

Exchange Compliance Plan 2012 Annual Update



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Introduction



1.1 Purpose

This Chesapeake Bay Nutrient Credit Exchange Program Compliance Plan 2012 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 2011 Annual Update, which was submitted by The Exchange to the Virginia Department of Environmental Quality (“DEQ”) on January 31, 2011. 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 2008, 2009, 2010, and 2011 were all submitted to DEQ in a timely manner and were subsequently approved by DEQ. The DEQ approval letters for previous Annual Updates 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.

The initial focus of the Exchange Compliance Plan is 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 is achieved through this construction program, the focus shifts to maintaining compliance through an ongoing program of additional facility upgrades over time.

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 its general permit as provided in the 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) (the “General Permit”), which states:

Annual update of compliance plan. Every owner or operator 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 for the facility to achieve and maintain compliance with applicable total nitrogen and phosphorus individual waste load allocations on the registration list and aggregate waste load allocations in Part I C 3. Compliance plans for 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 Water Quality Improvement Fund, to achieve compliance with the individual and combined waste load allocations in each tributary. Compliance plans for expansions or new discharges for 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 waste load 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 non-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.

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 York River basin and a portion of the Lower 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 either by the past agreement of The Exchange and DEQ or 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 uses of Credits; detailed trading ledgers for projections; and The Exchange's Credit Exchange Policy (including its Credit Price Schedule) (Section 8).

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, Credit generation 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 either Class A or Class B Credits from upstream facilities. In the future, Class A Credit exchanges may be specified in a plan update. Similarly, Class B 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 James 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 which compare the Declared Load to the Delivered WLA for all Participants for an 8-year period (currently, through the year 2019). On January 1, 2011 mass load permit limits for *all* significant facilities (including Buyers) took effect. Individual facilities may have had earlier compliance deadlines based on their own ability to achieve compliance with their individual WLAs earlier. In addition, 2011 was the first Compliance Year for which The Exchange is operating its Exchange Program, including execution of Credit exchanges in the immediately following year known as the Reconciliation Year.

The Plan Summary also illustrates Expected Load, which is a forecast of the collective load of all Participants. In contrast to the Declared Load line, the Expected Load line intentionally ignores market and other factors manifested in the Class A Credit decisions of individual owners to take into account all Credits projected to be available (i.e., both Class A and Class B 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 are willing to make. However, it does illustrate projected aggregate performance and generally indicates favorable nutrient reduction trends.

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. Red bars in the same location indicate a Participant's Credits that are held in the WQIF in accordance with 9 VAC 25-820-70 Part I.J.2.e., pending project completion.

Trading Ledger

The final pages of each basin's nutrient section present annual trading ledgers and capital project information for 2012 through 2016. 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: Spotsylvania County and Town of Washington (Rappahannock/Phosphorus); RockTenn and White Birch-Bear Island (York/Phosphorus); Honeywell-Hopewell and Hopewell RWTF (James/Nitrogen); Chesterfield County and Dominion-Chesterfield (James/Phosphorus); and HRSD and City of Suffolk (James/Phosphorus).

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. The former "Compliance Deadline Statements" are no longer provided now that the initial compliance deadline of January 1, 2011 has passed.

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

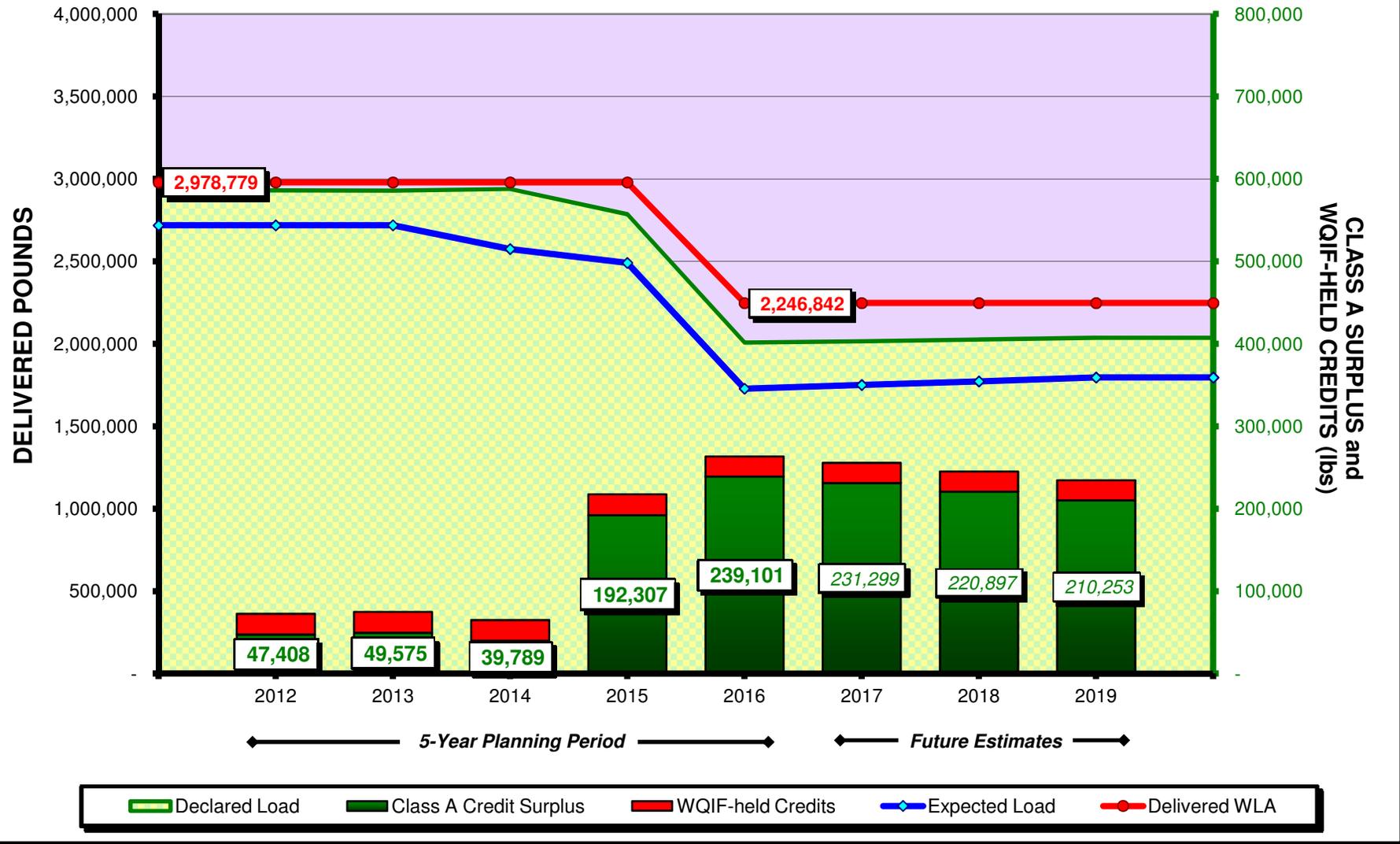
governed by the Nutrient Credit Services Agreement between The Exchange and each Participant. A copy of the agreement is provided as Appendix B hereto. Consequently, the data contained in the Facility Summaries and Compliance Statements was collected approximately five months in advance of submittal 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 2013 Annual Update.

SECTION 2

Potomac-Shenandoah River Basin Exchange Compliance Plan



Nitrogen Compliance: Potomac Basin



POTOMAC Basin: Nitrogen Credit Ledger												
Compliance Year:	2012	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** (expected)	
								PRICE:	\$ 1.29	\$ 2.00	\$ 0.13	
The Exchange (group)	2,978,779	2,718,399	260,380	-	(7,972)	(25,278)	227,130		169,657	(122,249)	179,722	
ACSA-Fishersville	21,441	12,757	8,684	-	-	-	8,684		4,342	-	4,342	
ACSA-Greenville	6,265	1,278	4,987	(4,987)	-	-	-		-	-	-	
ACSA-Harriston	2,506	828	1,678	(1,678)	-	-	-		-	-	-	
ACSA-Middle River	36,449	27,444	9,005	-	-	-	9,005		4,503	-	4,502	
ACSA-Mt. Sidney	3,759	3,743	16	(16)	-	-	-		-	-	-	
ACSA-Stuarts Draft	21,441	9,220	12,221	(9,871)	-	-	2,350		1,175	-	1,175	
ACSA-Vesper View	2,506	1,219	1,287	(1,287)	-	-	-		-	-	-	
ACSA-Weyers Cave	2,680	20,519	(17,839)	17,839	-	-	-		-	-	-	
Alexandria S.A.	493,381	493,381	-	-	-	-	-		-	-	-	
Berryville	5,713	16,732	(11,019)	-	-	-	(11,019)		-	(11,019)	-	
Broadway Regional	19,752	15,855	3,897	-	-	-	3,897		-	-	3,897	
Dale Service Corp #1	42,029	36,090	5,939	-	-	-	5,939		-	-	5,939	
Dale Service Corp #8	42,029	36,090	5,939	-	-	-	5,939		-	-	5,939	
Fairfax Co-Noman Cole	612,158	612,158	-	-	-	-	-		-	-	-	
FCWSA-Vint Hill	5,034	1,590	3,444	-	-	-	3,444		-	-	3,444	
Front Royal	32,648	96,129	(63,481)	-	-	-	(63,481)		-	(63,481)	-	
FWSA-Opequon	90,170	50,438	39,732	-	-	-	39,732		-	-	39,732	
FWSA-Parkins Mill	45,074	18,210	26,864	-	-	-	26,864		-	-	26,864	
HRRSA-North River	111,492	70,272	41,220	-	-	-	41,220		41,220	-	-	
KGCSA-Dahlgren S.D.	9,137	8,649	488	(488)	-	-	-		-	-	-	
KGCSA-Fairview Beach	1,827	914	913	(913)	-	-	-		-	-	-	
KGCSA-Purkins Corner	1,096	7,614	(6,518)	1,401	-	-	(5,117)		-	(5,117)	-	
Leesburg	101,113	57,028	44,085	-	-	(25,278)	18,807		-	-	18,807	
Loudoun Water- Broad Run	111,224	50,253	60,971	-	-	-	60,971		54,874	-	6,097	
Luray	8,576	3,417	5,159	-	(5,159)	-	-		-	-	-	
Massanutten PSC	8,040	10,078	(2,038)	-	-	-	(2,038)		-	(2,038)	-	
Merck	6,432	19,297	(12,865)	-	-	-	(12,865)		-	(12,865)	-	
MillerCoors LLC	24,121	24,121	-	-	-	-	-		-	-	-	
Mt. Jackson	5,713	4,081	1,632	-	-	-	1,632		-	-	1,632	
Purcellville	15,167	9,403	5,764	-	-	-	5,764		2,882	-	2,882	
PWCSA-HL Mooney	219,280	155,324	63,956	-	-	-	63,956		44,769	-	19,187	
Stafford Co-Aquia	73,093	59,937	13,156	-	-	-	13,156		11,577	-	1,579	
Stoney Creek	4,897	5,856	(959)	-	-	-	(959)		-	(959)	-	
Strasburg	7,999	31,956	(23,957)	-	-	-	(23,957)		-	(23,957)	-	
UOSA	763,096	729,392	33,704	-	-	-	33,704		-	-	33,704	
Waynesboro	21,441	17,126	4,315	-	-	-	4,315		4,315	-	-	
Purchase by Eastern Shore	-	-	-	-	(2,813)	-	(2,813)		-	(2,813)	-	
	-	-	-	-	-	-	-		-	-	-	

