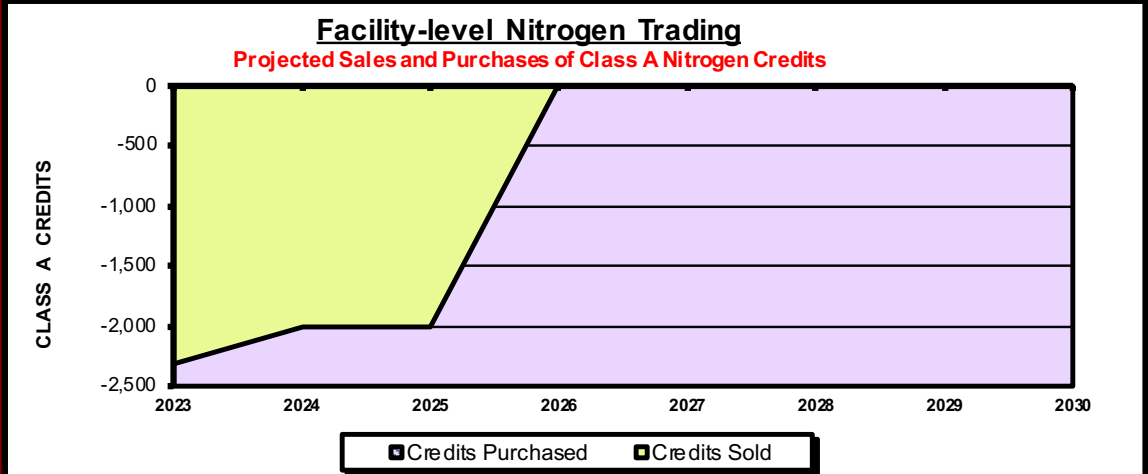
Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Projected Flow (mgd)	0.02	0.02	0.02	-	-	-	-	-
Projected Avg. Annual Concentration (mg/L)	16.20	16.20	16.20	-	-	-	-	-
Discharged Load (end of pipe)	1,135	1,135	1,135	0	0	0	0	0
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	1,135	1,135	1,135	0	0	0	0	0
Delivered WLA*	1,218	1,218	1,218	0	0	0	0	0
Expected Credits (delivered)	83	83	83	0	0	0	0	0
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	83	83	83	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	83	83	83	0	0	0	0	0

* Nassawadox Riverside is consolidated with Onancock prior to 2026. This consolidation includes the anticipated transfer of Nassawadox's TN and TP allocations to Onancock.

NITROGEN FACILITY SUMMARY

HRSD-Onancock
EASTERN SHORE Trading



Loading & Credit Summary

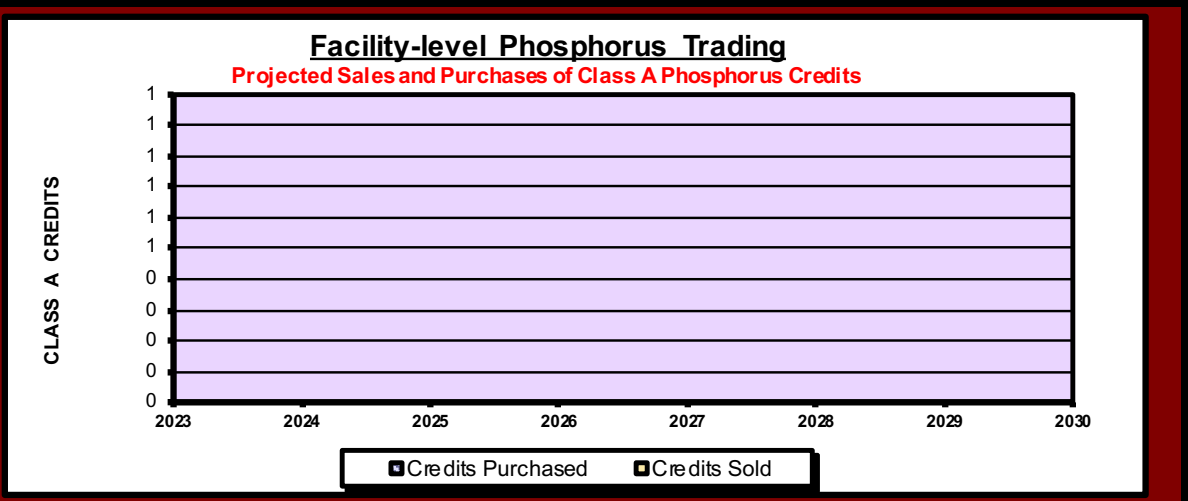
Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA*
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

2023	2024	2025	2026	2027	2028	2029	2030	
Planning Period					Future Estimates (non-binding)			
0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	
0.56	0.56	0.56	0.60	0.39	0.40	0.41	0.42	
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
6,822	6,822	6,822	7,309	4,756	4,861	4,968	5,079	
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
6,822	6,822	6,822	7,309	4,756	4,861	4,968	5,079	
9,137	9,137	9,137	10,355	10,355	10,355	10,355	10,355	
2,315	2,315	2,315	3,046	5,599	5,494	5,387	5,276	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
2,315	2,315	2,315	3,046	5,599	5,494	5,387	5,276	
2,315	2,000	2,000	0	0	0	0	0	
0	315	315	3,046	5,599	5,494	5,387	5,276	

* Nassawadox Riverside is consolidated with Onancock prior to 2026. This consolidation includes the anticipated transfer of Nassawadox's TN and TP allocations to Onancock.

PHOSPHORUS FACILITY SUMMARY

HRSD-Nassawadox Riverside
EASTERN SHORE Trading



Loading & Credit Summary

Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA*
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

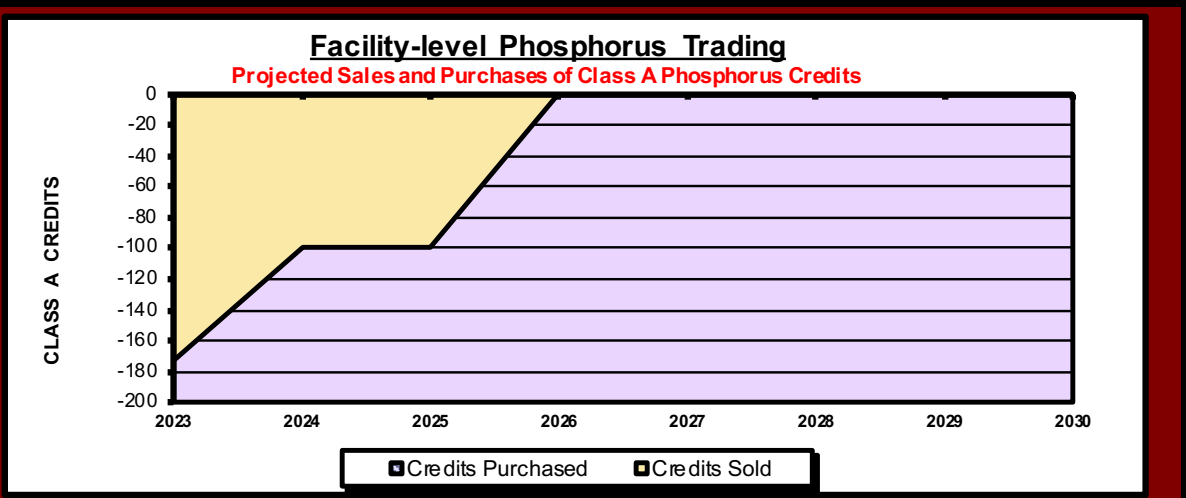
2023	2024	2025	2026	2027	2028	2029	2030
<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
0.02	0.02	0.02	-	-	-	-	-
1.18	1.18	1.18	-	-	-	-	-
83	83	83	0	0	0	0	0
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
83	83	83	0	0	0	0	0
91	91	91	0	0	0	0	0
8	8	8	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
8	8	8	0	0	0	0	0
0	0	0	0	0	0	0	0
8	8	8	0	0	0	0	0

* Nassawadox Riverside is consolidated with Onancock prior to 2026. This consolidation includes the anticipated transfer of Nassawadox's TN and TP allocations to Onancock.

PHOSPHORUS FACILITY SUMMARY

HRSD-Onancock

EASTERN SHORE Trading



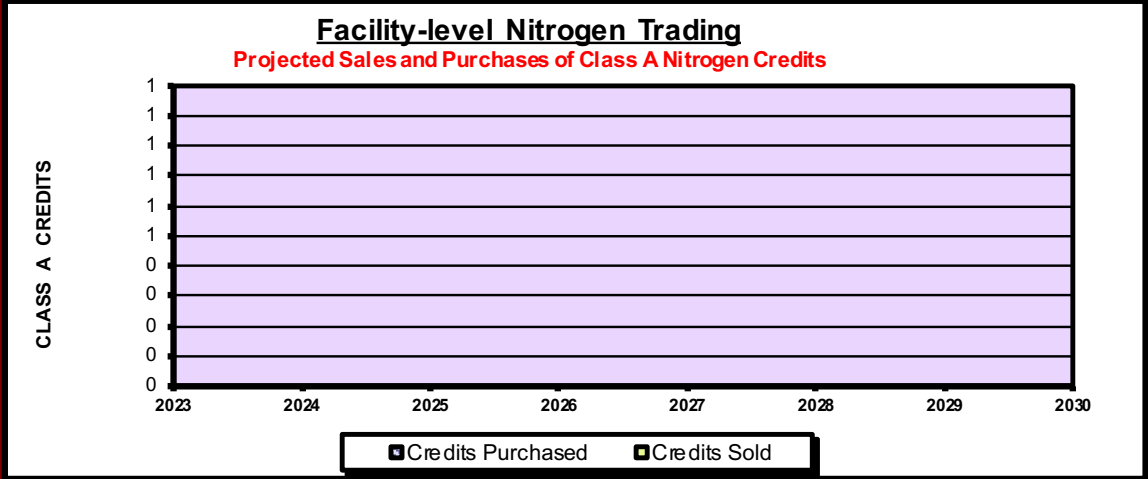
Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Projected Flow (mgd)	0.56	0.56	0.56	0.60	0.39	0.40	0.41	0.42
Projected Avg. Annual Concentration (mg/L)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	512	512	512	548	357	365	373	381
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	512	512	512	548	357	365	373	381
Delivered WLA*	685	685	685	776	776	776	776	776
Expected Credits (delivered)	173	173	173	228	419	411	403	395
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	173	173	173	228	419	411	403	395
Class A Credit Sales (Purchases)	173	100	100	0	0	0	0	0
Expected Class B Credits	0	73	73	228	419	411	403	395

* Nassawadox Riverside is consolidated with Onancock prior to 2026. This consolidation includes the anticipated transfer of Nassawadox's TN and TP allocations to Onancock.

NITROGEN FACILITY SUMMARY

Tangier Island
EASTERN SHORE Trading



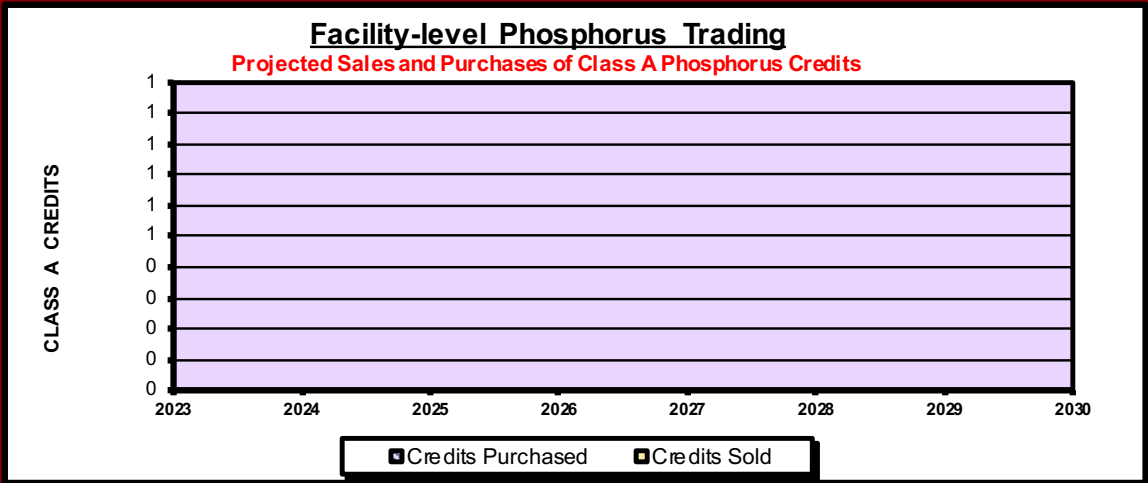
Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Projected Flow (mgd)	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05
Projected Avg. Annual Concentration (mg/L)	12.00	11.00	11.00	10.00	10.00	10.00	10.00	10.00
Discharged Load (end of pipe)	2,193	2,010	2,010	1,523	1,523	1,523	1,523	1,523
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	2,193	2,010	2,010	1,523	1,523	1,523	1,523	1,523
Delivered WLA	1,218	1,218	1,218	1,218	1,218	1,218	1,218	1,218
Expected Credits (delivered)	(975)	(792)	(792)	(305)	(305)	(305)	(305)	(305)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange*	975	792	792	305	305	305	305	305
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

* Represents private trade with Tyson Foods-Temperanceville

PHOSPHORUS FACILITY SUMMARY

Tangier Island
EASTERN SHORE Trading



Loading & Credit Summary

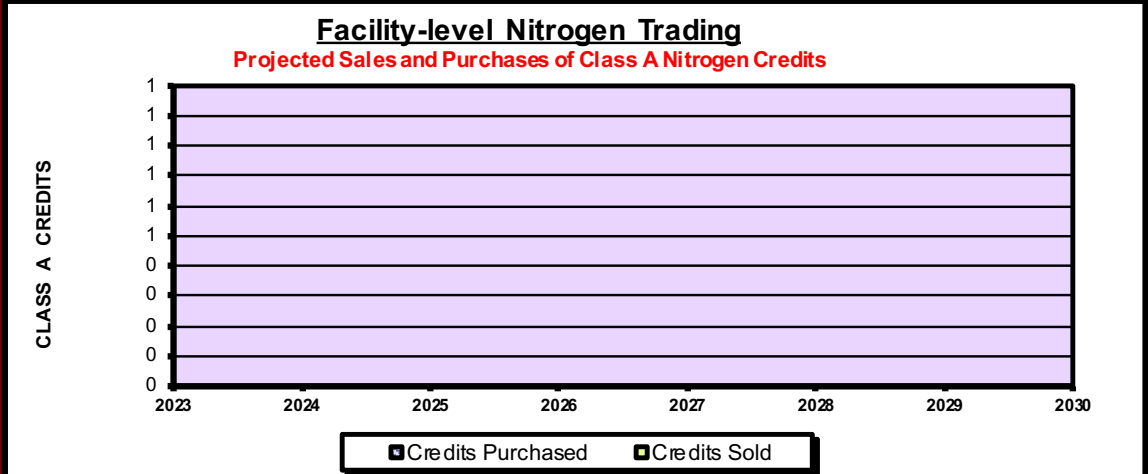
Design Flow (mgd)
Projected Flow (mgd)
Projected Avg. Annual Concentration (mg/L)
Discharged Load (end of pipe)
Delivery Factor
Expected Load
Delivered WLA
Expected Credits (delivered)
Transfers In (Out) within Owner Bubble
Transfers In (Out) from Private Exchange*
WQIF-Held Credits
Expected Net Credits
Class A Credit Sales (Purchases)
Expected Class B Credits