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

** Expected Class B Credits are estimates only. Actual Class B Credits—and the resulting Class B sales price—will vary from estimates based on actual Delivered Loads in the Compliance Year.

POTOMAC Basin: Nitrogen Credit Ledger												
Compliance Year:	2013	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** (expected)	
								PRICE:	\$ 1.35	\$ 2.15	\$ 0.13	
The Exchange (group)	2,978,779	2,719,030	259,749	-	(2,813)	(25,278)	231,658		165,178	(115,603)	182,083	
ACSA-Fishersville	21,441	13,615	7,826	-	-	-	7,826		6,261	-	1,565	
ACSA-Greenville	6,265	1,278	4,987	(4,987)	-	-	-		-	-	-	
ACSA-Harriston	2,506	828	1,678	(1,678)	-	-	-		-	-	-	
ACSA-Middle River	36,449	28,034	8,415	-	-	-	8,415		6,732	-	1,683	
ACSA-Mt. Sidney	3,759	3,743	16	(16)	-	-	-		-	-	-	
ACSA-Stuarts Draft	21,441	9,648	11,793	(10,803)	-	-	990		792	-	198	
ACSA-Vesper View	2,506	1,219	1,287	(1,287)	-	-	-		-	-	-	
ACSA-Weyers Cave	2,680	21,451	(18,771)	18,771	-	-	-		-	-	-	
Alexandria S.A.	493,381	493,381	-	-	-	-	-		-	-	-	
Berryville	5,713	3,346	2,367	-	-	-	2,367		2,130	-	237	
Broadway Regional	19,752	16,610	3,142	-	-	-	3,142		-	-	3,142	
Dale Service Corp #1	42,029	36,547	5,482	-	-	-	5,482		-	-	5,482	
Dale Service Corp #8	42,029	36,547	5,482	-	-	-	5,482		-	-	5,482	
Fairfax Co-Noman Cole	612,158	612,158	-	-	-	-	-		-	-	-	
FCWSA-Vint Hill	5,034	1,978	3,056	-	-	-	3,056		-	-	3,056	
Front Royal	32,648	103,797	(71,149)	-	-	-	(71,149)		-	(71,149)	-	
FWSA-Opequon	90,170	51,926	38,244	-	-	-	38,244		-	-	38,244	
FWSA-Parkins Mill	45,074	20,374	24,700	-	-	-	24,700		-	-	24,700	
HRRSA-North River	111,492	72,309	39,183	-	-	-	39,183		39,183	-	-	
KGCSA-Dahlgren S.D.	9,137	7,614	1,523	(1,523)	-	-	-		-	-	-	
KGCSA-Fairview Beach	1,827	731	1,096	(1,096)	-	-	-		-	-	-	
KGCSA-Purkins Corner	1,096	4,873	(3,777)	2,619	-	-	(1,158)		-	(1,158)	-	
Leesburg	101,113	58,342	42,771	-	-	(25,278)	17,493		-	-	17,493	
Loudoun Water- Broad Run	111,224	56,421	54,803	-	-	-	54,803		49,323	-	5,480	
Luray	8,576	3,457	5,119	-	-	-	5,119		-	-	5,119	
Massanutten PSC	8,040	10,371	(2,331)	-	-	-	(2,331)		-	(2,331)	-	
Merck	6,432	19,297	(12,865)	-	-	-	(12,865)		-	(12,865)	-	
MillerCoors LLC	24,121	24,121	-	-	-	-	-		-	-	-	
Mt. Jackson	5,713	4,489	1,224	-	-	-	1,224		-	-	1,224	
Purcellville	15,167	10,313	4,854	-	-	-	4,854		2,427	-	2,427	
PWCSA-HL Mooney	219,280	159,892	59,388	-	-	-	59,388		41,572	-	17,816	
Stafford Co-Aquia	73,093	58,018	15,075	-	-	-	15,075		12,965	-	2,110	
Stoney Creek	4,897	5,856	(959)	-	-	-	(959)		-	(959)	-	
Strasburg	7,999	32,327	(24,328)	-	-	-	(24,328)		-	(24,328)	-	
UOSA	763,096	716,471	46,625	-	-	-	46,625		-	-	46,625	
Waynesboro	21,441	17,648	3,793	-	-	-	3,793		3,793	-	-	
Purchase by Eastern Shore	-	-	-	-	(2,813)	-	(2,813)		-	(2,813)	-	
	-	-	-	-	-	-	-		-	-	-	

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

** Expected Class B Credits are estimates only. Actual Class B Credits—and the resulting Class B sales price—will vary from estimates based on actual Delivered Loads in the Compliance Year.

POTOMAC Basin: Nitrogen Credit Ledger												
Compliance Year:	2014	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** (expected)	
								PRICE:	\$ 1.80	\$ 2.65	\$ 0.09	
The Exchange (group)	2,978,779	2,574,983	403,796	-	(1,777)	(25,278)	376,741		164,911	(125,122)	336,952	
ACSA-Fishersville	21,441	14,526	6,915	-	-	-	6,915		5,532	-	1,383	
ACSA-Greenville	6,265	1,170	5,095	(5,095)	-	-	-		-	-	-	
ACSA-Harriston	2,506	780	1,726	(1,726)	-	-	-		-	-	-	
ACSA-Middle River	36,449	28,623	7,826	-	-	-	7,826		6,261	-	1,565	
ACSA-Mt. Sidney	3,759	3,977	(218)	218	-	-	-		-	-	-	
ACSA-Stuarts Draft	21,441	10,131	11,310	(6,342)	-	-	4,968		3,974	-	994	
ACSA-Vesper View	2,506	1,514	992	(992)	-	-	-		-	-	-	
ACSA-Weyers Cave	2,680	16,617	(13,937)	13,937	-	-	-		-	-	-	
Alexandria S.A.	493,381	493,373	8	-	-	-	8		-	-	8	
Berryville	5,713	3,428	2,285	-	-	-	2,285		2,057	-	228	
Broadway Regional	19,752	16,534	3,218	-	-	-	3,218		-	-	3,218	
Dale Service Corp #1	42,029	37,460	4,569	-	-	-	4,569		-	-	4,569	
Dale Service Corp #8	42,029	37,460	4,569	-	-	-	4,569		-	-	4,569	
Fairfax Co-Noman Cole	612,158	417,546	194,612	-	-	-	194,612		-	-	194,612	
FCWSA-Vint Hill	5,034	2,049	2,985	-	-	-	2,985		-	-	2,985	
Front Royal	32,648	114,992	(82,344)	-	-	-	(82,344)		-	(82,344)	-	
FWSA-Opequon	90,170	53,548	36,622	-	-	-	36,622		-	-	36,622	
FWSA-Parkins Mill	45,074	22,537	22,537	-	-	-	22,537		-	-	22,537	
HRRSA-North River	111,492	71,290	40,202	-	-	-	40,202		40,202	-	-	
KGCSA-Dahlgren S.D.	9,137	7,309	1,828	-	-	-	1,828		-	-	1,828	
KGCSA-Fairview Beach	1,827	822	1,005	(427)	-	-	578		-	-	578	
KGCSA-Purkins Corner	1,096	1,523	(427)	427	-	-	-		-	-	-	
Leesburg	101,113	59,859	41,254	-	-	(25,278)	15,976		-	-	15,976	
Loudoun Water- Broad Run	111,224	45,703	65,521	-	-	-	65,521		52,417	-	13,104	
Luray	8,576	3,457	5,119	-	-	-	5,119		-	-	5,119	
Massanutten PSC	8,040	10,517	(2,477)	-	-	-	(2,477)		-	(2,477)	-	
Merck	6,432	19,297	(12,865)	-	-	-	(12,865)		-	(12,865)	-	
MillerCoors LLC	24,121	24,121	-	-	-	-	-		-	-	-	
Mt. Jackson	5,713	4,489	1,224	-	-	-	1,224		-	-	1,224	
Purcellville	15,167	11,325	3,842	-	-	-	3,842		1,921	-	1,921	
PWCSA-HL Mooney	219,280	164,460	54,820	-	-	-	54,820		38,374	-	16,446	
Stafford Co-Aquia	73,093	59,845	13,248	-	-	-	13,248		10,863	-	2,385	
Stoney Creek	4,897	5,856	(959)	-	-	-	(959)		-	(959)	-	
Strasburg	7,999	32,699	(24,700)	-	-	-	(24,700)		-	(24,700)	-	
UOSA	763,096	758,015	5,081	-	-	-	5,081		-	-	5,081	
Waynesboro	21,441	18,131	3,310	-	-	-	3,310		3,310	-	-	
Purchase by Eastern Shore	-	-	-	-	(1,777)	-	(1,777)		-	(1,777)	-	
	-	-	-	-	-	-	-		-	-	-	

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

** Expected Class B Credits are estimates only. Actual Class B Credits—and the resulting Class B sales price—will vary from estimates based on actual Delivered Loads in the Compliance Year.