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Projected Flow (mgd)	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05
Projected Avg. Annual Concentration (mg/L)	1.80	1.60	1.60	1.60	1.60	1.60	1.60	1.60
Discharged Load (end of pipe)	329	292	292	244	244	244	244	244
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	329	292	292	244	244	244	244	244
Delivered WLA	91	91	91	91	91	91	91	91
Expected Credits (delivered)	(238)	(201)	(201)	(153)	(153)	(153)	(153)	(153)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange*	238	201	201	153	153	153	153	153
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

* Represents private trade with Tyson Foods-Temperanceville

NITROGEN FACILITY SUMMARY

Tyson Foods-Temperanceville
EASTERN SHORE Trading



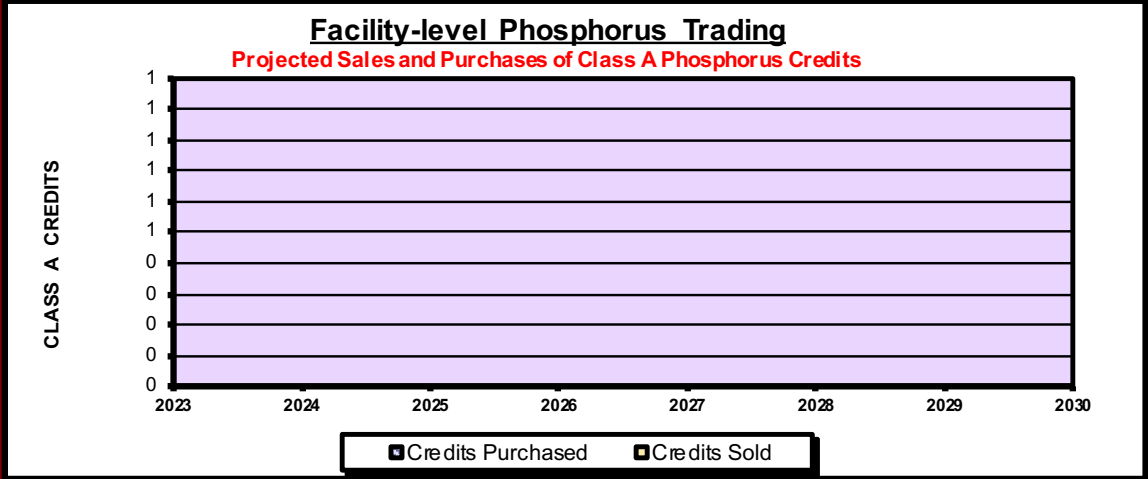
Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Projected Flow (mgd)	1.10	1.20	1.30	1.30	1.30	1.30	1.30	1.30
Projected Avg. Annual Concentration (mg/L)	5.50	4.00	4.00	4.00	5.00	5.00	5.00	5.00
Discharged Load (end of pipe)	18,426	14,619	15,837	15,837	19,796	19,796	19,796	19,796
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	18,426	14,619	15,837	15,837	19,796	19,796	19,796	19,796
Delivered WLA	22,842	22,842	22,842	22,842	22,842	22,842	22,842	22,842
Expected Credits (delivered)	4,416	8,223	7,005	7,005	3,046	3,046	3,046	3,046
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange*	(975)	(792)	(792)	(305)	(305)	(305)	(305)	(305)
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	3,441	7,431	6,213	6,700	2,741	2,741	2,741	2,741
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	3,441	7,431	6,213	6,700	2,741	2,741	2,741	2,741

* Represents private trade with Tangier Island

PHOSPHORUS FACILITY SUMMARY

Tyson Foods-Temperanceville
EASTERN SHORE Trading



Loading & Credit Summary

	2023	2024	2025	2026	2027	2028	2029	2030
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Design Flow (mgd)	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Projected Flow (mgd)	1.10	1.20	1.30	1.30	1.30	1.30	1.30	1.30
Projected Avg. Annual Concentration (mg/L)	0.25	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Discharged Load (end of pipe)	838	731	792	792	792	792	792	792
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	838	731	792	792	792	792	792	792
Delivered WLA	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142
Expected Credits (delivered)	304	411	350	350	350	350	350	350
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange*	(238)	(201)	(201)	(153)	(153)	(153)	(153)	(153)
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	66	210	149	197	197	197	197	197
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	66	210	149	197	197	197	197	197

* Represents private trade with Tangier Island

SECTION 7

Credit Exchange Special Conditions

For the Nutrient Credit Exchange Program to be successful in delivering compliance and cost savings, both for Virginia as a whole and for local ratepayers, Virginia business owners, and state taxpayers (WQIF) funding the Chesapeake Bay cleanup, the Exchange Program must attract Participants and give those Participants comfort sufficient for them to engage in a robust level of trading. During the Exchange Compliance Plan development process, a common theme from potential Participants has been the need for specific assurances that good faith participation in the Exchange Program will not result in VPDES non-compliance or contractual liability to third parties, whether due to regulatory deadlines that Participants cannot meet due to construction challenges (as in the case of potential Class A Sellers) or due to acts of third parties (as in the case of potential Class A Buyers relying on timely Credit availability). This section specifies Credit Exchange Special Conditions designed to help provide the necessary conditions for success. This section is unchanged substantively from the Exchange Compliance Plan 2022 Annual Update.

7.1 Schedule of Compliance

This Section 7.1 is based on DEQ's approval letter dated September 7, 2007 from E. Gilinsky, Ph.D., Director, Division of Water Quality, DEQ, to M. Haley, President of The Exchange (the "2007 DEQ Approval Letter") (attached as Appendix A). While the following procedure was originally developed for purposes of meeting the initial January 1, 2011 compliance schedule, it is retained here for its potential relevance going forward. From time to time, the Watershed General Permit includes compliance schedules, so the same procedure will apply in the event of other future compliance schedules as well.

July 31, 2007 Recommendation and Procedure (Information Only)

The July 31, 2007 plan recommended and was premised upon an aggressive tributary-parameter schedule (January 1, 2011 effective date of final effluent limits for Nitrogen and Phosphorus in all tributaries, except the Potomac-Shenandoah where the date would be January 1, 2013) and an implementation approach compliant with the general "as soon as possible" standard to be administered by DEQ, as follows: "Effective date for any tributary-parameter shall be extended by the DEQ Director up to but no later than December 31, 2013 based on justification provided in accordance with scheduling factors established by Virginia Code section 62.1-44.19:14 C 2 or other good cause shown."

This implementation approach was recommended in lieu of the alternative of an *across-the-board* period (12 to 24 months) previously recommended under the statutory scheduling factors. The overall benefit of this approach was that it was intended to provide for both the shortest feasible schedule for facility construction and successful startup of the Nutrient Credit Exchange Program. The specific individual benefits of this approach included: (1) this schedule adjustment may only be exercised for good cause shown, (2) the finding of good cause as well as the specific length of any adjustment are both decisions made by the DEQ Director (not by The Exchange or any of its Participants or other permittees), and (3) it establishes a mechanism by which DEQ has the ability to make timely schedule adjustments where good cause exists.

Compliance Schedule Procedure under 2007 DEQ Approval Letter

In the 2007 DEQ Approval Letter, DEQ explained its finding that the 2011 compliance deadline should be retained at that time for both parameters in all five basins and, thus, DEQ disapproved the detailed implementation approach summarized above in this Section 7.1. In reaching this conclusion, however, DEQ acknowledged The Exchange's main concern when DEQ stated: "We share your concern with the completion of so many projects on such a tight timeline. However, at this early date it is not possible to determine how quickly individual construction projects will proceed and what the actual capabilities of the upgraded facilities will be."

Similarly, a September 12, 2007 letter from D. Paylor, Director, DEQ, to M. Haley, President of The Exchange (attached as Appendix D), also indicates that "it will be a challenge to complete so many projects on such a tight timeline, and we remain committed to working with you to shepherd these projects to completion."

The 2007 DEQ Approval Letter sets forth the following two-step implementation approach in lieu of that previously recommended by The Exchange:

1. **Monitor & Evaluate** - Future annual compliance plan updates and DEQ's semi-annual WQIF progress reports will be used along with the scheduling factors in the Virginia Code and the "as soon as possible" criterion to evaluate the need for basin schedule extensions.
2. **Adjust as Needed** - Should it prove necessary, DEQ will initiate amendment to the permit under the Administrative Process Act to make appropriate revisions to the schedule.

This procedure is also generally set forth in the Chesapeake Bay and Virginia Waters Clean-Up Plan Progress Report submitted by the Secretary of Natural Resources of the Commonwealth of Virginia to House Committee on Agriculture, Chesapeake and Natural Resources, House Appropriations Committee, Senate Committee on Agriculture, Conservation and Natural Resources, and the Senate Finance Committee (October 2007) at page 3.

Accordingly, the above two-step implementation approach shall be the operative procedure for evaluating and adjusting the compliance schedule.

7.2 Initial Upgrade Delays Despite Participant's Best Efforts

The focus of the Exchange Compliance Plan was on achieving initial compliance. A large number of concurrent nutrient removal upgrades were required, and similar activities were underway throughout the Chesapeake Bay region in other states. Construction projects were occurring at a period where the general construction market (not only wastewater treatment) was in a period of very high demand for professional engineers, skilled and unskilled labor, and critical materials. Prices were increasing sharply. State government was also experiencing this in key sectors such as highway and school construction.

During Exchange Compliance Plan development, owners of larger facilities such as those that either must upgrade for the basin to achieve compliance (because the facility is a large source) or which are expected to have lower unit cost upgrades (dollars per pound removed), voiced reluctance to commit to sell Class A Credits because compliance with the initial compliance schedule deadlines was partially or significantly beyond their reasonable control, especially as compared to the January 1, 2011 initial compliance deadlines in the General Permit. Accordingly, to promote and secure the participation of these facilities, The Exchange did not intend to impose

its otherwise generally applicable credit shortfall policy under these circumstances. This meant that in a shortfall situation in the startup years, there was a risk that Buyers waiting on Credit availability may not have Credits available through The Exchange, if one or more linchpin projects were delayed in completing construction. A condition of this Exchange Compliance Plan is that neither the delayed Seller nor the waiting Buyer will be deemed to be in non-compliance or subject to enforcement action.

7.3 Timely Regulatory Approvals

One factor that impacts basin-level compliance is timely review and approval of permits, WQIF grant agreements, and engineering documents by DEQ. This Exchange Compliance Plan is premised on timely action by DEQ, including the standard turnaround times for engineering documents as specified in 9 VAC 25-790-80 C (generally 30 day turnaround deadline for technical evaluations of engineering documents).

7.4 Requested Changes Resulting From Regulatory Review

The Participants have elected to participate in this multi-party Exchange Compliance Plan on the assumption that the Exchange Compliance Plan would be accepted and approved by DEQ (and any other relevant state and federal authority) in the form presented or in a substantially similar form with no material adverse changes. In the event of any material adverse change, The Exchange reserves the right to revise this Exchange Compliance Plan and each Participant reserves the right to modify its position in it, or withdraw from it, upon notice to DEQ and The Exchange within 60 days of notice of any material adverse change in the content of the approved Exchange Compliance Plan.

7.5 WQIF Grant Denial

Numerous facility upgrades covered in Sections 2 through 6 are premised upon execution of a WQIF Grant Agreement between DEQ and the Participant for the partial funding of nutrient removal technology to be installed. Since 2005, the WQIF statute has provided at Virginia Code section 10.1-2131 B that DEQ “shall enter into grant agreements with all facilities designated as significant dischargers or eligible nonsignificant dischargers that apply for grants.” This Section 7.5 is necessary to address the amendment at Virginia Code section 10.1-1186.01 G to establish a limited exception, as follows:

Notwithstanding the provisions of subsection B of § [10.1-2131](#), the Director of the Department of Environmental Quality shall not be required to enter into a grant agreement with a facility designated as a significant discharger or eligible nonsignificant discharger if the Director determines that the use of nutrient credits in accordance with the Chesapeake Bay Watershed Nutrient Credit Exchange Program (§ [62.1-44.19:12](#) et seq.) would be significantly more cost-effective than the installation of nutrient controls for the facility in question.

This Exchange Compliance Plan is conditioned on the execution of WQIF Grant Agreement for each WQIF eligible project set forth herein. The Exchange and the Participants reserve the right to amend this plan in the event that, pursuant to section 10.1-1186.01, DEQ declines to enter into a WQIF Grant Agreement for such a project.

7.6 WQIF Credit Availability

Access to WQIF Credits in the event of a Credit shortfall situation is an essential element for providing the certainty and comfort level required for trading-based compliance plans. Accordingly, The Exchange Compliance Plan is conditioned on the SWCB and DEQ ensuring the continued availability of Credits through the WQIF at or below the prices currently specified in the General Permit.

7.7 Annual Updates

The Exchange and the Participants reserve the right to update and amend this Exchange Compliance Plan on an annual basis consistent with applicable laws and regulations.

7.8 Effluent Nutrient Concentrations

Concentrations contained herein are estimates for information purposes only and are not to be used as a basis for any regulatory decisions.

SECTION 8

Credit Exchange Policy



CREDIT EXCHANGE POLICY FOR THE PURCHASE AND SALE OF CHESAPEAKE BAY NUTRIENT CREDITS

ARTICLE I PURPOSE

This Credit Exchange Policy (this “Policy”) of the Virginia Nutrient Credit Exchange Association, Inc. (the “Nutrient Exchange”) is adopted pursuant to Article VII of the Bylaws for the purpose of coordinating and facilitating the participation of its Members in Virginia’s Chesapeake Bay Nutrient Credit Exchange Program established by Virginia Code section 62.1-44.19:12 *et seq.* Accordingly, this Policy is intended to provide a framework for the Exchange of Credits by and among the Members and, in addition to other benefits, to satisfy the standard requirement of Virginia Water Quality Improvement Fund Grant Agreements made pursuant to Virginia Code section 10.1-2117 *et seq.* that the grantee make available for Exchange any Credits remaining after complying with its Watershed General Permit limits.