POTOMAC Basin: Nitrogen Credit Ledger												
Compliance Year:	2015	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** (expected)	
								PRICE:	\$ 0.24	\$ 3.05	\$ 0.02	
The Exchange (group)	2,978,779	2,490,496	488,283	-	(2,813)	(25,278)	460,192		211,421	(19,114)	267,885	
ACSA-Fishersville	21,441	15,437	6,004	-	-	-	6,004		4,803	-	1,201	
ACSA-Greenville	6,265	1,226	5,039	(5,039)	-	-	-		-	-	-	
ACSA-Harriston	2,506	691	1,815	(1,815)	-	-	-		-	-	-	
ACSA-Middle River	36,449	29,213	7,236	-	-	-	7,236		5,789	-	1,447	
ACSA-Mt. Sidney	3,759	3,825	(66)	66	-	-	-		-	-	-	
ACSA-Stuarts Draft	21,441	10,560	10,881	(5,514)	-	-	5,367		4,294	-	1,073	
ACSA-Vesper View	2,506	1,836	670	(670)	-	-	-		-	-	-	
ACSA-Weyers Cave	2,680	15,652	(12,972)	12,972	-	-	-		-	-	-	
Alexandria S.A.	493,381	493,381	-	-	-	-	-		-	-	-	
Berryville	5,713	3,510	2,203	-	-	-	2,203		1,983	-	220	
Broadway Regional	19,752	16,685	3,067	-	-	-	3,067		-	-	3,067	
Dale Service Corp #1	42,029	38,374	3,655	-	-	-	3,655		-	-	3,655	
Dale Service Corp #8	42,029	38,374	3,655	-	-	-	3,655		-	-	3,655	
Fairfax Co-Noman Cole	612,158	423,942	188,216	-	-	-	188,216		75,286	-	112,930	
FCWSA-Vint Hill	5,034	2,120	2,914	-	-	-	2,914		-	-	2,914	
Front Royal	32,648	27,547	5,101	-	-	-	5,101		1,530	-	3,571	
FWSA-Opequon	90,170	55,103	35,067	-	-	-	35,067		-	-	35,067	
FWSA-Parkins Mill	45,074	24,701	20,373	-	-	-	20,373		-	-	20,373	
HRRSA-North River	111,492	74,346	37,146	-	-	-	37,146		37,146	-	-	
KGCSA-Dahlgren S.D.	9,137	7,309	1,828	-	-	-	1,828		-	-	1,828	
KGCSA-Fairview Beach	1,827	822	1,005	(427)	-	-	578		-	-	578	
KGCSA-Purkins Corner	1,096	1,523	(427)	427	-	-	-		-	-	-	
Leesburg	101,113	61,375	39,738	-	-	(25,278)	14,460		-	-	14,460	
Loudoun Water- Broad Run	111,224	80,890	30,334	-	-	-	30,334		27,301	-	3,033	
Luray	8,576	3,498	5,078	-	-	-	5,078		4,824	-	254	
Massanutten PSC	8,040	10,517	(2,477)	-	-	-	(2,477)		-	(2,477)	-	
Merck	6,432	19,297	(12,865)	-	-	-	(12,865)		-	(12,865)	-	
MillerCoors LLC	24,121	24,121	-	-	-	-	-		-	-	-	
Mt. Jackson	5,713	4,897	816	-	-	-	816		-	-	816	
Purcellville	15,167	12,437	2,730	-	-	-	2,730		1,365	-	1,365	
PWCSA-HL Mooney	219,280	169,029	50,251	-	-	-	50,251		35,176	-	15,075	
Stafford Co-Aquia	73,093	61,673	11,420	-	-	-	11,420		9,136	-	2,284	
Stoney Creek	4,897	5,856	(959)	-	-	-	(959)		-	(959)	-	
Strasburg	7,999	5,448	2,551	-	-	-	2,551		-	-	2,551	
UOSA	763,096	726,628	36,468	-	-	-	36,468		-	-	36,468	
Waynesboro	21,441	18,653	2,788	-	-	-	2,788		2,788	-	-	
Purchase by Eastern Shore	-	-	-	-	(2,813)	-	(2,813)		-	(2,813)	-	
	-	-	-	-	-	-	-		-	-	-	

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

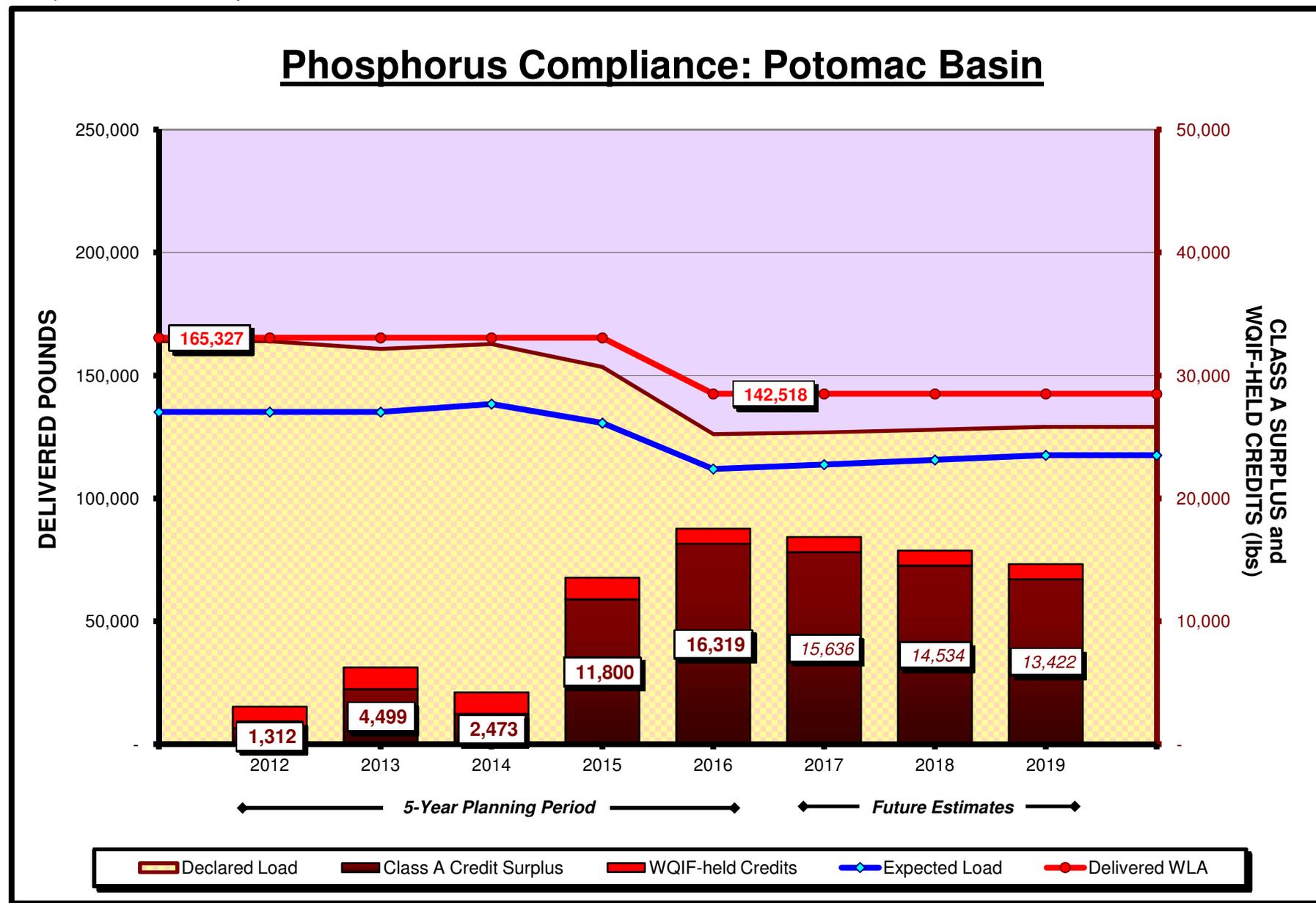
** Expected Class B Credits are estimates only. Actual Class B Credits—and the resulting Class B sales price—will vary from estimates based on actual Delivered Loads in the Compliance Year.