ARTICLE II DEFINITIONS

Unless otherwise defined below or a different meaning is intended by the usage herein, all terms shall have the same definition as provided in section 9 VAC 25-820-10 of the Watershed General Permit.

Actual Class B Credits – In the Reconciliation Year, the quantity of Credits remaining for the Permitted Facility after adjusting Actual Net Credits for Class A Credit purchases and sales for the immediately preceding Compliance Year. This quantity equals Actual Net Credits plus any Class A Credit purchases and minus any Class A Credit sales for the Compliance Year.

Actual Credits – Credits actually generated during the Compliance Year prior to adjusting for Preliminary Uses of Credits. Actual Credits equal Delivered WLA minus Actual Load.

Actual Load – The Delivered Load actually discharged during the Compliance Year for one or more Permitted Facilities.

Actual Net Credits – Actual Credits minus the quantity of Credits not available due to Preliminary Uses of Credits.

Board of Governors (or Board) – The board of directors of the Nutrient Exchange.

Buyer – A Participant that purchases Credits for a given Compliance Year.

Class A Buyer – A Participant that requests the availability of, and agrees in advance to purchase, a specific quantity of Credits in accordance with this Policy. Except as otherwise

provided herein, a Class A Buyer is committed to purchasing its requested and agreed amount of Class A Credits, even if the Class A Buyer actually needs a lesser amount based on actual performance of its Permit Facility in a Compliance Year.

Class A Credits – Credits for which an agreement for sale and purchase in a specific quantity is made in advance in accordance with this Policy.

Class A Pledge – The quantity of Class A Credits that the Seller specifies and agrees to sell to the Nutrient Exchange as Class A Credits in accordance with this Policy.

Class A Seller – A Participant that agrees in advance to sell Class A Credits to the Nutrient Exchange in accordance with this Policy. Except as otherwise provided herein, a Class A Seller is responsible for making up any shortfall in its agreed amount of Class A Credits for a given Compliance Year and completing such sale.

Class B Credits – Credits for which no agreement for sale and purchase in a specific quantity is made in advance but which are pledged to the Nutrient Exchange in accordance with this Policy.

Clearing Account – An account of the Nutrient Exchange used for segregating funds from Credit Exchanges from other funds of the Nutrient Exchange.

Compliance Year – Any specific calendar year for which Exchanges are planned or executed.

Credit – Each pound of TN or TP by which the Expected Load (projections) or Delivered Load (actual) is less than the Delivered WLA for a Permitted Facility (or Permitted Facility Bubble). Note that while Credits can exist only in positive quantities, for planning and implementation purposes certain Credit-related values may be stated as negative quantities. For example, when a Permitted Facility's Expected Load is projected to exceed its Delivered WLA, the Plan will show a negative quantity of Expected Credits. Additional examples may include Expected Net Credits, Actual Credits, Actual Net Credits, and Actual Class B Credits.

Delivered WLA – The TN or TP WLA assigned to a Permitted Facility, either under the Water Quality Management Planning ("WQMP") Regulation (9 VAC 25-720) or otherwise, and adjusted by the applicable delivery factor under the Watershed General Permit and expressed as pounds per year.

Delivered Load – The TN or TP load discharged by a Permitted Facility during a Compliance Year, adjusted by the applicable delivery factor under the Watershed General Permit and expressed as pounds per year.

DEQ – The Virginia Department of Environmental Quality or, where appropriate, the State Water Control Board to which the Department serves as staff.

Designated Representative – A person who is a fulltime employee of, and is designated in writing by, the Participant to act on its behalf.

Exchange – The purchase and sale of a Credit of any class.

Exchange Compliance Plan (or Plan) – The plan submitted by the Nutrient Exchange to DEQ pursuant to 9 VAC 25-820-40 A as updated periodically pursuant to 9 VAC 25-820-40 B and 9 VAC 25-820-70 Part I D of the Watershed General Permit.

Exchange Compliance Plan Update (or Plan Update) – The update of the Exchange Compliance Plan required pursuant to 9 VAC 25-820-40 B and 9 VAC 25-820-70 Part I D of the Watershed General Permit.

Expected Class B Credits – The quantity of Credits projected to be remaining for a Permitted Facility after adjusting Expected Net Credits for Class A Credit sales for the current or any future Compliance Year. This quantity equals Expected Net Credits minus any Class A Credits committed by a Class A Seller for a Compliance Year.

Expected Load – The projected Delivered Load for a given Compliance Year for one or more Permitted Facilities.

Expected Credits – The amount of Credits projected for a given Compliance Year as determined by subtracting the Expected Load from the Delivered WLA.

Expected Net Credits – Expected Credits minus the quantity of Credits projected to not be available due to Preliminary Uses of Credits.

In-Bubble Exchange – A Preliminary Use of Credits consisting of Credit use by and among the Permitted Facilities within a Permitted Facility Bubble included in the Exchange Compliance Plan. In accordance with 9 VAC 25-820-70 Part I B 2 e of the Watershed General Permit, In-Bubble Exchanges are not Exchanges or credit acquisitions as described in 9 VAC 25-820-70 **Part I J** 2 of the Watershed General Permit.

Neutral Participant – A Participant which projects a positive quantity of Expected Net Credits for its Permitted Facility in a given Compliance Year, but which has not elected to be a Class A Seller for that Compliance Year.

Non-Participant – An owner or operator of a Permitted Facility that is not a Participant.

Participant – A Member owner or operator of a Permitted Facility included in the Exchange Compliance Plan which has executed the Nutrient Credit Services Agreement.

Permitted Facility – A facility authorized to discharge under the Watershed General Permit. The singular refers to the plural (Permitted Facilities) where appropriate. This term also refers to a Permitted Facility Bubble where appropriate.

Permitted Facility Bubble – Multiple Permitted Facilities under common ownership or operation that are subject to aggregated WLAs pursuant to 9 VAC 25-820-70 Part I B 2 of the Watershed General Permit.

Planning Period – The rolling five-year period covered by the Exchange Compliance Plan (or Plan Update) beginning with the year in which the Plan is due to be submitted to DEQ. For example, for the Exchange Compliance Plan 2008 Annual Update due and submitted to DEQ on February 1, 2008, the Planning Period is January 1, 2008 through and including December 31, 2012.

Preliminary Use of Credits – Any of the following three planned or actual uses of Credits: In-Bubble Exchange, Private Exchange, or WQIF-Held.

Private Exchange – A Preliminary Use of Credits consisting of an Exchange planned or executed directly between or among Participants or Non-Participants rather than through the Nutrient Exchange.

Reconciliation – The process for executing Exchanges for a Compliance Year.

Reconciliation Year – For each Compliance Year, the year immediately following during which time Exchanges for the Compliance Year are executed. For example, for Compliance Year 2011, the associated Reconciliation Year is 2012.

Seller – A Participant that supplies Credits for a given Compliance Year.

TN – Total nitrogen, a pollutant the discharge of which is authorized and limited under the Watershed General Permit.

TP – Total phosphorus, a pollutant the discharge of which is authorized and limited under the Watershed General Permit.

Watershed General Permit – The General Virginia Pollutant Discharge Elimination System Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia (9 VAC 25-820) issued by the State Water Control Board effective for a five-year permit term beginning January 1, 2007 or as hereafter modified or reissued from time to time. Among other requirements, the Watershed General Permit imposes limitations on the discharge of TN and TP from Permitted Facilities (9 VAC 25-820-70 Part I B), and requires each permittee to submit to DEQ by August 1, 2007 and annually thereafter (currently by each February 1) a compliance plan (9 VAC 25-820-40), either individually or through the Nutrient Exchange, indicating how its facility(ies) will comply with such limitations.

WLA – A Wasteload Allocation for TN or TP as established under the Water Quality Management Planning Regulation, 9 VAC 25-720, and implemented through the Watershed General Permit. A WLA may be expressed in pounds per year as either a discharged WLA (*i.e.* end-of-pipe gross pounds) or as a Delivered WLA (*i.e.*, the discharged WLA multiplied by the

delivery factor applicable to the Permitted Facility as specified in the Watershed General Permit).

WQIF-Held – Pursuant to 9 VAC 25-820-70 Part I J 2 e of the Watershed General Permit, a Preliminary Use of Credits which consists of setting aside and not using within the Plan certain Credits associated with Permitted Facilities (or a portion thereof) not yet constructed and in operation. Such Credits are held in the Water Quality Improvement Fund administered by DEQ.

ARTICLE III GUIDING PRINCIPLES & GENERAL APPROACH

3.1 Guiding Principles. This Policy has been developed and is to be implemented in accordance with the following guiding principles adopted by the Nutrient Exchange:

(a) Guiding Principle No. 1: Environment First. The Nutrient Exchange, including its Exchange Compliance Plan and this Policy, is designed to ensure environmental protection first and foremost. Environmental protection is fostered by means of full compliance with the Watershed General Permit issued by DEQ.

(b) Guiding Principle No. 2: Voluntary Participation. Under governing laws and regulations, there is generally no requirement for a Permitted Facility to trade, *i.e.*, Exchange, Credits with any other person. Accordingly, the Nutrient Exchange, including its Exchange Compliance Plan and this Policy, is premised on the voluntary participation of Participants and their Permitted Facilities subject to applicable laws and regulations and the policies and procedures established by the Nutrient Exchange.

(c) Guiding Principle No. 3: Benefits for All. Consistent with the concept of voluntary participation, the Nutrient Exchange, including its Exchange Compliance Plan and this Policy, is designed with the intent of benefitting all Participants whether as a Buyer, Seller or Neutral.

(d) Guiding Principle No. 4: Remember the “Base Case.” This principle is a reminder that the Nutrient Exchange is a first-of-its-kind undertaking with the potential to provide significant benefits including water quality improvement, regulatory flexibility, and economic efficiency compared to the traditional regulatory approach lacking a trading option, and that the Nutrient Exchange intends to operate with this potential for broad benefit in mind.

3.2 General Approach. This Policy is designed to meet the following goals and objectives for the establishment of a successful Exchange Program: (a) a highly-structured, well-planned program, (b) a convenient and reliable Credit Exchange mechanism, (c) a practical legal structure that promotes participation by maintaining a high degree of flexibility for Participants, and (d) a fair and effective pricing methodology.

ARTICLE IV COMPLIANCE AND CREDIT EXCHANGE PLANNING

4.1 Participant-Driven Exchange Compliance Plan. The Nutrient Exchange has developed the Exchange Compliance Plan on behalf of the Participants for each of Virginia's five major river basins in accordance with the Watershed General Permit and intends to update the Plan annually by submittal of Plan Updates to DEQ. The Nutrient Exchange Compliance Plan is now and will continue to be based on the individual data provided by, and individual decisions made by, Participants with respect to their own Permitted Facilities, including revisions to relevant facility-specific information related to Class A Credit and Class B Credit Exchanges or other information, in accordance with the schedule at Attachment A and subject to acceptance by the Nutrient Exchange in accordance with this Policy and further subject to approval by DEQ.

4.2 Five-Year Planning Period. The Plan including any Plan Updates shall cover a rolling five-year Planning Period. For each Planning Period each of the following Plan elements shall be on a firm basis and may not be modified by a Participant except as provided in Section 4.8 (Modifications Within Planning Period): (a) Class A Credit sales and purchases once elected by a Participant, (b) the Class A Credit purchase price paid by a Class A Buyer (Attachment B), and (c) the Participant's commitment pursuant to Section 4.7 (Class B Credit Pledge) to provide to the Nutrient Exchange its Actual Class B Credits. With each Plan Update, Year 1 of the preceding Planning Period shall be dropped (except for purposes of Reconciliation), Year 2 through Year 5 of the preceding Planning Period (Year 1 through Year 4 of the Plan Update) shall remain unchanged with respect to the Plan elements stated in this Section as firm, and a new Year 5 shall be added based on data and information determined by each Participant with respect to its Permitted Facility. For example, in 2012, the Nutrient Exchange, in coordination with the Participants, will conduct the Reconciliation process for Compliance Year 2011 and update the five-year Plan to cover a Planning Period of 2012 through and including 2016, with the new fifth year (2016) based on data and information determined and submitted by each Participant with respect to its Permitted Facility. Without limiting the foregoing, it is nevertheless the intent of the Nutrient Exchange to accommodate through each Plan Update certain modifications related to firm elements of the Plan for the remaining four years of the Planning Period, whenever some or all of such modifications are determined by the Board in its discretion to be feasible and in the best interests of the Nutrient Exchange, as provided below in Section 4.8. Notwithstanding the foregoing provisions of this Section, if DEQ were to extend the schedule of compliance in Part I C 1 of the Watershed General Permit for any tributary (river basin) and parameter combination, the obligation of Participants to execute Exchanges of Credits for Permitted Facilities in such tributary (river basin) and for such parameter (TN or TP) as provided in the Exchange Compliance Plan shall be waived for each year prior to the first year for which compliance is required.

4.3 Annual Participant Data Update. The Nutrient Exchange may request and each Participant shall provide in a timely manner information necessary or useful for updating or otherwise administering the Plan. For purposes of Plan Updates, the Nutrient Exchange anticipates continuing to utilize a Facility Data Checklist. The most recent form of the Facility Data Checklist is attached as Attachment C and may be revised by the Nutrient Exchange from time to time. The Nutrient Exchange anticipates continuing to utilize a Compliance Deadline

Statement prior to the expiration of the schedule of compliance in Part I C 1 of the Watershed General Permit. The most recent form of the Compliance Deadline Statement is attached as Attachment D and may be revised by the Nutrient Exchange from time to time. With respect to the new fifth year of the Planning Period covered by each Plan Update, the Plan shall be based on data and information determined by the Participant during the Plan Update process. To meet applicable regulatory deadlines, Participants shall submit the requested data pursuant to the schedule at Attachment A, which may be revised by the Nutrient Exchange from time to time. Failure to meet submittal deadlines may result in omission of a Participant and its Permitted Facilities from the Plan at the discretion of the Nutrient Exchange.

4.4 Expected Net Credits. For each of its Permitted Facilities included in the Plan, the Participant will be responsible for specifying the Delivered WLA (established by regulation), Expected Load (derived from projected flow and concentration data provided by the Participant), Expected Credits, Preliminary Uses of Credits, and Expected Net Credits. Expected Net Credits is a planning figure only, and no Participant is obligated solely by its specification thereof to generate Credits in a quantity equal to or greater than the Expected Net Credits for the Planning Period.