POTOMAC Basin: Nitrogen Credit Ledger

Compliance Year:	2016	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)				
		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** (expected)
Facility Name											
								PRICE:	\$ 0.18	\$ 3.50	\$ 0.02
The Exchange (group)	2,246,842	1,728,127	518,715	-	(2,283)	(24,365)	492,067		253,604	(14,503)	252,966
ACSA-Fishersville	4,873	3,046	1,827	(1,827)	-	-	-	-	-	-	-
ACSA-Greenville	1,424	276	1,148	(1,148)	-	-	-	-	-	-	-
ACSA-Harriston	1,025	216	809	(809)	-	-	-	-	-	-	-
ACSA-Middle River	8,284	6,091	2,193	(644)	-	-	1,549	-	-	-	1,549
ACSA-Mt. Sidney	854	831	23	(23)	-	-	-	-	-	-	-
ACSA-Stuarts Draft	2,436	1,061	1,375	(1,375)	-	-	-	-	-	-	-
ACSA-Vesper View	1,025	665	360	(360)	-	-	-	-	-	-	-
ACSA-Weyers Cave	1,462	7,648	(6,186)	6,186	-	-	-	-	-	-	-
Alexandria S.A.	493,381	359,802	133,579	-	-	-	133,579	66,790	-	-	66,789
Berryville	5,373	3,300	2,073	-	-	-	2,073	1,969	-	-	104
Broadway Regional	5,601	4,796	805	-	-	-	805	-	-	-	805
Dale Service Corp #1	42,029	39,288	2,741	-	-	-	2,741	-	-	-	2,741
Dale Service Corp #8	42,029	39,288	2,741	-	-	-	2,741	-	-	-	2,741
Fairfax Co-Noman Cole	612,158	426,317	185,841	-	-	-	185,841	74,336	-	-	111,505
FCWSA-Vint Hill	434	195	239	-	-	-	239	-	-	-	239
Front Royal	29,725	25,192	4,533	-	-	-	4,533	1,360	-	-	3,173
FWSA-Opequon	31,681	19,764	11,917	-	-	-	11,917	-	-	-	11,917
FWSA-Parkins Mill	15,837	9,502	6,335	-	-	-	6,335	-	-	-	6,335
HRRSA-North River	55,746	36,664	19,082	-	-	-	19,082	19,082	-	-	-
KGCSA-Dahlgren S.D.	9,137	7,309	1,828	-	-	-	1,828	-	-	-	1,828
KGCSA-Fairview Beach	1,827	731	1,096	(427)	-	-	669	-	-	-	669
KGCSA-Purkins Corner	1,096	1,523	(427)	427	-	-	-	-	-	-	-
Leesburg	97,458	61,135	36,323	-	-	(24,365)	11,958	-	-	-	11,958
Loudoun Water- Broad Run	119,264	75,895	43,369	-	-	-	43,369	39,032	-	-	4,337
Luray	8,187	1,669	6,518	-	-	-	6,518	6,518	-	-	-
Massanutten PSC	6,030	8,107	(2,077)	-	-	-	(2,077)	-	(2,077)	-	-
Merck	4,824	14,466	(9,642)	-	-	-	(9,642)	-	(9,642)	-	-
MillerCoors LLC	18,091	18,091	-	-	-	-	-	-	-	-	-
Mt. Jackson	2,900	2,071	829	-	-	-	829	-	-	-	829
Purcellville	13,157	9,297	3,860	-	-	-	3,860	1,930	-	-	1,930
PWCSA-HL Mooney	219,280	171,313	47,967	-	-	-	47,967	33,577	-	-	14,390
Stafford Co-Aquia	73,093	63,591	9,502	-	-	-	9,502	7,412	-	-	2,090
Stoney Creek	2,558	3,059	(501)	-	-	-	(501)	-	(501)	-	-
Strasburg	5,134	3,536	1,598	-	-	-	1,598	1,598	-	-	-
UOSA	302,607	296,303	6,304	-	-	-	6,304	-	-	-	6,304
Waynesboro	6,822	6,089	733	-	-	-	733	-	-	-	733
Purchase by Eastern Shore	-	-	-	-	(2,283)	-	(2,283)	-	(2,283)	-	-
	-	-	-	-	-	-	-	-	-	-	-

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

** Expected Class B Credits are estimates only. Actual Class B Credits—and the resulting Class B sales price—will vary from estimates based on actual Delivered Loads in the Compliance Year.



POTOMAC Basin: Phosphorus Credit Ledger

Compliance Year:	2012	Credit Forecasts		Preliminary Use of Credits				Credit Exchange (Pounds)				
		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** (expected)
Facility Name												
									PRICE:	\$ 3.40	\$ 4.00	\$ 0.35
The Exchange (group)	165,327	135,141	30,186	-	(1,220)	(1,759)	27,207		24,097	(22,785)	25,895	
ACSA-Fishersville	2,814	1,674	1,140	(1,140)	-	-	-		-	-	-	
ACSA-Greenville	1,466	563	903	(903)	-	-	-		-	-	-	
ACSA-Harriston	586	380	206	(206)	-	-	-		-	-	-	
ACSA-Middle River	4,784	3,602	1,182	-	-	-	1,182		-	-	1,182	
ACSA-Mt. Sidney	879	804	75	(75)	-	-	-		-	-	-	
ACSA-Stuarts Draft	2,814	1,210	1,604	(647)	-	-	957		-	-	957	
ACSA-Vesper View	586	504	82	(82)	-	-	-		-	-	-	
ACSA-Weyers Cave	352	3,405	(3,053)	3,053	-	-	-		-	-	-	
Alexandria S.A.	29,603	22,202	7,401	-	-	-	7,401		-	-	7,401	
Berryville	492	3,096	(2,604)	-	-	-	(2,604)		-	(2,604)	-	
Broadway Regional	1,703	1,477	226	-	-	-	226		-	-	226	
Dale Service Corp #1	2,522	2,165	357	-	-	-	357		-	-	357	
Dale Service Corp #8	2,522	2,165	357	-	-	-	357		-	-	357	
Fairfax Co-Noman Cole	36,729	22,038	14,691	-	-	-	14,691		12,882	-	1,809	
FCWSA-Vint Hill	382	125	257	-	-	-	257		-	-	257	
Front Royal	2,814	9,357	(6,543)	-	-	-	(6,543)		-	(6,543)	-	
FWSA-Opequon	8,864	4,374	4,490	-	-	-	4,490		-	-	4,490	
FWSA-Parkins Mill	3,518	1,421	2,097	-	-	-	2,097		-	-	2,097	
HRRSA-North River	14,633	9,061	5,572	-	-	-	5,572		5,572	-	-	
KGCSA-Dahlgren S.D.	914	757	157	(130)	-	-	27		14	-	13	
KGCSA-Fairview Beach	183	91	92	(34)	-	-	58		29	-	29	
KGCSA-Purkins Corner	110	274	(164)	164	-	-	-		-	-	-	
Leesburg	7,035	3,968	3,067	-	-	(1,759)	1,308		-	(1,787)	3,095	
Loudoun Water- Broad Run	2,580	1,166	1,414	-	-	-	1,414		1,273	-	141	
Luray	1,126	299	827	-	(827)	-	-		-	-	-	
Massanutten PSC	1,055	6,294	(5,239)	-	-	-	(5,239)		-	(5,239)	-	
Merck	844	3,377	(2,533)	-	-	-	(2,533)		-	(2,533)	-	
MillerCoors LLC	3,166	3,166	-	-	-	-	-		-	-	-	
Mt. Jackson	492	352	140	-	-	-	140		-	-	140	
Purcellville	1,055	654	401	-	-	-	401		201	-	200	
PWCSA-HL Mooney	13,157	9,319	3,838	-	-	-	3,838		3,454	-	384	
Stafford Co-Aquia	4,386	3,596	790	-	-	-	790		672	-	118	
Stoney Creek	422	1,026	(604)	-	-	-	(604)		-	(604)	-	
Strasburg	689	3,771	(3,082)	-	-	-	(3,082)		-	(3,082)	-	
UOSA	7,236	4,611	2,625	-	-	-	2,625		-	-	2,625	
Waynesboro	2,814	2,797	17	-	-	-	17		-	-	17	
Purchase by Eastern Shore	-	-	-	-	(393)	-	(393)		-	(393)	-	
	-	-	-	-	-	-	-		-	-	-	

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

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POTOMAC Basin: Phosphorus Credit Ledger

Compliance Year:	2013	Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)					
		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** (expected)
Facility Name									PRICE:	\$ 3.14	\$ 4.30	\$ 0.35
The Exchange (group)	165,327	135,125	30,202	-	(393)	(1,759)	28,050			23,894	(19,395)	23,551
ACSA-Fishersville	2,814	1,787	1,027	(1,027)	-	-	-			-	-	-
ACSA-Greenville	1,466	563	903	(903)	-	-	-			-	-	-
ACSA-Harriston	586	380	206	(206)	-	-	-			-	-	-
ACSA-Middle River	4,784	3,679	1,105	-	-	-	1,105			-	-	1,105
ACSA-Mt. Sidney	879	804	75	(75)	-	-	-			-	-	-
ACSA-Stuarts Draft	2,814	1,266	1,548	(915)	-	-	633			-	-	633
ACSA-Vesper View	586	504	82	(82)	-	-	-			-	-	-
ACSA-Weyers Cave	352	3,560	(3,208)	3,208	-	-	-			-	-	-
Alexandria S.A.	29,603	22,476	7,127	-	-	-	7,127			-	-	7,127
Berryville	492	288	204	-	-	-	204		184	-	-	20
Broadway Regional	1,703	1,548	155	-	-	-	155		-	-	-	155
Dale Service Corp #1	2,522	2,193	329	-	-	-	329		-	-	-	329
Dale Service Corp #8	2,522	2,193	329	-	-	-	329		-	-	-	329
Fairfax Co-Noman Cole	36,729	22,038	14,691	-	-	-	14,691		12,334	-	-	2,357
FCWSA-Vint Hill	382	155	227	-	-	-	227		-	-	-	227
Front Royal	2,814	10,131	(7,317)	-	-	-	(7,317)		-	(7,317)	-	-
FWSA-Opequon	8,864	4,503	4,361	-	-	-	4,361		-	-	-	4,361
FWSA-Parkins Mill	3,518	1,590	1,928	-	-	-	1,928		-	-	-	1,928
HRRSA-North River	14,633	9,324	5,309	-	-	-	5,309		5,309	-	-	-
KGCSA-Dahlgren S.D.	914	609	305	(109)	-	-	196		-	-	-	196
KGCSA-Fairview Beach	183	97	86	-	-	-	86		-	-	-	86
KGCSA-Purkins Corner	110	219	(109)	109	-	-	-		-	-	-	-
Leesburg	7,035	4,059	2,976	-	-	(1,759)	1,217		-	-	-	1,217
Loudoun Water- Broad Run	2,580	1,309	1,271	-	-	-	1,271		1,144	-	-	127
Luray	1,126	303	823	-	-	-	823		823	-	-	-
Massanutten PSC	1,055	6,477	(5,422)	-	-	-	(5,422)		-	(5,422)	-	-
Merck	844	3,377	(2,533)	-	-	-	(2,533)		-	(2,533)	-	-
MillerCoors LLC	3,166	3,166	-	-	-	-	-		-	-	-	-
Mt. Jackson	492	387	105	-	-	-	105		-	-	-	105
Purcellville	1,055	718	337	-	-	-	337		169	-	-	168
PWCSA-HL Mooney	13,157	9,594	3,563	-	-	-	3,563		3,207	-	-	356
Stafford Co-Aquia	4,386	3,481	905	-	-	-	905		724	-	-	181
Stoney Creek	422	1,026	(604)	-	-	-	(604)		-	(604)	-	-
Strasburg	689	3,815	(3,126)	-	-	-	(3,126)		-	(3,126)	-	-
UOSA	7,236	4,726	2,510	-	-	-	2,510		-	-	-	2,510
Waynesboro	2,814	2,780	34	-	-	-	34		-	-	-	34
Purchase by Eastern Shore	-	-	-	-	(393)	-	(393)		-	(393)	-	-
	-	-	-	-	-	-	-		-	-	-	-