4.5 Class A Credit Sale Obligations. Participants with Permitted Facilities projecting to generate a positive quantity of Expected Net Credits shall have the option to sell Class A Credits for a Compliance Year in the Planning Period at the premium Class A Credit price. Each such Participant shall specify its Class A Pledge as a quantity of Credits ranging from zero (0) up to the quantity of its Expected Net Credits for each year of the Planning Period, such quantity to be determined in the discretion of the Participant. Such specification shall be made for the full initial Planning Period and thereafter annually for the new fifth year of the five-year Planning Period. The Participant shall be obligated to provide to the Nutrient Exchange such quantity of Class A Credits. The specified quantity of Class A Credits shall be set forth in the Plan. Unless waived pursuant to section 5.10 (Waiver of Class A Credit Sales Obligation), the Participant agrees to sell such quantity of Credits to the Nutrient Exchange regardless of its Actual Net Credits (*i.e.*, a Class A Seller is responsible for making up any shortfall in its agreed amount of Class A Credits for a given Compliance Year and completing such sale). A Participant projecting to generate a positive quantity of Expected Net Credits but electing to make no firm Class A Credit sales obligation (*i.e.*, a Neutral Participant) shall specify a Class A Pledge of zero.

4.6 Class A Credit Purchase Obligations. For Permitted Facilities projecting Expected Net Credits in a negative quantity, to demonstrate a plan for compliance the Participant shall be obligated to purchase Credits in such quantity at the Class A Credit purchase price shown on Attachment B. For example, a Permitted Facility projecting in the 2008 Plan Update to have Expected Net Credits of TN of negative 500 for Compliance Year 2011 shall be obligated to purchase 500 TN Credits at the Class A Credit price in effect for 2011 (\$2.00 per Credit). This transaction shall be executed during the Reconciliation Year at which time the Credits shall be transferred and the price shall be paid. The Exchange Compliance Plan shall plan to meet this projected demand addressed in this Section through Class A Credit sales obligations under Section 4.5 to the extent available; however, to the extent that sufficient Class A Credits are not available, the Plan may address this demand by means of Class B Credits pledged by Participants. The Credit prices paid by a Buyer as shown on Attachment B are firm

for the Planning Period and shall be updated annually to include such price for the new fifth year of the Plan Update.

4.7 Class B Credit Pledge. By participating in the Exchange Compliance Plan, each Participant pledges one hundred percent of its Expected Class B Credits and agrees to transfer one hundred percent of its Actual Class B Credits from its Permitted Facilities to the Nutrient Exchange. The quantity of Expected Class B Credits is a projection only and it accommodates Preliminary Uses of Credits, including Private Exchanges planned and disclosed by the Participant in accordance with Section 4.9. Without limiting this pledge requirement, it is acknowledged and understood that Actual Class B Credits are anticipated to vary from the projection of Expected Class B Credits and that the Participant has no obligation to provide Actual Class B Credits in the same quantity as Expected Class B Credits, so long as the Participant transfers all of its Actual Class B Credits to the Nutrient Exchange. Among other purposes, it is the intent of this Section to enable Participants, which have entered into or will enter into a Virginia Water Quality Improvement Fund Grant Agreement with DEQ (*i.e.*, the owners of eligible municipal wastewater treatment plants) to satisfy the following standard provision of the typical grant agreement: “To aid in implementing the Nutrient Credit Exchange Program, the Grantee shall make all Point Source Nitrogen and Phosphorus Credits generated in a calendar year available for nutrient allocation compliance.” It is also the intent of this Section to include as Actual Class B Credits those Credits not identified as Expected Class B Credits due to any Preliminary Use of Credits but which are in fact available for Exchange through the Nutrient Exchange during the Reconciliation.

4.8 Modifications Within Planning Period. Notwithstanding the firm commitments for Class A Credits and Class B Credits provided in this Article IV, it is the intent of the Nutrient Exchange to accommodate through each Plan Update requests for modifications affecting the firm elements of the previous Planning Period, provided that the Board determines, in its discretion, that such modification is not reasonably expected to have a material adverse effect on the Nutrient Exchange or its Participants. Consistent with the guiding principles described above, the fact that a modification would result in a decrease in funds from Credit sales shall not preclude the Board from determining that a modification would not have a material adverse effect. In the event of multiple competing modification requests, (i) requests of existing Participants shall have priority over requests of potential new Participants, and (ii) to the extent that it is not feasible to honor all modification requests of existing Participants, the Nutrient Exchange generally intends to address the requests of existing Participants on a pro rata basis with respect to Credits. In order to manage requests for modifications within the Planning Period efficiently and fairly, the Nutrient Exchange shall establish annually a date by which Participants shall submit such requests. The modifications requested by any Participant, if accommodated in the Plan Update in whole or in part, shall be binding on such Participant.

(a) Class A Credit Sale Obligations. Notwithstanding the firm basis of Class A Credit sale obligations, a Class A Seller may decrease its Class A Credit sale obligations through the Plan Update to the extent the Board determines that a sufficient supply of Class A Credits is projected to remain to meet the existing Class A Credit demand of the existing Class A Buyers, and the Board, in its discretion, may accommodate further decreases taking into consideration Expected Class B Credit projections. Any Participant may increase its Class A

Credit sale obligation so long as the resulting Class A Credit supply does not exceed Class A Credit demand.

(b) Class A Credit Purchase Obligations. Notwithstanding the firm basis of Class A Credit purchase obligations, a Class A Buyer may decrease its Class A Credit purchase obligations to the extent the Board determines that Class A Credit demand exceeds Class A Credit supply. Any Participant may increase its Class A Credit purchase obligation to the extent of Class A Credit supply, and the Board, in its discretion, may accommodate further increases taking into consideration Expected Class B Credit projections.

(c) Class B Credits. As provided above in Section 4.7, Expected Class B Credits is a projection only and the Participant's obligation with respect to Class B Credits is limited to providing its Actual Class B Credits to the Nutrient Exchange. Accordingly, through each Plan Update, the Participant at its discretion may modify its projection of Expected Class B Credits for each and every year of the five-year Planning Period covered by the Plan Update.

(d) New Participants. The Nutrient Exchange intends to consider the admission of new Participants depending on whether the Nutrient Exchange anticipates a surplus of Credits or projects a need for or desires additional Credits during the Planning Period. Admission of new Participants shall be at the discretion of the Board and generally subject to the following conditions. When the Plan indicates a surplus of Class A Credits, a new Participant may be included subject to the condition that it may not sell Class B Credits until Year 3 and Class A Credits until Year 5 of the Plan Update that first includes the new Participant. When the Plan indicates a need for additional Class A Credits, a new Participant may be included subject to the condition that it may not purchase Credits until Year 5 of the Plan Update that first includes the new participant. These conditions may be waived or modified in whole or in part by the Board in its discretion.

4.9. Private Exchanges. Sections 4.4 (Expected Net Credits) and 4.7 (Class B Credit Pledge) notwithstanding, to facilitate adequate planning each Participant shall provide reasonable advance notice to the Nutrient Exchange of all Private Exchanges to which it is or will be a party. Such notice shall be made by the deadline in Attachment A for submitting the Facility Data Checklist during the Plan Update process and shall be effective for any Private Exchange for the Compliance Year beginning the next January 1 following such notice (or for any subsequent Compliance Year). The notice shall be on a form to be provided by the Nutrient Exchange and shall identify all parties and the quantity of Credits subject to the Private Exchange. For example, if a Participant desires to enter into a new Private Exchange for Compliance Year 2011, under the current schedule at Attachment A notice would be required by November 1, 2010 and such Private Exchange would be included in the Plan Update covering the Planning Period of Compliance Years 2011 through 2015. Nothing in this Section 4.9 shall affect the firm commitment as to Class A Credit purchases and sales once made by a Participant.

4.10 DEQ Approval. The Nutrient Exchange's goal is to maintain the Exchange Compliance Plan in a manner and form that best serves its Participants and complies with the terms and conditions of the Watershed General Permit. In the event that DEQ were to disapprove a Plan Update in whole or in part, the Nutrient Exchange shall be responsible only for

continuing to endeavor, in consultation with the Participants, to obtain DEQ approval pursuant to 9 VAC 25-820-40 B.

ARTICLE V CREDIT EXCHANGE RECONCILIATION

5.1 Administration of and Participation in Reconciliation. Beginning in 2012 for Compliance Year 2011, the Nutrient Exchange will administer and the Participants will participate in an annual Reconciliation pursuant to the Plan and this Policy for the preceding Compliance Year.

5.2 Annual Permitted Facility Reports. In accordance with the schedule at Attachment A, each Participant shall annually submit to the Nutrient Exchange a copy of the Participant's Annual Report to DEQ required by Part I F of the Watershed General Permit and such other information as may be reasonably requested by the Nutrient Exchange in administering the Reconciliation.

5.3 Initial Reconciliation Report. In accordance with the schedule at Attachment A, the Nutrient Exchange will prepare and distribute to the Participants the Initial Reconciliation Report for the immediately preceding Compliance Year. On a Permitted Facility and river basin-level basis for all Participants, the report shall present in ledger format an accounting of the generation and transfer of Credits within the Nutrient Exchange and among its Participants. The report shall specify for each Permitted Facility its Delivered WLA, Actual Load, Actual Credits, Preliminary Uses of Credits, Actual Net Credits, Class A Credit sales and purchases, and Actual Class B Credits, Credit prices, charges to Buyers, and revenues to Sellers. As applicable, the report will reflect application of the policies and procedures in Sections 5.9 (Initial Upgrades), 5.10 (Waiver of Class A Credit Sales Obligation), 5.11 (Option to Purchase Additional Credits During Reconciliation), and 5.12 (Credit Shortfall Management Procedures).

5.4 Credit Exchanges and Confirmations. The transfer of Credits from Sellers to the Nutrient Exchange, and from the Nutrient Exchange to Buyers, shall be implemented as follows.

(a) Credit Transfers from Sellers. Each year beginning 2012 (or one year later for each year by which DEQ extends the schedule of compliance for any tributary (river basin) and parameter (TN or TP) combination beyond January 1, 2011), Participants shall transfer to the Nutrient Exchange in accordance with the Initial Reconciliation Report and the schedule at Attachment A (i) the quantity of Class A Credits to which they have committed as Sellers and (ii) the quantity of their Actual Class B Credits, if any. Such transfer shall be effective without further action by the Participant and shall be confirmed by the Participant through execution by its Designated Representative of, and submittal to the Nutrient Exchange of, the Seller's Credit Exchange Confirmation Form (Attachment E).

(b) Credit Transfers to Buyers. Each year beginning 2012 (or one year later for each year by which DEQ extends the schedule of compliance for any tributary (river basin) and parameter (TN or TP) combination beyond January 1, 2011), the Nutrient Exchange shall

transfer to Buyers in accordance with the Initial Reconciliation Report and the schedule at Attachment A the quantity of Credits committed to and requested by such Buyers subject to the terms and limitations of this Policy. Such transfer shall be accomplished and confirmed by the Nutrient Exchange through execution and submittal to Buyers of the Buyer's Credit Exchange Confirmation Form (Attachment F). In addition, the Nutrient Exchange shall invoice each Buyer for Credit purchases in accordance with the schedule at Attachment A, and each Buyer shall pay such invoice within forty-five (45) days of the invoice date. Failure to pay such invoice within such time shall require payment by the Participant of an administrative charge of one hundred dollars (\$100.00) plus ten percent (10%) of the amount of the invoice.

5.5 Sales of Surplus Credits to Non-Participants. For any Compliance Year and associated Reconciliation Year, for any river basin and parameter (TN or TP) combination, if the Nutrient Exchange has satisfied all of the needs for Credits for Participants as specified in the Exchange Compliance Plan or as otherwise requested by Participants for Watershed General Permit compliance purposes, and has remaining Credits, the Nutrient Exchange may sell such remaining Credits, in the discretion of the Board, to any Non-Participants requesting and committing to the purchase of such Credits subject to terms established by the Board in accordance with this Policy. The revenue from any Credit sales to Non-Participants or others shall be distributed to the Participants in the manner provided in Section 5.8.

5.6 Final Reconciliation Report. In accordance with the schedule at Attachment A, the Nutrient Exchange will prepare and distribute to the Participants the Final Reconciliation Report for the immediately preceding Compliance Year to reflect any adjustments subsequent to the Initial Reconciliation Report for sales of surplus Credits to Non-Participants or as otherwise may be appropriate.

5.7 Sources of Funds. The sources of funds for the Nutrient Exchange's purchase of Credits from Sellers shall be the funds paid by Buyers, the funds paid by any Non-Participants or others purchasing Credits through the Nutrient Exchange, and any other revenues accruing to the Nutrient Exchange that the Board designates for this purpose.

(a) Clearing Account. All such funds shall be segregated for accounting purposes from any other funds of the Nutrient Exchange in a Clearing Account for the purposes of holding prior to distribution and of distributing such funds to Sellers in the manner provided in this Policy.

(b) Prices Paid by Buyers and Non-Participants. The prices for Credits shall be (i) for Buyers of Credits in the quantities scheduled in the Plan as Class A Credit purchases the Class A Credit price on Attachment B, (ii) for Participants making additional Credit purchases beyond those scheduled in the Plan as Class A Credit purchases, the Class A Credit Price from Attachment A multiplied by a premium of 1.5, and (iii) for any Non-Participant or others for purchases as provided in Section 5.5, the Class A Credit Price from Attachment A multiplied by a premium which shall be established by the Board but which shall not be less than 2.0, unless the Board in its discretion determines that a lesser premium is in the best interests of the Nutrient Exchange and its Participants.

5.8 Disbursement of Funds to Sellers. The Nutrient Exchange shall disburse funds to Sellers from the Clearing Account as follows.

(a) Timing. Funds shall be disbursed to Sellers each Reconciliation Year in accordance with the schedule at Attachment A, or as soon thereafter as may be practical.

(b) Amounts Paid to Sellers. Ninety (90) percent of the amount in the Clearing Account and due to the Nutrient Exchange from Buyers for each Compliance Year in the Reconciliation Year shall be paid to the Class A Sellers, pro rata in proportion to the quantity of such Class A Credits transferred by each. The remaining ten (10) percent shall be paid to those Participants transferring Class B Credits to the Nutrient Exchange, pro rata as to the quantity of such Class B Credits transferred by each. However, if under the preceding calculation the amount paid by the Nutrient Exchange for each Class B Credit would exceed the amount paid by the Nutrient Exchange for each Class A Credit, the amount paid for Class A and Class B Credits shall be equal and shall be paid to Sellers pro rata in proportion to the quantity of Credits transferred by each.

(c) Clearing Account Shortfalls Due to Non-Payment of Buyers. To the extent that any Buyer or other purchaser of Credits from the Nutrient Exchange fails to remit to the Nutrient Exchange any amounts for Credits when due, and such shortfall interferes with the distribution of funds as provided herein, in addition to the administrative charge provided in Paragraph 5.4(b) the Board may in its discretion (i) invalidate the Credit transfer to the non-paying person(s) and redistribute such Credits as provided in this Policy, (ii) extend additional time for payment on such terms as the Board may determine, or (iii) take other actions in the best interests of the Nutrient Exchange and the Participants. In any such event, the Board may further in its discretion either delay payments otherwise provided for in this Section 5.8, or make partial payments, pro rata as provided herein, pending resolution of such matters.