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

** Expected Class B Credits are estimates only. Actual Class B Credits—and the resulting Class B sales price—will vary from estimates based on actual Delivered Loads in the Compliance Year.

POTOMAC Basin: Phosphorus Credit Ledger

Compliance Year:	2014		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** (expected)
									PRICE:	\$ 3.69	\$ 4.60	\$ 0.42
The Exchange (group)	165,327	138,412	26,915	-	(315)	(1,759)	24,841		23,022	(20,549)	22,368	
ACSA-Fishersville	2,814	1,907	907	(907)	-	-	-		-	-	-	
ACSA-Greenville	1,466	485	981	(981)	-	-	-		-	-	-	
ACSA-Harriston	586	521	65	(65)	-	-	-		-	-	-	
ACSA-Middle River	4,784	3,757	1,027	-	-	-	1,027		-	-	1,027	
ACSA-Mt. Sidney	879	854	25	(25)	-	-	-		-	-	-	
ACSA-Stuarts Draft	2,814	1,330	1,484	(812)	-	-	672		-	-	672	
ACSA-Vesper View	586	539	47	(47)	-	-	-		-	-	-	
ACSA-Weyers Cave	352	3,189	(2,837)	2,837	-	-	-		-	-	-	
Alexandria S.A.	29,603	20,996	8,607	-	-	-	8,607		-	-	8,607	
Berryville	492	295	197	-	-	-	197		177	-	20	
Broadway Regional	1,703	1,541	162	-	-	-	162		-	-	162	
Dale Service Corp #1	2,522	2,248	274	-	-	-	274		-	-	274	
Dale Service Corp #8	2,522	2,248	274	-	-	-	274		-	-	274	
Fairfax Co-Noman Cole	36,729	25,053	11,676	-	-	-	11,676		11,676	-	-	
FCWSA-Vint Hill	382	120	262	-	-	-	262		-	-	262	
Front Royal	2,814	11,228	(8,414)	-	-	-	(8,414)		-	(8,414)	-	
FWSA-Opequon	8,864	4,643	4,221	-	-	-	4,221		-	-	4,221	
FWSA-Parkins Mill	3,518	1,759	1,759	-	-	-	1,759		-	-	1,759	
HRRSA-North River	14,633	9,193	5,440	-	-	-	5,440		5,440	-	-	
KGCSA-Dahlgren S.D.	914	548	366	(42)	-	-	324		-	-	324	
KGCSA-Fairview Beach	183	82	101	-	-	-	101		-	-	101	
KGCSA-Purkins Corner	110	152	(42)	42	-	-	-		-	-	-	
Leesburg	7,035	4,165	2,870	-	-	(1,759)	1,111		-	-	1,111	
Loudoun Water- Broad Run	2,580	1,060	1,520	-	-	-	1,520		1,216	-	304	
Luray	1,126	303	823	-	-	-	823		823	-	-	
Massanutten PSC	1,055	6,568	(5,513)	-	-	-	(5,513)		-	(5,513)	-	
Merck	844	3,377	(2,533)	-	-	-	(2,533)		-	(2,533)	-	
MillerCoors LLC	3,166	3,166	-	-	-	-	-		-	-	-	
Mt. Jackson	492	387	105	-	-	-	105		-	-	105	
Purcellville	1,055	788	267	-	-	-	267		134	-	133	
PWCSA-HL Mooney	13,157	9,868	3,289	-	-	-	3,289		2,960	-	329	
Stafford Co-Aquia	4,386	3,591	795	-	-	-	795		596	-	199	
Stoney Creek	422	1,026	(604)	-	-	-	(604)		-	(604)	-	
Strasburg	689	3,859	(3,170)	-	-	-	(3,170)		-	(3,170)	-	
UOSA	7,236	4,816	2,420	-	-	-	2,420		-	-	2,420	
Waynesboro	2,814	2,750	64	-	-	-	64		-	-	64	
Purchase by Eastern Shore	-	-	-	-	(315)	-	(315)		-	(315)	-	
	-	-	-	-	-	-	-		-	-	-	

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

** Expected Class B Credits are estimates only. Actual Class B Credits—and the resulting Class B sales price—will vary from estimates based on actual Delivered Loads in the Compliance Year.

POTOMAC Basin: Phosphorus Credit Ledger

Compliance Year:	2015	Credit Forecasts		Preliminary Use of Credits				Credit Exchange (Pounds)				
		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** (expected)
									PRICE:	\$ 1.96	\$ 4.93	\$ 0.22
The Exchange (group)	165,327	130,644	34,683	-	(393)	(1,759)	32,531		21,210	(9,410)	20,731	
ACSA-Fishersville	2,814	2,026	788	(788)	-	-	-		-	-	-	
ACSA-Greenville	1,466	452	1,014	(1,014)	-	-	-		-	-	-	
ACSA-Harriston	586	626	(40)	40	-	-	-		-	-	-	
ACSA-Middle River	4,784	3,834	950	-	-	-	950		-	-	950	
ACSA-Mt. Sidney	879	832	47	(47)	-	-	-		-	-	-	
ACSA-Stuarts Draft	2,814	1,386	1,428	(1,152)	-	-	276		-	-	276	
ACSA-Vesper View	586	619	(33)	33	-	-	-		-	-	-	
ACSA-Weyers Cave	352	3,280	(2,928)	2,928	-	-	-		-	-	-	
Alexandria S.A.	29,603	21,358	8,245	-	-	-	8,245		-	-	8,245	
Berryville	492	303	189	-	-	-	189		170	-	19	
Broadway Regional	1,703	1,555	148	-	-	-	148		-	-	148	
Dale Service Corp #1	2,522	2,302	220	-	-	-	220		-	-	220	
Dale Service Corp #8	2,522	2,302	220	-	-	-	220		-	-	220	
Fairfax Co-Noman Cole	36,729	25,437	11,292	-	-	-	11,292		11,292	-	-	
FCWSA-Vint Hill	382	125	257	-	-	-	257		-	-	257	
Front Royal	2,814	3,166	(352)	-	-	-	(352)		-	(352)	-	
FWSA-Opequon	8,864	4,778	4,086	-	-	-	4,086		-	-	4,086	
FWSA-Parkins Mill	3,518	1,928	1,590	-	-	-	1,590		-	-	1,590	
HRRSA-North River	14,633	9,587	5,046	-	-	-	5,046		5,046	-	-	
KGCSA-Dahlgren S.D.	914	548	366	(42)	-	-	324		-	-	324	
KGCSA-Fairview Beach	183	82	101	-	-	-	101		-	-	101	
KGCSA-Purkins Corner	110	152	(42)	42	-	-	-		-	-	-	
Leesburg	7,035	4,270	2,765	-	-	(1,759)	1,006		-	-	1,006	
Loudoun Water- Broad Run	2,580	1,876	704	-	-	-	704		634	-	70	
Luray	1,126	306	820	-	-	-	820		779	-	41	
Massanutten PSC	1,055	6,568	(5,513)	-	-	-	(5,513)		-	(5,513)	-	
Merck	844	3,377	(2,533)	-	-	-	(2,533)		-	(2,533)	-	
MillerCoors LLC	3,166	3,166	-	-	-	-	-		-	-	-	
Mt. Jackson	492	422	70	-	-	-	70		-	-	70	
Purcellville	1,055	865	190	-	-	-	190		95	-	95	
PWCSA-HL Mooney	13,157	10,142	3,015	-	-	-	3,015		2,714	-	301	
Stafford Co-Aquia	4,386	3,700	686	-	-	-	686		480	-	206	
Stoney Creek	422	1,026	(604)	-	-	-	(604)		-	(604)	-	
Strasburg	689	626	63	-	-	-	63		-	-	63	
UOSA	7,236	4,793	2,443	-	-	-	2,443		-	-	2,443	
Waynesboro	2,814	2,829	(15)	-	-	-	(15)		-	(15)	-	
Purchase by Eastern Shore	-	-	-	-	(393)	-	(393)		-	(393)	-	
	-	-	-	-	-	-	-		-	-	-	

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

** Expected Class B Credits are estimates only. Actual Class B Credits—and the resulting Class B sales price—will vary from estimates based on actual Delivered Loads in the Compliance Year.

POTOMAC Basin: Phosphorus Credit Ledger

Compliance Year:	2016	Credit Forecasts		Preliminary Use of Credits				Credit Exchange (Pounds)				
		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** (expected)
									PRICE:	\$ 1.38	\$ 5.27	\$ 0.27
The Exchange (group)	142,518	111,976	30,542	-	(337)	(1,234)	28,971		23,022	(6,703)	12,652	
ACSA-Fishersville	1,974	1,233	741	(741)	-	-	-		-	-	-	
ACSA-Greenville	1,028	316	712	(712)	-	-	-		-	-	-	
ACSA-Harriston	411	419	(8)	8	-	-	-		-	-	-	
ACSA-Middle River	3,355	2,467	888	-	-	-	888		-	-	888	
ACSA-Mt. Sidney	617	554	63	(63)	-	-	-		-	-	-	
ACSA-Stuarts Draft	1,974	1,011	963	(439)	-	-	524		-	-	524	
ACSA-Vesper View	411	391	20	(20)	-	-	-		-	-	-	
ACSA-Weyers Cave	242	2,209	(1,967)	1,967	-	-	-		-	-	-	
Alexandria S.A.	29,603	21,588	8,015	-	-	-	8,015		4,008	-	4,007	
Berryville	339	208	131	-	-	-	131		118	-	13	
Broadway Regional	1,172	1,085	87	-	-	-	87		-	-	87	
Dale Service Corp #1	2,522	2,357	165	-	-	-	165		-	-	165	
Dale Service Corp #8	2,522	2,357	165	-	-	-	165		-	-	165	
Fairfax Co-Noman Cole	36,729	25,579	11,150	-	-	-	11,150		11,150	-	-	
FCWSA-Vint Hill	148	51	97	-	-	-	97		-	-	97	
Front Royal	1,974	2,230	(256)	-	-	-	(256)		-	(256)	-	
FWSA-Opequon	6,217	4,105	2,112	-	-	-	2,112		-	-	2,112	
FWSA-Parkins Mill	2,467	1,480	987	-	-	-	987		-	-	987	
HRRSA-North River	10,262	6,631	3,631	-	-	-	3,631		3,631	-	-	
KGCSA-Dahlgren S.D.	914	548	366	(40)	-	-	326		-	-	326	
KGCSA-Fairview Beach	179	72	107	-	-	-	107		-	-	107	
KGCSA-Purkins Corner	106	146	(40)	40	-	-	-		-	-	-	
Leesburg	4,934	3,095	1,839	-	-	(1,234)	605		-	-	605	
Loudoun Water- Broad Run	1,809	1,151	658	-	-	-	658		592	-	66	
Luray	789	372	417	-	-	-	417		417	-	-	
Massanutten PSC	727	4,646	(3,919)	-	-	-	(3,919)		-	(3,919)	-	
Merck	592	2,367	(1,775)	-	-	-	(1,775)		-	(1,775)	-	
MillerCoors LLC	2,220	2,220	-	-	-	-	-		-	-	-	
Mt. Jackson	339	161	178	-	-	-	178		-	-	178	
Purcellville	727	513	214	-	-	-	214		107	-	107	
PWCSA-HL Mooney	13,157	10,279	2,878	-	-	-	2,878		2,590	-	288	
Stafford Co-Aquia	4,386	3,815	571	-	-	-	571		371	-	200	
Stoney Creek	290	706	(416)	-	-	-	(416)		-	(416)	-	
Strasburg	474	436	38	-	-	-	38		38	-	-	
UOSA	4,934	3,221	1,713	-	-	-	1,713		-	-	1,713	
Waynesboro	1,974	1,957	17	-	-	-	17		-	-	17	
Purchase by Eastern Shore	-	-	-	-	(337)	-	(337)		-	(337)	-	
	-	-	-	-	-	-	-		-	-	-	

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

** Expected Class B Credits are estimates only. Actual Class B Credits—and the resulting Class B sales price—will vary from estimates based on actual 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.

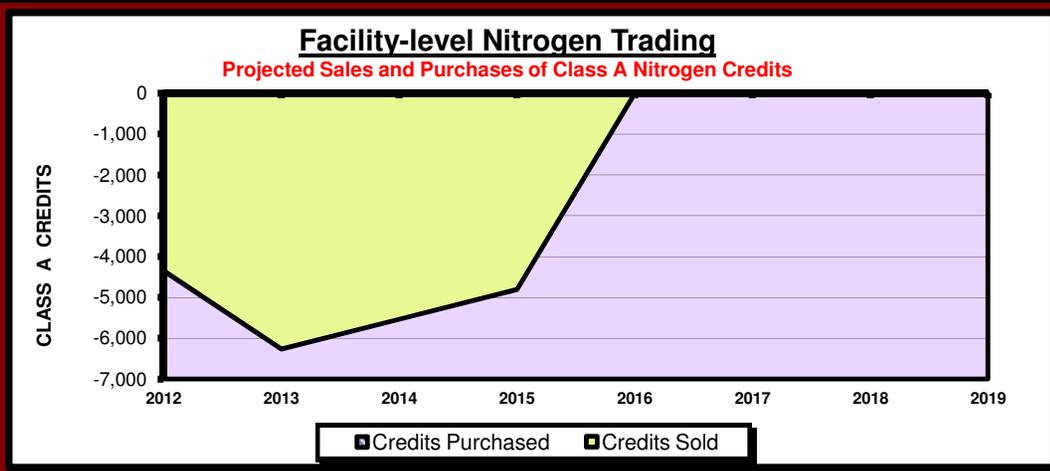
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply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

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
Fishersville	-	-	-	-	(1,827)	(2,260)	(2,402)	(2,304)
Greenville	(4,987)	(4,987)	(5,095)	(5,039)	(1,148)	(1,148)	(1,148)	(1,148)
Harriston	(1,678)	(1,678)	(1,726)	(1,815)	(809)	(809)	(809)	(809)
Middle River	-	-	-	-	(644)	(601)	(468)	(610)
Mt. Sidney	(16)	(16)	218	66	(23)	(23)	(23)	(23)
Stuarts Draft	(9,871)	(10,803)	(6,342)	(5,514)	(1,375)	(1,333)	(1,324)	(1,280)
Vesper View	(1,287)	(1,287)	(992)	(670)	(360)	(360)	(360)	(360)
Weyers Cave	17,839	18,771	13,937	12,972	6,186	6,534	6,534	6,534
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Fishersville	8,684	7,826	6,915	6,004	-	-	-	-
Greenville	-	-	-	-	-	-	-	-
Harriston	-	-	-	-	-	-	-	-
Middle River	9,005	8,415	7,826	7,236	1,549	1,470	1,796	1,533
Mt. Sidney	-	-	-	-	-	-	-	-
Stuarts Draft	2,350	990	4,968	5,367	-	-	-	-
Vesper View	-	-	-	-	-	-	-	-
Weyers Cave	-	-	-	-	-	-	-	-
Expected Net Credits	20,039	17,231	19,709	18,607	1,549	1,470	1,796	1,533
Class A Sales (Purchases)	10,020	13,785	15,767	14,886	0	0	0	0
<i>Expected Class B Credits</i>	<i>10,019</i>	<i>3,446</i>	<i>3,942</i>	<i>3,721</i>	<i>1,549</i>	<i>1,470</i>	<i>1,796</i>	<i>1,533</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		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
Fishersville	(1,140)	(1,027)	(907)	(788)	(741)	(691)	(640)	(587)
Greenville	(903)	(903)	(981)	(1,014)	(712)	(712)	(712)	(712)
Harriston	(206)	(206)	(65)	40	8	8	8	8
Middle River	-	-	-	-	-	-	-	-
Mt. Sidney	(75)	(75)	(25)	(47)	(63)	(63)	(63)	(63)
Stuarts Draft	(647)	(915)	(812)	(1,152)	(439)	(589)	(640)	(693)
Vesper View	(82)	(82)	(47)	33	(20)	(20)	(20)	(20)
Weyers Cave	3,053	3,208	2,837	2,928	1,967	2,067	2,067	2,067
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Fishersville	-	-	-	-	-	-	-	-
Greenville	-	-	-	-	-	-	-	-
Harriston	-	-	-	-	-	-	-	-
Middle River	1,182	1,105	1,027	950	888	839	788	737
Mt. Sidney	-	-	-	-	-	-	-	-
Stuarts Draft	957	633	672	276	524	334	242	146
Vesper View	-	-	-	-	-	-	-	-
Weyers Cave	-	-	-	-	-	-	-	-
Expected Net Credits	2,139	1,738	1,699	1,226	1,412	1,173	1,030	883
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
<i>Expected Class B Credits</i>	<i>2,139</i>	<i>1,738</i>	<i>1,699</i>	<i>1,226</i>	<i>1,412</i>	<i>1,173</i>	<i>1,030</i>	<i>883</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

ACSA-Fishersville
POTOMAC Trading Basin



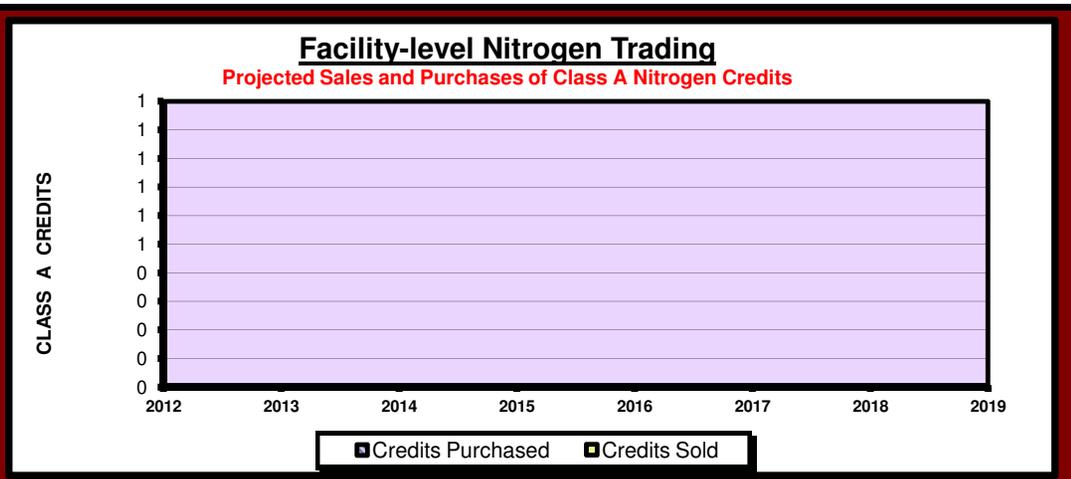
Loading & Credit Summary

Design Flow (mgd)	4.00
Projected Flow (mgd)	2.38
Projected Avg. Annual Concentration (mg/L)	4.00
Discharged Load (end of pipe)	28,994
Delivery Factor	0.44
Expected Load	12,757
Delivered WLA	21,441
Expected Credits (delivered)	8,684
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	8,684
Class A Credit Sales (Purchases)	4,342
Expected Class B Credits	4,342