5.9 Initial Upgrades. The Nutrient Exchange and the Participants acknowledge that for the initial Permitted Facility wastewater treatment upgrades necessary to implement the Exchange Compliance Plan for any river basin beginning January 1, 2011 (or such later initial year for compliance as DEQ may approve), the availability of engineering design services, the availability of construction services, availability of Water Quality Improvement Fund grant funds, extreme weather and other factors may make a Participant's provision and transfer to the Nutrient Exchange of Class A Credits impracticable and beyond the reasonable control of such Participant. In any case in which such transfer to the Nutrient Exchange of Class A Credits is determined by the Board in its discretion to be impracticable and beyond the reasonable control of such Participant, such not-at-fault Participant shall be relieved of its obligations for the transfer to the Nutrient Exchange of Class A Credits, but only the extent that such Credits are actually not available to such Participant and only for the period of time of the initial unavailability. Any resulting Credit shortfalls impacting the ability to supply Credits to Class A Buyers shall be managed in accordance with Section 5.12 (Credit Shortfall Management Procedures). In addition, the Nutrient Exchange shall request DEQ's concurrence that neither the not-at-fault Class A Seller(s) as defined in this Section 5.9 nor the not-at-fault waiting Buyer(s) will be deemed to be in noncompliance or subject to enforcement solely because of such circumstances and related Credit supply impacts.

5.10 Waiver of Class A Credit Sales Obligation. If during the Reconciliation Year sufficient Credits exist to meet the demands of all Participants for the Compliance Year, a Class A Seller's Class A Credit sales obligation shall be waived to the extent of its Class A Credit shortfall.

5.11 Option to Purchase Additional Credits During Reconciliation. If during the Reconciliation Year sufficient Credits exist to meet the demands of all Participants for the Compliance Year, after waivers of Class A Credit sale obligations pursuant to Section 5.10 any Participant desiring to purchase additional Credits for unanticipated needs (*i.e.*, Credits required beyond the Participant's Class A Credit purchases scheduled in the Exchange Compliance Plan) may purchase such Credits from the Nutrient Exchange at the premium price applicable to Participants as specified in Paragraph 5.7(b)(ii) to meet its Watershed General Permit compliance obligations.

5.12 Credit Shortfall Management Procedures.

(a) If insufficient Credits exist to meet the demands of all Participants, Class A Buyers shall have priority access to available Credits to the extent provided in this Paragraph 5.12(a). To the extent of the available Credits, Credits shall first be transferred to Class A Buyers in a quantity sufficient to satisfy either the amount of Credits scheduled as a Class A Credit purchase in the Exchange Compliance Plan for each Class A Buyer or the amount of Credits actually needed by the Class A Buyer to comply with its Delivered WLA, whichever is less for each Class A Buyer (its "Class A Shortfall Distribution Quantity"). Such distribution to Class A Buyers and any subsequent distribution to Participants shall be implemented in accordance with either Paragraph 5.12(b) or Paragraph 5.12(c), as appropriate.

(b) If the distribution of available Credits pursuant to Subparagraph 5.12(a) is insufficient to satisfy all Class A Buyers in the manner and to the extent provided in Subparagraph 5.12(a), the following procedure shall apply: (i) all available Credits will be distributed among the Class A Buyers pro rata in proportion to the Class A Shortfall Distribution Quantity of each, and (ii) all Class A Sellers that failed to generate and transfer all of the Class A Credits that such Sellers had agreed to provide pursuant to Section 4.5 of this Policy and scheduled in the Plan shall make up their allocable share of any remaining shortfall of Class A Credits to the extent required to meet the total Class A Shortfall Distribution Quantity of all Class A Buyers, pro rata in proportion to each such Class A Seller's Class A Credit sales shortfall, by acquiring Credits from outside of the Nutrient Exchange, from the Water Quality Improvement Fund administered by DEQ, or as otherwise allowed under applicable law.

(c) If the distribution of available Credits pursuant to Subparagraph 5.12(a) is sufficient to satisfy all Class A Buyers in the manner and to the extent provided in Subparagraph 5.12(a), any remaining Credits shall be transferred in equal shares to all Participants who desire such Credits; provided, however, that no Participant may purchase more Credits than required for compliance of its Permitted Facility under the Watershed General Permit. Each Participant with a remaining need for Credits thereafter shall be solely responsible for acquiring sufficient

additional Credits from outside of the Nutrient Exchange, from the Water Quality Improvement Fund administered by DEQ, or as otherwise allowed under applicable law.

(d) In the discretion of the Board, the Nutrient Exchange may assist the Participants in acquiring sufficient additional Credits from outside of the Nutrient Exchange, from the Water Quality Improvement Fund administered by DEQ, or as otherwise allowed under applicable law; however, the Nutrient Exchange shall have no liability whatsoever for or related to a Credit shortfall regardless of the cause thereof.

ARTICLE VI MISCELLANEOUS PROVISIONS

6.1 Amendments. This Policy may be amended from time to time in accordance with Article VII of the Bylaws.

6.2 Administrative Obligations. As a condition of continuing participation and without limiting any other provision of this Policy, each Participant shall (a) execute and comply with terms of the Nutrient Credit Services Agreement; (b) pay any applicable fees in a timely manner, and (c) pay its Credit purchase costs as provided herein in a timely manner.

6.3 Compliance with Watershed General Permit; Exchange Not Liable. Each Participant shall remain responsible for ensuring its own compliance with the Watershed General Permit. Neither the Nutrient Exchange, nor its officers, governors (directors), technical consultants or other advisors shall be responsible for assuring an adequate supply of Credits or for any other costs or damages of any kind related in any way to the operation of the Nutrient Exchange, including consequential damages.

6.4 No Waiver. No failure to exercise, and no delay in exercising, any right, power or privilege under this Policy by the Nutrient Exchange shall operate as a waiver, nor shall any single or partial exercise of any right, power or privilege hereunder preclude the exercise of any other right, power or privilege. No waiver by the Nutrient Exchange of any breach of any provision shall be deemed to be a waiver of any preceding or succeeding breach of the same or any other provision, nor shall any waiver be implied from any course of dealing.

ATTACHMENTS

- A Annual Schedule for Plan Update and Reconciliation Processes
- B Credit Price Schedule
- C Facility Data Checklist
- D Compliance Deadline Statement
- E Seller's Credit Exchange Confirmation Form
- F Buyer's Credit Exchange Confirmation Form

ATTACHMENT A

ANNUAL SCHEDULE

<u>Action</u>	<u>Deadline</u>	<u>Party Responsible</u>	<u>Policy Section(s)</u>
Submit Class A Credit Sale/Purchase Obligation Change Requests (OPTIONAL) (only for changes proposed to current Planning Period, not for new Year 5)	Sept. 1	Participant	4.8
Submit Facility Data Checklist (Attachment C) for Plan Update Development	Sept. 1	Participant	4.3
Submit Annual Report to Nutrient Exchange (and DEQ per 9 VAC 25-820-70 Part I F)	Feb. 1	Participant	5.2
Submit Exchange Compliance Plan Update to DEQ	Feb. 1	Exchange	4.1, 4.10
Prepare Initial Reconciliation Report	Apr. 7	Exchange	5.3
Distribute Credit Exchange Confirmation Forms to Sellers	Apr. 15	Exchange	5.4(a)
Distribute Invoices to Buyers	Apr. 15	Exchange	5.4(b)
Submit Credit Exchange Confirmation Forms to Nutrient Exchange	May 15	Sellers	5.4(a)
Invoice Payments Due from Buyers	May 15	Buyers	5.4(b), 5.7
Distribute Signed Credit Exchange Confirmation Forms to Buyers	May 20	Exchange	5.5(b)
Certify Credit Purchases to DEQ (9 VAC 25-820-70 Part J 2 f)	June 1	Buyers	N/A
Prepare Final Reconciliation Report	June 15	Exchange	5.4
Disbursement of Funds to Participants for Credit Sales	Aug. 1	Exchange	5.8

Revision: March 4, 2022

EXCHANGE COMPLIANCE PLAN ANNUAL UPDATE, FEBRUARY 1, 2023

ATTACHMENT B

CREDIT PRICE SCHEDULE

Compliance Year	Reconciliation Year	Class A Credit Purchase Price (\$/Credit)		Price Status (Firm or Proposed)
		<i>Nitrogen</i>	<i>Phosphorus</i>	
2011	2012	\$2.00	\$4.00	Firm
2012	2013	\$2.00	\$4.00	Firm
2013	2014	\$2.15	\$4.30	Firm
2014	2015	\$2.65	\$4.60	Firm
2015	2016	\$3.05	\$4.93	Firm
2016	2017	\$3.50	\$5.27	Firm
2017	2018	\$3.75	\$5.65	Firm
2018	2019	\$3.78	\$5.70	Firm
2019	2020	\$3.82	\$5.76	Firm
2020	2021	\$3.86	\$5.81	Firm
2021	2022	\$3.87	\$5.82	Firm
2022	2023	\$3.94	\$5.93	Firm
2023	2024	\$4.04	\$6.08	Firm
2024	2025	\$4.13	\$6.22	Firm
2025	2026	\$4.21	\$6.34	Firm
2026	2027	\$4.26	\$6.41	Firm
2027	2028	\$4.62	\$6.94	Firm

Revision: June 2022

ATTACHMENT C

FACILITY DATA CHECKLIST FOR 2023 ANNUAL UPDATE

Participant (Owner) Name: _____

Facility Name: _____

Designated Representative (or Alternate) Name: _____

Contact Phone: _____

Contact Email: _____

After completing the checklist, please save the file according to the following format: Participant Name-Facility Name dd-mm-year (where date in file name is date of email submittal) and email back to Cody

(please enter information only in cells with blue text)

*** Note that DEQ has issued updated Delivery Factors and Delivered Wasteload Allocations for CY 2026 and beyond; please reference the updated registration lists provided with the Exchange data kick-off memorandum to complete the checklists below**

NITROGEN Data Checklist	Estimates Beyond 5-year Planning Period			
	New 5th Year	2028	2029	2030
Projected Flow (mgd)	0.00	0.00	0.00	0.00
Projected mg/L (avg. annual)	0.00	0.00	0.00	0.00
End-of-Pipe Pounds	0	0	0	0
Delivery Factor*	0.00	0.00	0.00	0.00
Delivered Pounds	0	0	0	0
Delivered WLA*	0	0	0	0
Expected Credits	0	0	0	0
Adjustments In (Out) ¹	0	0	0	0
Net Expected Credits	0	0	0	0
Class A Sales (Purchases)²	0	0	0	0
<i>Expected Class B Credits</i>	0	0	0	0
Class A Purchase Price (\$/lb)	\$ 4.62			
Facility Class A Purchase Cost⁴	\$ -			

PHOSPHORUS Data Checklist	Estimates Beyond 5-year Planning Period			
	New 5th Year	2028	2029	2030
Projected Flow (mgd) ³	0.00	0.00	0.00	0.00
Projected mg/L (avg. annual)	0.00	0.00	0.00	0.00
End-of-Pipe Pounds	0	0	0	0
Delivery Factor*	0.00	0.00	0.00	0.00
Delivered Pounds	0	0	0	0
Delivered WLA*	0	0	0	0
Expected Credits	0	0	0	0
Adjustments In (Out) ¹	0	0	0	0
Net Expected Credits	0	0	0	0
Class A Sales (Purchases)²	0	0	0	0
<i>Expected Class B Credits</i>	0	0	0	0
Class A Purchase Price (\$/lb)	\$ 6.94			
Facility Class A Purchase Cost⁴	\$ -			

- 1 - Adjustments include Private Exchanges, Bubble Exchanges, or WQIF-held Credits; enter a positive number for receipt of Credits, enter a negative number for Credits given to other facilities (or WQIF-held credits)
- 2 - If showing positive value for Net Expected Credits, enter the number of Class A Credits committed for sale (enter 0 if no Class A Credits are committed for sale).
- 2 - If showing negative value for Net Expected Credits, enter the same value in this row to indicate Class A Credit purchase commitment (consistent with Credit Exchange Policy)
- 3 - Projected flows for the Phosphorus Credit forecast are set equal to those used to generate the Nitrogen Credit forecast
- 4 - Represents the total purchase cost to the facility (regardless of actual Credit need) based on the Credit purchase forecast and corresponding Class A purchase price

ATTACHMENT D

**COMPLIANCE STATEMENT FOR FACILITIES SUBJECT TO REDUCED
WASTELOAD ALLOCATIONS IN CHESAPEAKE BAY TMDL**

Facility (Or Owner Bubble) Name: _____

Basin/Nutrient(s): _____

Compliance Information Required by 9 VAC 25-820-40 A 2 (Check Option 1 or Option 2)

_____ Option 1 (9 VAC 25-820-40 A 2 b): Permittee hereby requests WLA to be effective as of January 1, 2012.

_____ Option 2 (9 VAC 25-820-40 A 2 a): Additional capital project(s) is needed to ensure continued compliance with the WLA through the applicable compliance schedule deadline for the tributary. (Note: Checking Option 2 does not preclude use of credit purchase as means of compliance below.)

If Option 2 is checked, briefly describe need for additional projects:

Implementation Schedule

1. Does permittee anticipate using credit purchase to comply?
_____ NO _____ YES

2. Is permittee implementing a capital project to comply?
_____ NO _____ YES
(If YES, compliance is required as soon as possible but no later than the applicable tributary compliance schedule deadline.)

3. Capital Project Milestone Schedule (Specify estimated date for each milestone. For bubbles, specify facility name(s) and list multiple facility schedules if applicable.)

Engineer selection	_____
PER/CER to DEQ	_____
Plans & Specifications to DEQ	_____
Commence construction	_____
Complete construction	_____
CTO Request to DEQ (POTWs only)	_____

ATTACHMENT E

**SELLER'S CREDIT EXCHANGE CONFIRMATION FORM
COMPLIANCE YEAR 20__**

The execution of this Credit Exchange Confirmation Form confirms a Credit Transfer from the Participant to the Nutrient Exchange pursuant to the Section 5.4(a) of the Credit Exchange Policy of the Nutrient Exchange. Capitalized terms have the meanings provided in the Credit Exchange Policy.

In accordance with the provisions of and subject to the terms and limitations of the Credit Exchange Policy and the Nutrient Credit Services Agreement, the undersigned Participant hereby:

1. Acknowledges receipt of the Initial Reconciliation Report dated _____.
2. Confirms and represents that the Initial Reconciliation Report correctly states for its Permitted Facility(ies) in the Exchange Compliance Plan the amounts of Class A Credits of TN and TP and Class B Credits of TN and TP transferred to the Nutrient Exchange.
3. Acknowledges and confirms the transfer of such Credits in such amounts to the Nutrient Exchange.