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2.38	2.54	2.71	2.88	2.50	2.60	2.70	2.81
4.00	4.00	4.00	4.00	4.00	3.30	3.00	3.00
28,994	30,943	33,014	35,085	30,456	26,131	24,706	25,694
0.44	0.44	0.44	0.44	0.10	0.10	0.10	0.10
12,757	13,615	14,526	15,437	3,046	2,613	2,471	2,569
21,441	21,441	21,441	21,441	4,873	4,873	4,873	4,873
8,684	7,826	6,915	6,004	1,827	2,260	2,402	2,304
0	0	0	0	(1,827)	(2,260)	(2,402)	(2,304)
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
8,684	7,826	6,915	6,004	0	0	0	0
4,342	6,261	5,532	4,803	0	0	0	0
4,342	1,565	1,383	1,201	0	0	0	0

NITROGEN FACILITY SUMMARY

ACSA-Greenville
POTOMAC Trading Basin

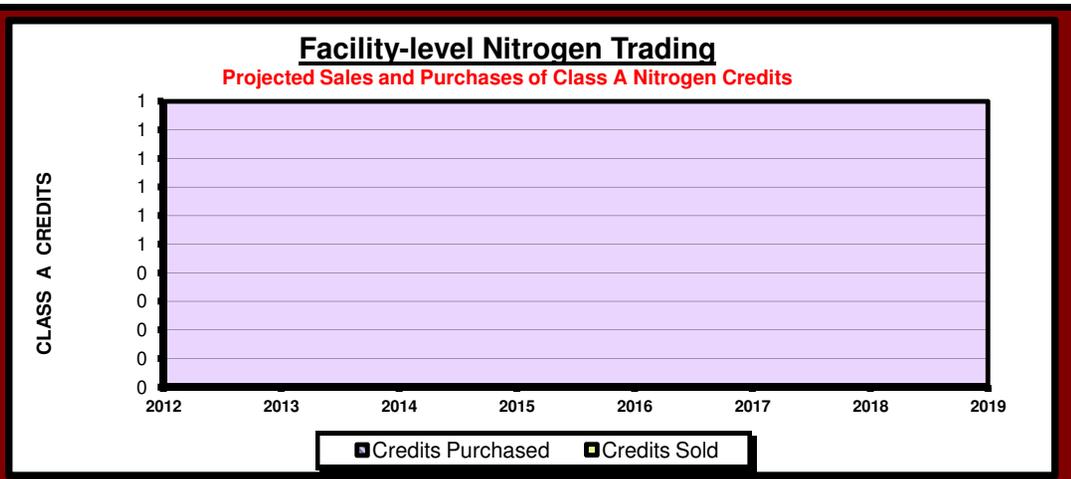


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Projected Flow (mgd)	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Projected Avg. Annual Concentration (mg/L)	31.80	31.80	29.10	30.49	30.20	30.20	30.20	30.20
Discharged Load (end of pipe)	2,905	2,905	2,659	2,786	2,759	2,759	2,759	2,759
Delivery Factor	0.44	0.44	0.44	0.44	0.10	0.10	0.10	0.10
Expected Load	1,278	1,278	1,170	1,226	276	276	276	276
Delivered WLA	6,265	6,265	6,265	6,265	1,424	1,424	1,424	1,424
Expected Credits (delivered)	4,987	4,987	5,095	5,039	1,148	1,148	1,148	1,148
Transfers In (Out) within Owner Bubble	(4,987)	(4,987)	(5,095)	(5,039)	(1,148)	(1,148)	(1,148)	(1,148)
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

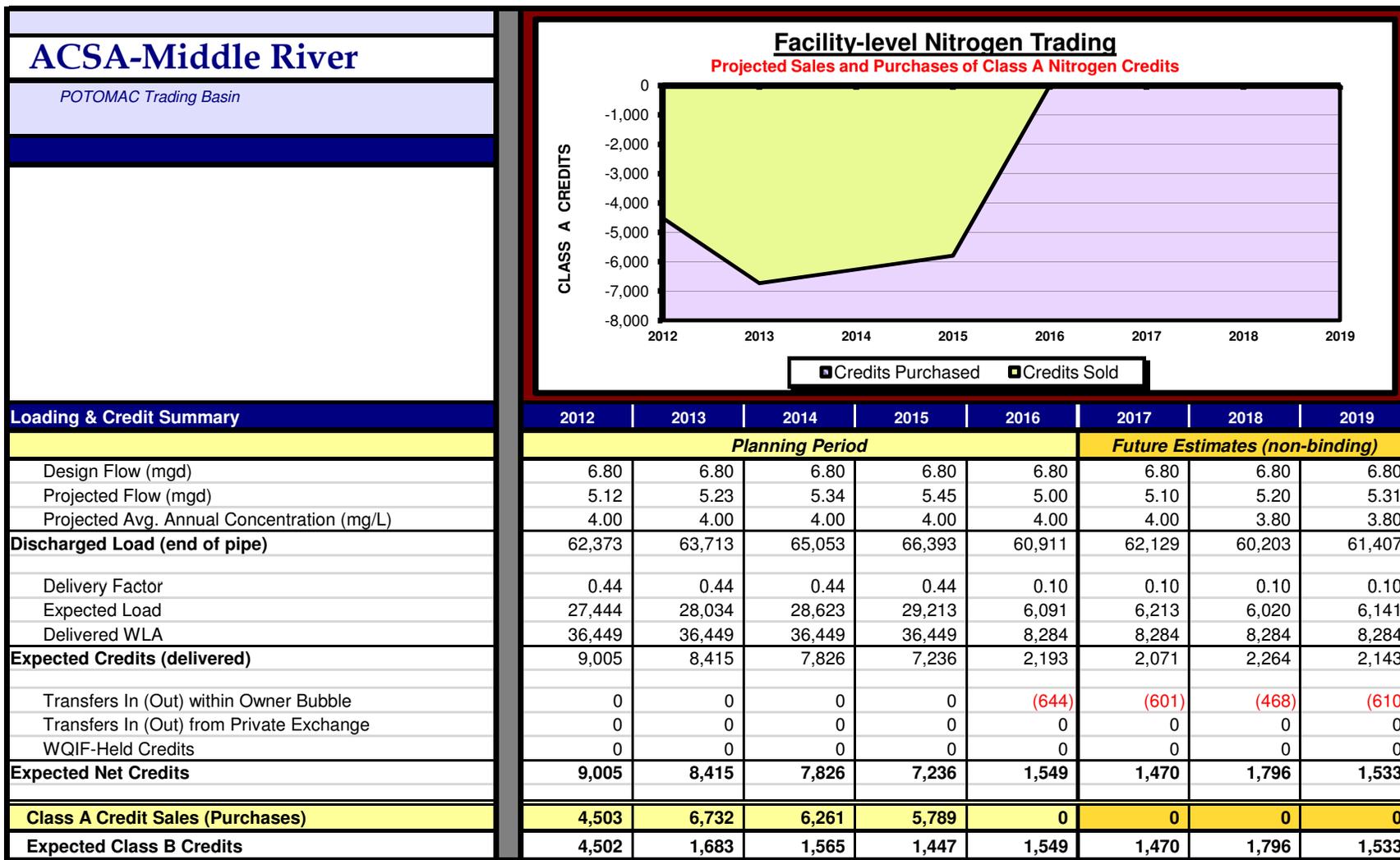
ACSA-Harriston
POTOMAC Trading Basin



Loading & Credit Summary

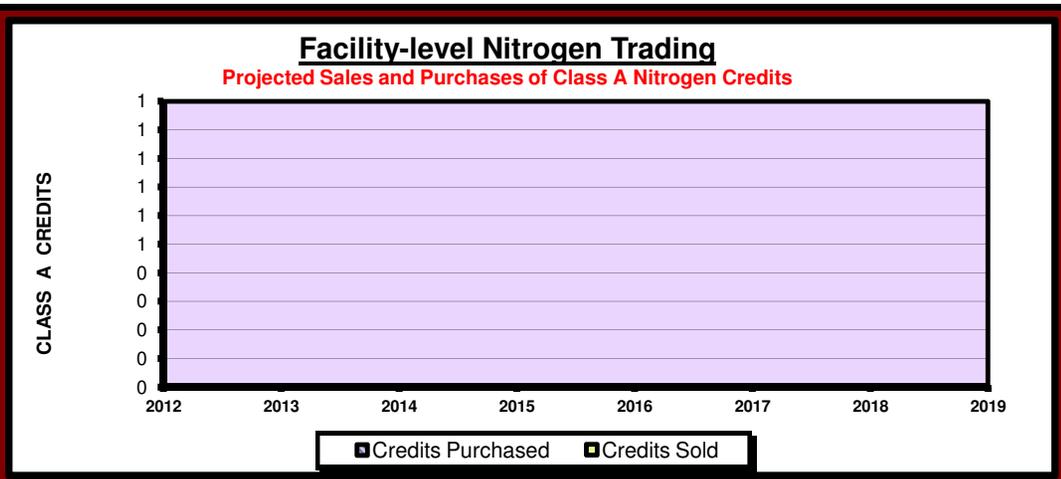
	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Projected Flow (mgd)	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Projected Avg. Annual Concentration (mg/L)	10.30	10.30	9.70	8.60	6.57	6.57	6.57	6.57
Discharged Load (end of pipe)	1,882	1,882	1,773	1,572	1,201	1,201	1,201	1,201
Delivery Factor	0.44	0.44	0.44	0.44	0.18	0.18	0.18	0.18
Expected Load	828	828	780	691	216	216	216	216
Delivered WLA	2,506	2,506	2,506	2,506	1,025	1,025	1,025	1,025
Expected Credits (delivered)	1,678	1,678	1,726	1,815	809	809	809	809
Transfers In (Out) within Owner Bubble	(1,678)	(1,678)	(1,726)	(1,815)	(809)	(809)	(809)	(809)
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