To be completed by Participant:

Participant Name (Organization): _____

Designated Representative (Print): _____

Designated Representative Signature: _____

Date: _____

No later than April 15 submit the signed original form to:

Virginia Nutrient Credit Exchange Association, Inc.

ATTN: Secretary

P.O. Box 51

Richmond, VA 23218-0051

ATTACHMENT F

BUYER'S CREDIT EXCHANGE CONFIRMATION FORM

The execution of this Credit Exchange Confirmation Form confirms a Credit Transfer to the Participant from the Nutrient Exchange pursuant to the Section 5.4(b) of the Credit Exchange Policy of the Nutrient Exchange. Capitalized terms have the meanings provided in the Credit Exchange Policy.

In accordance with the provisions of and subject to the terms and limitations of the Credit Exchange Policy and the Nutrient Credit Services Agreement, the Nutrient Exchange hereby transfers to the Participant identified herein the following amounts of Credits of TN and TP:

Participant Name (Organization): _____

River Basin (One Per Form): _____

Compliance Year: _____

TN Credits (Pounds): _____

TP Credits (Pounds): _____

VIRGINIA NUTRIENT CREDIT EXCHANGE ASSOCIATION, INC.

By: _____

Title: _____

Date: _____

For convenience, the next page of this form made be used, subject to DEQ's approval, by the Participant to make its required certification of credit acquisition to DEQ.

**BUYER'S CREDIT EXCHANGE NOTIFICATION TO DEQ
PURSUANT TO PART I J 2 f OF THE GENERAL PERMIT
FOR TOTAL NITROGEN AND TOTAL PHOSPHORUS DISCHARGES AND
NUTRIENT TRADING IN THE CHESAPEAKE BAY WATERSHED IN VIRGINIA
9 VAC 25-820-70**

General Permit Registration No.: _____

Permittee Name: _____

Pursuant to Part I J 2 f of the Watershed General Permit, the above-named Permittee, a Participant in the Virginia Nutrient Credit Exchange Association, Inc., hereby certifies that it has acquired sufficient Credits to satisfy its compliance obligations. The Credit Exchange Confirmation Form on the reverse side of this notification form documents the quantity of Credits of TN and TP transferred from the Nutrient Exchange to the Participant for the Compliance Year.

I certify under penalty of law that this notification and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Principal Executive Officer
or Authorized Agent: _____

Typed or Printed Name: _____

Signature: _____

Area Code/Phone Number: _____

Date: _____

APPENDIX A

DEQ Approval Letters





Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

1111 E. Main Street, Suite 1400, Richmond, Virginia 23219

P.O. Box 1105, Richmond, Virginia 23218

(800) 592-5482 FAX (804) 698-4178

www.deq.virginia.gov

Travis A. Voyles
Acting Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director
(804) 698-4020

September 28, 2022

Mr. James Grandstaff, President
Virginia Nutrient Credit Exchange Association, Inc.
P.O. Box 51
Richmond, VA 23218-0051

RE: Exchange Compliance Plan 2022 Annual Update

Dear Mr. Grandstaff,

The Virginia Nutrient Credit Exchange Association's "Exchange Compliance Plan 2022 Annual Update" has been reviewed, and the document is approved for implementation under the Watershed General Permit.

We look forward to another year of partnering with the Exchange and its membership in pursuit of a restored Chesapeake Bay.

Sincerely,

A handwritten signature in cursive script that reads "Allan Brockenbrough, II".

Allan Brockenbrough, II, P.E.
Manager – Office of VPDES Permits

cc: Mr. Chris Pomeroy, Esq - AquaLaw



Commonwealth of Virginia

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Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director
(804) 698-4000

June 7, 2021

Mr. Frank W. Harksen, Jr.
President
Virginia Nutrient Credit Exchange Association, Inc.
P.O. Box 51
Richmond, VA 23218-0051

RE: Exchange Compliance Plan 2021 Annual Update

Dear Mr. Harksen:

The Virginia Nutrient Credit Exchange Association's, "*Exchange Compliance Plan 2021 Annual Update*" has been reviewed, and the document is approved for implementation under the Watershed General Permit.

We look forward to another year of partnering with the Exchange and its membership in pursuit of a restored Chesapeake Bay.

Sincerely,

A handwritten signature in black ink that reads "Allan Brockenbrough, II".

Allan Brockenbrough, II, P.E.
Manager- Office of VPDES Permits

cc: Mr. Chris Pomeroy, Esq. – AquaLaw



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Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director
(804) 698-4000

February 6, 2020

Mr. Frank W. Harksen, President
Virginia Nutrient Credit Exchange Association, Inc.
P.O. Box 51
Richmond, VA 23218-0051

RE: Exchange Compliance Plan 2020 Annual Update

Dear Mr. Harksen:

We have reviewed the Virginia Nutrient Credit Exchange Association's *Exchange Compliance Plan 2020 Annual Update* and the document is approved for implementation under the Watershed General Permit.

We look forward to another year of partnering with the Exchange and its membership in pursuit of a restored Chesapeake Bay.

Sincerely,

A handwritten signature in cursive script that reads "Allan Brockenbrough, II".

Allan Brockenbrough, II, P.E.
Manager- Office of VPDES Permits

CC: Mr. Chris Pomeroy, Esq. - AquaLaw



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Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director
(804) 698-4000

February 6, 2019

Mr. Frank W. Harksen, President
Virginia Nutrient Credit Exchange Association, Inc.
P.O. Box 51
Richmond, VA 23218-0051

RE: Exchange Compliance Plan 2019 Annual Update

Dear Mr. Harksen:

We have reviewed the Virginia Nutrient Credit Exchange Association's *Exchange Compliance Plan 2019 Annual Update* and the document is approved for implementation under the Watershed General Permit.

We look forward to another year of partnering with the Exchange and its membership in pursuit of a restored Chesapeake Bay.

Sincerely,

A handwritten signature in cursive script, appearing to read "Allan Brockenbrough, II".

Allan Brockenbrough, II, P.E.
Manager- Office of VPDES Permits

CC: Mr. Chris Pomeroy, Esq. - AquaLaw



Commonwealth of Virginia

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Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director
(804) 698-4000

December 13, 2018

Mr. Frank W. Harksen, President
Virginia Nutrient Credit Exchange Association, Inc.
P.O. Box 51
Richmond, VA 23218-0051

RE: Exchange Compliance Plan 2018 Annual Update

Dear Mr. Harksen:

We have reviewed the Virginia Nutrient Credit Exchange Association's *Exchange Compliance Plan 2018 Annual Update* and the document is approved for implementation under the Watershed General Permit.

We look forward to another year of partnering with the Exchange and its membership in pursuit of a restored Chesapeake Bay.

Sincerely,

A handwritten signature in black ink, appearing to read "Allan Brockenbrough, II".

Allan Brockenbrough, II, P.E.
Manager- Office of VPDES Permits

CC: Mr. Chris Pomeroy, Esq. - AquaLaw



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

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Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4020
1-800-592-5482

June 8, 2017

Mr. Frank W. Harksen, President
Virginia Nutrient Credit Exchange Association, Inc.
P.O. Box 51
Richmond, VA 23218-0051

RE: Exchange Compliance Plan 2017 Annual Update

Dear Mr. Harksen:

We have reviewed the Virginia Nutrient Credit Exchange Association's *Exchange Compliance Plan 2017 Annual Update* and the document is approved for implementation under the Watershed General Permit.

The Exchange and its membership are to be congratulated for the continued dedication to meeting and maintaining the Chesapeake Bay TMDL point source nutrient load caps. We look forward to another year of partnering with the Exchange and its membership in pursuit of a restored Chesapeake Bay.

Sincerely,

A handwritten signature in blue ink, reading "Allan Brockenbrough, II".

Allan Brockenbrough, II, P.E.
Manager- Office of VPDES Permits

CC: Mr. Chris Pomeroy, Esq. - AquaLaw



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Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

January 6, 2017

Mr. Frank W. Harksen, President
Virginia Nutrient Credit Exchange Association, Inc.
P.O. Box 51
Richmond, VA 23218-0051

Re: Exchange Compliance Plan 2016 Annual Update

Dear Mr. Harksen:

We have reviewed the Exchange's 2016 Compliance Plan Update and the document is approved for implementation under the watershed general permit. The Exchange and its members are to be congratulated for all the hard work that has made meeting and maintaining the Chesapeake Bay TMDL point source nutrient load caps possible.

We look forward to another year of partnering with the Exchange and its members in pursuit of a restored Chesapeake Bay.

Sincerely,

A handwritten signature in black ink, appearing to read "Allan Brockenbrough, II".

Allan Brockenbrough, II, Manager
Office of Water Permitting

cc: Mr. Chris Pomeroy, Esq. – AquaLaw



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Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

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1-800-592-5482

January 26, 2016

Mr. Frank W. Harksen, President
Virginia Nutrient Credit Exchange Association, Inc.
P.O. Box 51
Richmond, VA 23218-0051

Re: Exchange Compliance Plan 2015 Annual Update

Dear Mr. Harksen:

We have reviewed the Exchange's February 1, 2015 Compliance Plan Update and the document is approved for implementation under the watershed general permit. The Exchange and its members are to be congratulated for all the hard work that has made meeting and maintaining the Chesapeake Bay TMDL point source nutrient load caps possible.

We look forward to another year of partnering with the Exchange and its members in pursuit of a restored Chesapeake Bay.

Sincerely,

A handwritten signature in black ink, appearing to read "Allan Brockenbrough, II".

Allan Brockenbrough, II, Manager
Office of Water Permitting

cc: Mr. Chris Pomeroy, Esq. – AquaLaw



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

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Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4020
1-800-592-5482

December 17, 2014


Mr. Frank W. Harksen, President
Virginia Nutrient Credit Exchange Association, Inc.
P.O. Box 51
Richmond, VA 23218-0051

Re: Exchange Compliance Plan 2014 Annual Update

Dear Mr. Harksen:

We have reviewed the Exchange's January 30, 2014 Compliance Plan Update and the document is approved for implementation under the watershed general permit. The Exchange and its members are to be congratulated for all the hard work that has made meeting and maintaining the Chesapeake Bay TMDL point source nutrient load caps possible. Please note that we will be publishing a Notice of Intended Regulatory Action for the reissuance of the Watershed General Permit in the coming month and will be soliciting participants in that process. We look forward to another year of partnering with the Exchange and its members in pursuit of a restored Chesapeake Bay.

Sincerely,


Frederick K. Cunningham, Manager
Office of Water Permitting

cc: Mr. Chris Pomeroy, Esq. – AquaLaw



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
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Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

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1-800-592-5482

December 18, 2013

Mr. Frank W. Harksen, President
Virginia Nutrient Credit Exchange Association, Inc.
P.O. Box 51
Richmond, VA 23218-0051

Re: Exchange Compliance Plan 2013 Annual Update

Dear Mr. Harksen:

We have reviewed the Exchange's February 1, 2013 Compliance Plan Update and the document is approved for implementation under the watershed general permit. We note that members of The Exchange continue to follow and participate in DEQ's reevaluation of the James River Chlorophyll-a criteria. Upon completion of the study DEQ will be establishing final individual wasteload allocations (WLAs) for the significant James River dischargers. As part of that process we will be performing an engineering costs analysis to help establish cost effective and equitable WLAs. We look forward to collaborating with the James River dischargers on the analysis as the final nutrient reduction goals for the James River Basin are developed.

The Exchange and its members are to be congratulated for all the hard work that has made meeting and maintaining the Chesapeake Bay TMDL point source nutrient load caps possible. We look forward to another year of partnering with the Exchange and its members in pursuit of a restored Chesapeake Bay.

Sincerely,

A handwritten signature in black ink, appearing to read 'Frederick K. Cunningham'.

Frederick K. Cunningham, Manager
Office of Water Permitting

cc: Mr. Chris Pomeroy, Esq. – AquaLaw



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Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

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1-800-592-5482

January 22, 2013

Mr. Frank W. Harksen, President
Virginia Nutrient Credit Exchange Association, Inc.
P.O. Box 51
Richmond, VA 23218-0051

Re: Exchange Compliance Plan 2012 Annual Update

Dear Mr. Harksen:

We have reviewed the Exchange's February 1, 2012 Compliance Plan Update and DEQ gives its approval for implementation of the plan under the watershed general permit. Again in 2012, we expect there to be excess credits available in all basins except the Eastern Shore and that the Eastern Shore shortfall can be covered by surplus credits in the Potomac and Rappahannock basins. The Exchange and its members are to be congratulated for all the hard work that has made meeting and maintaining the Chesapeake Bay TMDL point source nutrient load caps possible.

We look forward to another year of partnering with the Exchange and its members in pursuit of a restored Chesapeake Bay.

Sincerely,

A handwritten signature in black ink that reads 'Frederick K. Cunningham'.

Frederick K. Cunningham
Water Permit Manager
Office of VPDES Permits

cc: Mr. Chris Pomeroy, Esq. – AquaLaw



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

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Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4020
1-800-592-5482

January 26, 2012

Mr. Mark A. Haley, President
Virginia Nutrient Credit Exchange Association, Inc.
P.O. Box 51
Richmond, VA 23218-0051

Re: Exchange Compliance Plan 2011 Annual Update

Dear Mr. Haley:

We have reviewed the Exchange's February 1, 2011 Compliance Plan Update. The Plan is approved with the condition that the items included on the attached summary be addressed as appropriate in either the 2012 Compliance Plan Update due on February 2, 2012 or the Reconciliation for Compliance Year 2011 report due by June 1, 2012.

A preliminary review of the 2011 DMR data indicates that there are excess credits in all basins except the Eastern Shore and that the Eastern Shore shortfall can be covered by surplus credits in the Potomac and Rappahannock basins. The Exchange and its members are to be congratulated for all the hard work that has made meeting the January 1, 2011 compliance deadline possible.

We look forward to another year of partnering with the Exchange and its members in pursuit of a restored Chesapeake Bay.

Sincerely,

A handwritten signature in cursive script, appearing to read "Frederick K. Cunningham".

Frederick K. Cunningham

Water Permit Manager

Office of Water Permits and Compliance Assistance

cc: Mr. Chris Pomeroy, Esq. – AquaLaw

**EXCHANGE COMPLIANCE PLAN 2011 ANNUAL UPDATE:
ITEMS TO BE ADDRESSED PER DEQ CONDITIONAL APPROVAL**

1. Town of Onancock WWTP

For 2011, the Plan indicates that the Town of Onancock WWTP is using its 0.75 MGD WLAs; however, a CTO has not yet been issued for this design flow. Accordingly, the Plan should apply the 0.25 MGD allocation for 2011. This item should be addressed during Reconciliation for Compliance Year 2011. For later years, the 0.75 MGD WLAs may be applied beginning with the first full Compliance Year following issuance of the CTO.

2. Hanover County Bubble

The Plan indicates that a portion of the Totopotomoy WWTP's 10 MGD WLAs is used for trading outside the Hanover County bubble. DEQ expects any credits generated at other County facilities within the bubble (i.e. Doswell) to be used within the bubble before credits associated with Totopotomoy's pending 3 MGD expansion from 7 MGD to 10 MGD are used (i.e.. until the CTO for 10 MGD issued). This equates to 54,820 lbs/yr of TN and 6,396 lbs/yr of TP. This means that the first 54,820 lbs/yr of TN credits and 6,396 lbs/yr of TP credits that are not used within the Hanover bubble are treated as "WQIF-held." Based on the actual 2011 loads, the Reconciliation for Compliance Year 2011 should include:

	Total Aggregate Delivered WLA	2011 Actual Delivered Load	Gross 2011 Credits	Credits Associated with 3 MGD	WQIF Held Credits	Net Hanover Credits
Total N	210,692	67,251	143,441	54,820	54,820	88,621
Total P	25,156	5,508	19,648	6,396	6,396	13,252

3. Alleghany County

The Lower Jackson WWTP is shown as having a delivered TN WLA of 19,187 lbs/yr when the actual allocation is 8,223 lbs/yr. Likewise the TP delivered WLA is shown as 5,330 lbs/yr rather than 2,284 lbs/yr. Presumably the difference reflects the transfer of the entire Clifton Forge WLA to Lower Jackson WWTP. However the transfer of the Clifton Forge WLA will not occur until completion of the public notice period in February 2012. Therefore, it would be more appropriate to address this item as a Private Exchange in the Reconciliation for Compliance Year 2011.

Additionally, while the WLAs for Lower Jackson WWTP and Clifton Forge WWTP are based on a total capacity of 3.5 MGD, at this time only 2.6 MGD has been constructed. This equates to WQIF held credits of 4,934 delivered lbs/yr TN and 1,371 delivered lbs/yr TP. The WQIF held credits are properly indicated on the TN ledger however they are not included on the TP ledger. WQIF held credits should be accounted for in the Reconciliation for Compliance Year 2011 in a similar manner as with the Hanover County Bubble discussed above.

4. **Town of Culpeper WWTP**

The Plan should be updated to reflect consolidation of the Culpeper County Mountain Run 1.5 MGD WLAs with the WLAs of the expanded 6.0 MGD Town of Culpeper WWTP.

5. **Spotsylvania County Bubble**

While the bubble WLAs are correct, individual WLAs should be updated to reflect the transfer of 1.4 MGD of WLAs from FMC WWTP to Massaponax WWTP.



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

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Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4020
1-800-592-5482

November 2, 2010

Mr. Mark A. Haley, President
Virginia Nutrient Credit Exchange Association, Inc.
P.O. Box 51
Richmond, VA 23218-0051

Re: Exchange Compliance Plan 2010 Annual Update

Dear Mr. Haley:

We have reviewed the Exchange's February 1, 2010 Compliance Plan Update and DEQ gives its approval for implementation of the plan under the watershed general permit. With numerous upgrades now close to completion, we look forward to compliance with the Total Nitrogen and Total Phosphorus wasteload allocations in 2011. DEQ will be distributing final Discharge Monitoring Reports to all registered facilities early next year. The Exchange and its members are to be congratulated for all the hard work that has made meeting this aggressive deadline possible.

We look forward to another year of partnering with the Exchange and its members in pursuit of a restored Chesapeake Bay.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Frederick K. Cunningham'.

Frederick K. Cunningham

Water Permit Manager

Office of Water Permits and Compliance Assistance

cc: Mr. Chris Pomeroy, Esq. - AquaLaw



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

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Mailing address: P.O. Box 1105, Richmond, Virginia 23218

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www.deq.virginia.gov

L. Preston Bryant, Jr.
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

September 24, 2009

Mr. Mark A. Haley, President
Virginia Nutrient Credit Exchange Association, Inc.
P.O. Box 51
Richmond, VA 23218-0051

Re: Exchange Compliance Plan 2009 Annual Update

Dear Mr. Haley:

We have reviewed the Exchange's February 1, 2009 Compliance Plan Update and DEQ gives its approval for implementation of the plan under the watershed general permit. We remain very pleased by the progress being made by the organization and its members. Point source Total Nitrogen and Total Phosphorus delivered loads decreased in each of the five permitted watersheds in 2008.

We share your concern with the lack of trading partners on the Eastern Shore and look forward to working with the Exchange in the next year to address this issue. Finally, our staff has had some discussions with you concerning a few survey responses that appear to be out of date by the time they are compiled and submitted. A few such situations may be inevitable as many facilities have struggled with upgrade decisions in the middle of the economic downturn. We are currently reviewing WQIF records to provide you with a list of apparent discrepancies for use in reviewing the next round of survey responses.

We look forward to another year of partnering with the Exchange and its members in pursuit of a restored Chesapeake Bay.

Sincerely,

A handwritten signature in cursive script, reading "Frederick K. Cunningham".

Frederick K. Cunningham
Water Permit Manager

Office of Water Permits and Compliance Assistance

Cc: Mr. Chris Pomeroy, Esq. - AquaLaw



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
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Mailing address: P.O. Box 1105, Richmond, Virginia 23218
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www.deq.virginia.gov

L. Preston Bryant, Jr.
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

April 25, 2008

Mr. Mark A. Haley, President
Virginia Nutrient Credit Exchange Association, Inc.
P.O. Box 51
Richmond, VA 23218-0051

Re: Exchange Compliance Plan 2008 Annual Update

Dear Mr. Haley: *Mark*

We have reviewed the Exchange's February 1, 2008 Compliance Plan Update and DEQ gives its approval for implementation of the plan under the watershed general permit. We are very pleased by the progress being made by the organization and its members. The growth in membership has been impressive and we expect that participation will continue to grow as the January 1, 2011 deadline approaches and more facilities recognize the benefits of membership.

Equally impressive is the reduction in load made in some basins as more and more facilities optimize their operations. The Exchange members managed to operate below their combined TN wasteload allocations in the Potomac and Rappahannock Basins and below their combined TP wasteload allocations in the York and (Lower) James Basins; however we must recognize 2007 was a dry year.

We will continue to monitor and evaluate progress in each basin as noted in my September 7, 2007 letter and Section 7.1 of the annual update. Between the annual compliance plan updates, the WQIF annual reports and the annual load reports we are confident that we will stay on top of this issue and be able to make any schedule adjustments necessary. Also as noted in my September 7, 2007 letter, the conditions in Section 7.2 on the compliance plan do not dictate the terms of DEQ's enforcement policy. However, please rest assured that DEQ too has much invested in the watershed general permit and intends to work cooperatively with all stakeholders to ensure a fair and successful program.

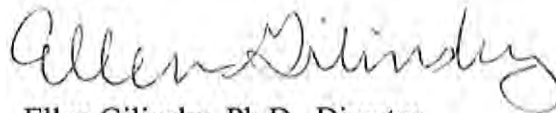
With respect to the Eastern Shore Basin, we share your concern that the basin is not large enough to provide ample trading partners. As you know a legislative change would be required to open up the Eastern Shore market to include purchases from the Potomac and Rappahannock Basins.

Mr. Mark A. Haley
April 25, 2007
Page 2 of 2

We have noted in recent weeks that as WQIF agreements and VPDES permits are negotiated, a few facilities have backed off of the upgrade plans provided to the Exchange. So far none of these changes appear to affect the basin compliance goals. We intend to track these discrepancies to ensure that they do not have an adverse impact on basin compliance as a whole and will continue to instruct such facilities to keep the Exchange informed of any changes in their plans.

In closing, we continue to be encouraged by the progress in the trading program and by the cooperation and efforts of the Exchange and its members in particular. We look forward to another year of this partnership and progress towards a restored Chesapeake Bay.

Sincerely,

A handwritten signature in cursive script that reads "Ellen Gilinsky".

Ellen Gilinsky, Ph.D., Director
Division of Water Quality

Cc: Mr. Chris Pomeroy, Esq. - AquaLaw



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

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L. Preston Bryant, Jr.
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

September 7, 2007

Mr. Mark Haley
President, Board of Governors
Virginia Nutrient Credit Exchange Association, Inc.
P.O. Box 51
Richmond, VA 23218-0051

RE: Exchange Compliance Plan, July 31, 2007

Dear Mr. Haley:

We have reviewed the Exchange's July 31, 2007 Compliance Plan and your letter of July 30, 2007 and are very pleased by the progress being made by the Exchange members. Especially encouraging are the projections that expected TN and TP loads will be below the aggregate wasteload allocations in all five basins by 2011.

After a careful review of all of the individual compliance plans and the Exchange's compliance plan, DEQ staff recommends that the existing 2011 compliance deadline be retained at this time for both parameters in all five basins. The Class A/Class B trading system adopted by the Exchange has served as an excellent tool for managing trades among its members. However, using only Class A pledges as the basis for determining a river basin compliance date appears inconsistent with the permit condition of achieving compliance "as soon as possible". In establishing "as soon as possible" compliance dates, DEQ must rely on the completion of projects that allow limits to be met and not delay the regulatory deadline due to a reluctance to sign Class A pledges.


We share your concern with the completion of so many projects on such a tight timeline. However, at this early date it is not possible to determine how quickly individual construction projects will proceed and what the actual capabilities of the upgraded facilities will be. For instance, after a year of progress, the performance of Exchange members was significantly better than what was projected for these facilities in the April 2006 draft report. Future annual compliance plan updates and DEQ's semi-annual WQIF progress reports will add further clarity to these projections and will be used along with the scheduling factors in the Virginia Code and the "as soon as possible" criteria to evaluate the need for basin schedule extensions. Accordingly, we believe that The Exchange's proposed footnote for the watershed general permit compliance table is neither necessary nor does it provide the public or EPA with an

opportunity to participate in regulatory changes to the permit schedules. Should it prove necessary, DEQ will initiate amendment to the permit under the Administrative Process Act to make appropriate revisions to the schedule.

We also share your desire for DEQ to provide a safe regulatory environment for participating owners to commit to buy or sell credits. The very existence of the trading program represents a significant reduction in risk for the permittees. This risk is further reduced by the ability to purchase compliance credits from the WQIF. DEQ has proposed to incorporate into the WQIF cost-control guidelines a provision that credits generated via WQIF-funded upgrades would be made available to other permittees by the facility generating the credits. As suggested in your July 30th letter, we are also pursuing a means of sustaining a pool of WQIF-funded BMP projects that will serve as a source of WQIF credits in each basin.

We greatly appreciate the Exchange's efforts in encouraging and facilitating the cooperation of over 100 facilities to reduce nutrient loads to the Chesapeake Bay, and look forward to our continued working relationship with your organization.

Sincerely,

A handwritten signature in cursive script, appearing to read "Ellen Gilinsky".

Ellen Gilinsky, Ph.D., Director
Division of Water Quality

APPENDIX B

Form of Nutrient Credit Services Agreement



NUTRIENT CREDIT SERVICES AGREEMENT

THIS NUTRIENT CREDIT SERVICES AGREEMENT (this “Agreement”) made by and between the Virginia Nutrient Credit Exchange Association, Inc., (the “Nutrient Exchange”) and the undersigned owner or operator of a Permitted Facility included in the Exchange Compliance Plan (the “Participant”).

BACKGROUND

A. The Participant owns or operates a certain facility or facilities regulated under the General Virginia Pollutant Discharge Elimination System Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia, 9 VAC 25-820, issued by the State Water Control Board and Department of Environmental Quality (collectively “DEQ”) for a five-year permit term beginning January 1, 2007 or as hereafter modified or reissued from time to time (the “Watershed General Permit”).

B. The Nutrient Exchange is a Virginia non-stock corporation comprised of permittees subject to the Watershed General Permit and is authorized by section 62.1-44.19:17 of the Code of Virginia to assist permittees with Watershed General Permit compliance and to facilitate voluntary nutrient credit trading.

C. Among other requirements, the Watershed General Permit (9 VAC 25-820-70, Part I B) imposes limitations on the discharge of two nutrients, total nitrogen and total phosphorus, from the Participant’s Permitted Facility(ies), and requires the Participant to submit to DEQ by August 1, 2007 and each February 1 thereafter, either individually or through the Nutrient Exchange, a compliance plan (9 VAC 25-820-40 and -70 Part I D) identifying how its Permitted Facility(ies) will comply with such limitations.

D. On behalf of the Participants and based on the data provided and decisions made by the individual Participants, the Nutrient Exchange has developed, and intends to maintain by means of the Watershed General Permit-required annual Plan Updates, a compliance plan for each of Virginia’s five major river basins (collectively the “Exchange Compliance Plan”) to assist the Participants in complying with the Watershed General Permit compliance plan requirement.

E. In addition, Participants in the Exchange Compliance Plan have the option of exchanging nutrient Credits. The Exchange Compliance Plan identifies firm commitments for the purchase and sale of Class A Credits at the request of numerous individual Participants who have elected to participate as Class A Buyers or Class A Sellers, and further establishes a market for and provides all Participants with the option of later purchasing available Class B Credits on more flexible terms to assist in maintaining compliance during unanticipated circumstances.

F. The Nutrient Exchange serves as the central trading exchange to facilitate the execution and reporting of these voluntary nutrient Credit Exchanges by and among its Participants in accordance with its Credit Exchange Policy, the Watershed General Permit and,

when applicable, Water Quality Improvement Fund Grant Agreements entered into by and between a Participant and DEQ.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants and conditions herein, the parties hereto agree as follows:

1. Annual Compliance Plan Updates. The Nutrient Exchange agrees to update the Exchange Compliance Plan annually and submit such Plan Update to DEQ for approval on or before the deadline (currently February 1 of each year) specified in Part I D of the Watershed General Permit. The Plan Update shall include updated information as provided by the Participant in accordance with the Credit Exchange Policy for its Permitted Facility(ies), including revisions to relevant facility-specific information. The Participant shall assist the Nutrient Exchange in the development of the Plan Update by providing information reasonably requested by the Nutrient Exchange in accordance with an annual Plan Update schedule to be established by the Nutrient Exchange.

2. Annual Reports. The Participant agrees to submit to the Nutrient Exchange a copy of the Participant's annual report to DEQ required by Part I F of the Watershed General Permit (9 VAC 25-820-70), and such other information as may be reasonably requested by the Nutrient Exchange to assist in the annual Reconciliation of Credit Exchanges for each Compliance Year.

3. Annual Credit Exchange Reconciliation. The Nutrient Exchange agrees to conduct an annual Reconciliation process for the timely execution of the Credit Exchanges elected by the Participants as specified in the Exchange Compliance Plan. The Participant agrees to implement any previously elected Class A Credit or Class B Credit Exchanges in accordance with the Credit Exchange Policy.

4. Incorporation of Credit Exchange Policy. The provisions of the Credit Exchange Policy are hereby incorporated as if such provisions were fully set out herein. For convenient reference, a copy of the current version of the Policy is attached hereto.

GENERAL PROVISIONS

5. Definitions. Terms not specifically defined herein shall have the definitions provided in the Credit Exchange Policy.

6. Term. The Agreement shall be in effect once signed by both parties and shall have an initial term through and including June 30, 2013. This term is coincident with the five year Planning Period covered by the current Exchange Compliance Plan (January 1, 2008 through December 31, 2012) plus a six month period (January 1, 2013 through June 30, 2013) for the Reconciliation process for the fifth Compliance Year (2012). Such term shall automatically extend by one year, without notice, upon submittal to DEQ of each annual update of the Exchange Compliance Plan beginning with the 2009 Annual Update due February 1, 2009,

unless (a) the Participant withdraws as provided herein or (b) the Nutrient Exchange provides notice to the Participant prior to completion of the Plan Update that it will not extend the term of this Agreement.

7. Amendments to Credit Exchange Policy and Exchange Compliance Plan. The Nutrient Exchange and the Participant acknowledge that the Credit Exchange Policy and the Exchange Compliance Plan may be amended from time to time as a result of changes desired by the Participants, the Exchange Board of Governors or DEQ, possible changes to law, and other factors. It is agreed that changes thereto shall become effective upon notice to the Participants or upon a later effective date as may be specified in such notice.

8. Withdrawal. The Participant shall have the following rights to withdraw from the Nutrient Exchange and the Exchange Compliance Plan.

(a) Withdrawal Upon End of Current Term. This Agreement shall not automatically extend for an additional year upon the Plan Update as provided in Paragraph 6 if the Participant elects to withdraw by providing notice of such election to the Nutrient Exchange at least four years and nine months (57 months) prior to the expiration of the term of this Agreement or before any later date as the Nutrient Exchange may specify during the Plan Update process. In the event of such withdrawal, the Nutrient Exchange shall omit the Participant and its Permitted Facilities from the additional Compliance Year (the new Year 5) added to the Plan during the Plan Update process for that year. For example, if a Participant in the Exchange Compliance Plan for the five year Planning Period covering January 1, 2008 through December 31, 2012 desires to withdraw and not extend this Agreement for an additional year (*i.e.*, through December 31, 2013), the Participant shall provide its withdrawal notice on or before October 1, 2008.

(b) Withdrawal During Term in Response to Policy or Plan Amendment. Notwithstanding any other provision of this Agreement, if any change to the Credit Exchange Policy or the Exchange Compliance Plan pursuant to Paragraph 7 would result in a material adverse effect on the Participant within the five year Planning Period covered by the Exchange Compliance Plan then in effect, the Participant may withdraw from the Agreement by written notice delivered to the Nutrient Exchange within sixty (60) days of such Participant's notice of the change, unless the Nutrient Exchange in its discretion further amends the Credit Exchange Policy or Exchange Compliance Plan within ninety (90) days of receiving such notice in a manner that eliminates the material adverse effect. Such withdrawal shall be effective January 1 of the Compliance Year for which the material adverse effect would first otherwise occur. The Participant shall participate in the Reconciliation and execute all Credit Exchanges planned for each Compliance Year prior to the effective date of withdrawal and pay all Credit costs or receive Credit revenue through and including such Compliance Year. In addition, the Participant shall continue to pay all applicable fees or dues in the ordinary course through the effective date of such withdrawal.

(c) Withdrawal During Term for Other Reasons. In addition to the right to withdraw during the term of this Agreement as provided in Subparagraph 8(b), the Participant shall have the right to withdraw during the term of this Agreement through the Plan Update

process if the following conditions are satisfied: (i) the Board determines that the Participant's withdrawal, alone or in combination with other modification requests, would not have a material adverse effect during the Planning Period on the Nutrient Exchange or any non-withdrawing Participants, (ii) the Participant is and agrees to remain current on all fees and Credit purchase costs as are due or may come due through and including the time of completion of the Reconciliation process for the last Compliance Year for which its Permitted Facilities are covered by the Plan, and (iii) the Participant agrees to cooperate fully in the Reconciliation for the last Compliance Year for which its Permitted Facilities are covered by the Plan. Such withdrawal shall be effective subject to the foregoing conditions upon submittal of the Plan Update by the Nutrient Exchange to DEQ as provided in Paragraph 1 above.

9. Annual Fee. The Nutrient Exchange's obligations under this Agreement shall be contingent on the continued adequate funding of the Nutrient Exchange through fees applicable to and paid by the Participants. Following execution of this Agreement by both parties and by approximately November 2008, the Nutrient Exchange shall issue an invoice to the Participant in the amount shown on Attachment A under the column labeled "Nov. 2008." Such invoice shall also include the amount, if any, invoiced by the Nutrient Exchange to the Participant in approximately March 2008 (as shown under the column labeled "Mar. 2008") but not yet paid by the Participant. The Participant agrees to pay such invoice within forty-five (45) days of the invoice date. Beginning with the 2009 Plan Update, following submittal of each annual Plan Update to DEQ the Nutrient Exchange shall issue an invoice to the Participant for the annual fee. The Participant shall pay such invoice within forty-five (45) days of the invoice date or by July 31 of the calendar year in which the invoice is issued, whichever is later. The Nutrient Exchange agrees to periodically update such schedule to add the fee amount for future years and in so doing intends to keep the annual fees specified therein to the lowest level sufficient for proper operation in the discretion of the Board. The Board anticipates establishing annual fees associated with and payable after the 2009, 2010, 2011 and 2012 Plan Updates, respectively, at less than a maximum of twice the annual fee currently scheduled on Attachment A for Nov. 2008. If an annual fee associated with any Plan Update through and including the 2012 Plan Update were to exceed this maximum anticipated fee, in that event the Participant may withdraw in accordance with the same procedures provided in Paragraph 8(b) of this Agreement. For the 2009 Plan Update, the Board's current estimate is that the annual fee will be the same amount as the Nov. 2008 fee shown on Attachment A. Upon receipt of a written request from the Participant, the Nutrient Exchange agrees to provide the Participant with an accounting of its receipts and disbursements for the two fiscal years immediately preceding the fiscal year in which the written request is received. The Participant agrees to pay applicable fees when due. Failure to pay any annual fee invoice within forty-five (45) days shall result in an administrative charge of one hundred dollars (\$100). In the event the Participant fails to pay any annual fee invoice within ninety (90) days of the invoice date, without limiting any other remedies, the Board in its discretion may terminate this Agreement and eliminate the Participant's Permitted Facilities from the Plan. Such termination shall not relieve the Participant of its obligation to pay any amounts due prior to the date of termination.

10. Waiver of Liability of the Nutrient Exchange. In recognition of the benefits derived by Participants and the nature of the Nutrient Exchange, to the extent permitted by law the Participant waives any causes of action and rights of recovery for liability of the Nutrient

Exchange and its Board of Governors, officers, employees, consultants and other advisors, for any losses or damage to the Participant, other than due to the gross negligence or intentional misconduct thereof.

11. Authorization of Signature. The Participant and the Nutrient Exchange each represent and warrant that its execution of this Agreement by the undersigned is fully authorized and validly performed.

12. No Partnership. Nothing contained in this Agreement shall create any partnership, trust, or joint venture with regard to the Nutrient Exchange and any or all Participants.

13. Third Party Beneficiaries. This Agreement is solely for the benefit of the Nutrient Exchange and its Participants and their permitted successors and assignees and shall not confer any rights or benefits on any other person.

14. Notices. Notices pursuant to Paragraphs 6 and 8 shall be delivered at the following address by U.S. Mail, certified with return receipt, and shall be deemed given when received (or delivery is refused) by the party to whom such notice or communication is directed. A party may change its address for such notice in writing as provided herein.

If to the Nutrient Exchange: Virginia Nutrient Credit Exchange Association, Inc.
ATTN: Secretary
P.O. Box 51
Richmond, Virginia 23218-0051

If to the Participant: _____

with a copy to the Participant's Designated Representative.

Any other notices and communications pursuant to this Agreement shall be made by or to the Participant's Designated Representative, or alternate when appropriate, each as designated the Participant from time to time in accordance with the Bylaws of the Nutrient Exchange.

15. Netting of Payments. The Nutrient Exchange may, but shall not be obligated to, net any payments to the Participant for such Participant's sales of Credits or otherwise with any fees past due, other authorized charges past due, or charges for Credits purchased past due to the Nutrient Exchange.

16. Integration. This Agreement (including the Credit Exchange Policy incorporated herein by reference) contains the entire agreement between the Nutrient Exchange and the Participant as to the subject matter hereof and supercedes all previous written and oral negotiations, commitments, proposals and writings, including those of counsel. Except as

otherwise provided herein or in the Credit Exchange Policy, no amendments may be made except by a writing signed by the parties.

17. Change in Law. Other than as specifically provided in the Credit Exchange Policy, in the event of any material change in applicable laws or regulations the parties shall work together to amend the Agreement to conform to such change in law, while maintaining as closely as practical the provisions and intent of this Agreement.

18. Governing Law; Severability. This Agreement shall be construed in accordance with and governed for all purposes by the laws of the Commonwealth of Virginia. If any term or provision of this Agreement, the deletion of which would not adversely affect the receipt of a material benefit by either party hereunder, shall be held by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Agreement shall not be affected thereby and each other term and provision of this Agreement shall remain valid and enforceable to the fullest extent permitted by law. It is the intent of the parties to this Agreement, and the parties agree, that in lieu of any term or provision of this Agreement that is illegal, invalid or unenforceable, the parties in good faith shall supply as part of this Agreement a legal, valid and enforceable term or provision as similar to such illegal, invalid or unenforceable term or provision as may be possible.

IN WITNESS WHEREOF, the parties have caused the execution of this Agreement as of the date first written above.

**VIRGINIA NUTRIENT CREDIT EXCHANGE
ASSOCIATION, INC.**

By: _____

Name: _____

Title: _____

Date: _____

PARTICIPANT NAME

By: _____

Name: _____

Title: _____

Date: _____

ATTACHMENT A

ANNUAL FEE SCHEDULE

<u>Class</u>	<u>Participant's Total TN WLA (lbs/yr)</u>	<u>Mar. 2008</u>	<u>Nov. 2008</u>
Very Large	>400,000	\$1,750	\$3,500
Large	400,000- 75,001	\$1,250	\$2,500
Standard	75,000- 15,001	\$750	\$1,500
Small	≤15,000	\$250	\$500

**ANNUAL FEE SCHEDULE UPDATE
(ISSUED: MAY 26, 2010)**

<u>Class</u>	<u>Participant's Total TN WLA (discharge lbs/yr)</u>	<u>Annual Fee</u>
Very Large	>400,000	\$4,250
Large	400,000-75,001	\$3,125
Standard	75,000-15,001	\$1,875
Small	≤15,000	\$625

APPENDIX C

Water Quality Improvement Fund



This appendix provides an update on funding from the Water Quality Improvement Fund (“WQIF”) for eligible point source nutrient removal technology upgrades.

In 2019, legislation (HB 1822) was enacted to establish an annual WQIF Needs Assessment to be performed by DEQ in collaboration with the Virginia Association of Municipal Wastewater Agencies (VAMWA). DEQ produced the first WQIF Needs Assessment Report in 2019. That report demonstrated the need for an additional appropriation to the Point Source portion of the WQIF every year since.

In the 2020 Session, the General Assembly authorized bonds in the amount of \$50 million and appropriated that \$50 million at Item C-70 C.3. of State Budget. This Point Source WQIF funding was the first major appropriation since 2016.

In 2021 Special Session I, the General Assembly appropriated \$100 million for projects identified in the newly-established Enhanced Nutrient Removal (ENR) Certainty Program (Item C-70.50), bringing total available funding to approximately \$150 million. The additional \$100 million was comprised of \$50 million in bond proceeds and \$50 million from the general fund, all for capital costs incurred for the design and installation of nutrient removal technology. Together with the 2020 appropriation, this brought recent appropriations up to a total of \$150 million.

In 2021 Special Session II (August 2021), the General Assembly approved an additional \$100 million (HB 7001, Para. B.2.k.4) in general funds from the American Rescue Plan Act for ENR Certainty Program projects, subject to earmarks of unspecified amounts for projects in the City of Petersburg and Town of Pound. DEQ estimates the earmarks at roughly \$50 million, meaning the other \$50 million would be available for ENR Certainty Program projects.

Together, the above appropriations supply approximately \$200 million in funding for reimbursing the costs of nutrient removal projects, of which \$150 million is earmarked specifically for projects included in the ENR Certainty Program.

Through the completed 2022 WQIF Needs Assessment, DEQ has identified the need for significant additional WQIF appropriations to implement point source nutrient removal projects, including those necessary for the Exchange Compliance Plan.

More specifically, DEQ has reported a need for an additional \$237 million through June 30, 2024. As of the date of this Exchange Compliance Plan, the General Assembly is considering the Governor’s proposed budget amendment to add \$237 million to the existing 2022 - 2024 State Budget. In addition, further appropriations will be necessary to meet the State’s share of WQIF eligible projects beyond June 30, 2024.

APPENDIX D

DEQ Director Letter





COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

Mailing address: P.O. Box 1105, Richmond, Virginia 23218

Fax (804) 698-4500 TDD (804) 698-4021

www.deq.virginia.gov

L. Preston Bryant, Jr.
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

September 12, 2007

Mr. Mark Haley
President, Board of Governors
Virginia Nutrient Credit Exchange Association, Inc.
P.O. Box 51
Richmond, VA 23218-0051

RE: Exchange Compliance Plan

Dear Mr. Haley:

I understand that the Exchange's July 31, 2007, Compliance Plan projects that expected Total Nitrogen and Total Phosphorus loads will be below the aggregate wasteload allocations in all five basins by 2011. You and the entire association are to be congratulated for your diligence in evaluating the best opportunities for upgrades and trading in each of the Chesapeake Bay basins so that we can retain the existing January 1, 2011, compliance date in the watershed general permit for both nitrogen and phosphorus. This is a significant step for the Exchange, the watershed general permit and trading program, and for the Commonwealth in our continued efforts to clean up the Bay and illustrates your commitment to being a strong partner in the solution.

We know it will be a challenge to complete so many projects on such a tight timeline, and we remain committed to working with you to shepherd these projects to completion. In the meantime, we appreciate the Exchange's efforts to encourage and facilitate the cooperation of over 100 facilities to reduce nutrient loads to the Chesapeake Bay.

Thank you for your commitment to maintaining healthy waters within Virginia.

Sincerely,

A handwritten signature in black ink, appearing to read "David K. Paylor", written over a horizontal line.

David K. Paylor

DKP:d1m