NITROGEN FACILITY SUMMARY

ACSA-Mt. Sidney
POTOMAC Trading Basin



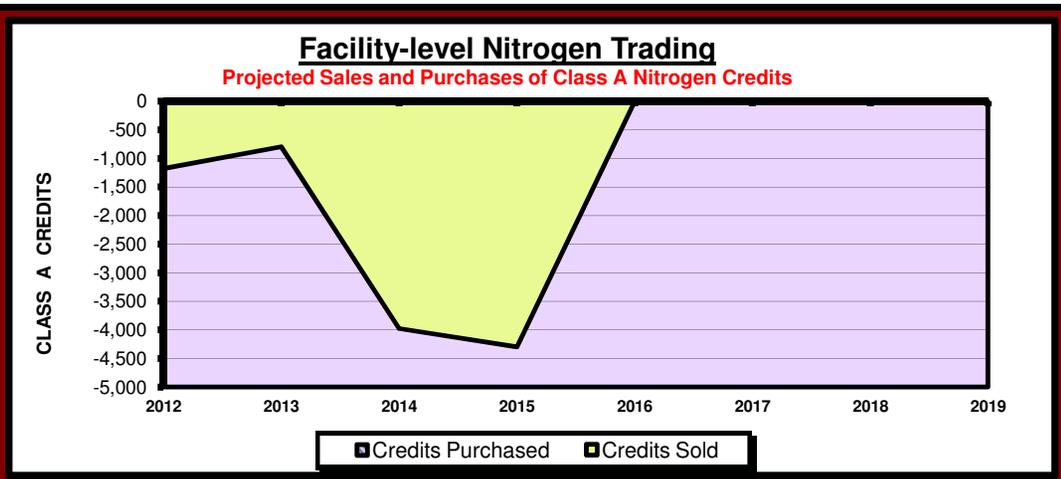
Loading & Credit Summary

Design Flow (mgd)	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Projected Flow (mgd)	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Projected Avg. Annual Concentration (mg/L)	39.90	39.90	42.40	40.78	39.00	39.00	39.00	39.00
Discharged Load (end of pipe)	8,506	8,506	9,039	8,694	8,314	8,314	8,314	8,314
Delivery Factor	0.44	0.44	0.44	0.44	0.10	0.10	0.10	0.10
Expected Load	3,743	3,743	3,977	3,825	831	831	831	831
Delivered WLA	3,759	3,759	3,759	3,759	854	854	854	854
Expected Credits (delivered)	16	16	(218)	(66)	23	23	23	23
Transfers In (Out) within Owner Bubble	(16)	(16)	218	66	(23)	(23)	(23)	(23)
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

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
39.90	39.90	42.40	40.78	39.00	39.00	39.00	39.00
8,506	8,506	9,039	8,694	8,314	8,314	8,314	8,314
0.44	0.44	0.44	0.44	0.10	0.10	0.10	0.10
3,743	3,743	3,977	3,825	831	831	831	831
3,759	3,759	3,759	3,759	854	854	854	854
16	16	(218)	(66)	23	23	23	23
(16)	(16)	218	66	(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
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

ACSA-Stuarts Draft
POTOMAC Trading Basin



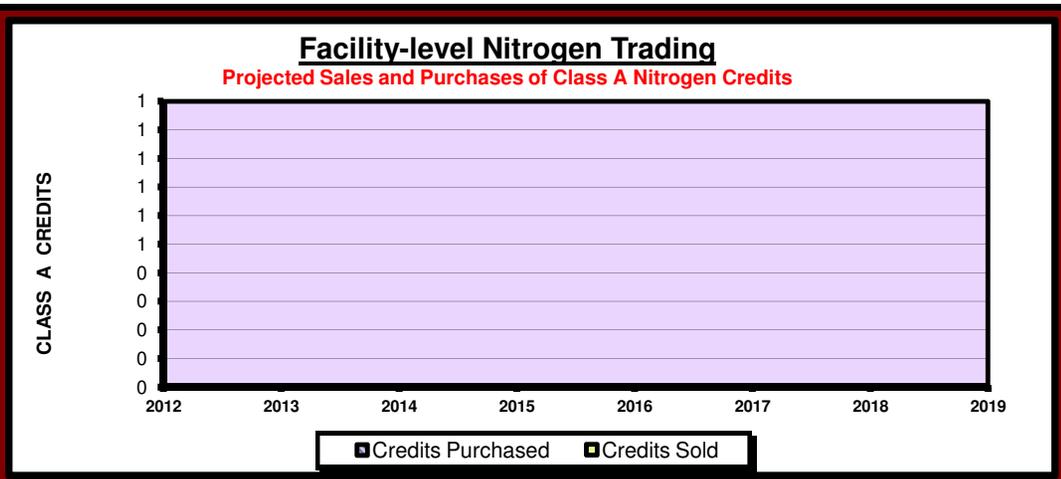
Loading & Credit Summary

Design Flow (mgd)	4.00
Projected Flow (mgd)	1.72
Projected Avg. Annual Concentration (mg/L)	4.00
Discharged Load (end of pipe)	20,953
Delivery Factor	0.44
Expected Load	9,220
Delivered WLA	21,441
Expected Credits (delivered)	12,221
Transfers In (Out) within Owner Bubble	(9,871)
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	2,350
Class A Credit Sales (Purchases)	1,175
Expected Class B Credits	1,175

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Projected Flow (mgd)	1.72	1.80	1.89	1.97	2.05	2.13	2.21	2.30
Projected Avg. Annual Concentration (mg/L)	4.00	4.00	4.00	4.00	3.40	3.40	3.30	3.30
Discharged Load (end of pipe)	20,953	21,928	23,024	23,999	21,228	22,056	22,243	23,111
Delivery Factor	0.44	0.44	0.44	0.44	0.05	0.05	0.05	0.05
Expected Load	9,220	9,648	10,131	10,560	1,061	1,103	1,112	1,156
Delivered WLA	21,441	21,441	21,441	21,441	2,436	2,436	2,436	2,436
Expected Credits (delivered)	12,221	11,793	11,310	10,881	1,375	1,333	1,324	1,280
Transfers In (Out) within Owner Bubble	(9,871)	(10,803)	(6,342)	(5,514)	(1,375)	(1,333)	(1,324)	(1,280)
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	2,350	990	4,968	5,367	0	0	0	0
Class A Credit Sales (Purchases)	1,175	792	3,974	4,294	0	0	0	0
Expected Class B Credits	1,175	198	994	1,073	0	0	0	0

NITROGEN FACILITY SUMMARY

ACSA-Vesper View
POTOMAC Trading Basin

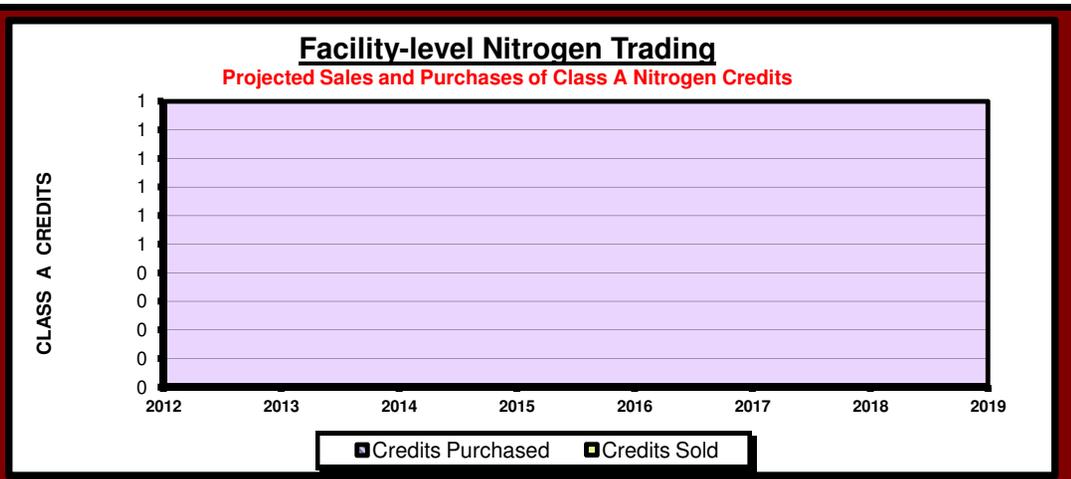


Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

2012	2013	2014	2015	2016	2017	2018	2019	
Planning Period					Future Estimates (non-binding)			
0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	
0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	
18.20	18.20	22.60	22.83	20.21	20.21	20.21	20.21	
2,771	2,771	3,441	4,172	3,693	3,693	3,693	3,693	
0.44	0.44	0.44	0.44	0.18	0.18	0.18	0.18	
1,219	1,219	1,514	1,836	665	665	665	665	
2,506	2,506	2,506	2,506	1,025	1,025	1,025	1,025	
1,287	1,287	992	670	360	360	360	360	
(1,287)	(1,287)	(992)	(670)	(360)	(360)	(360)	(360)	
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

ACSA-Weyers Cave
POTOMAC Trading Basin

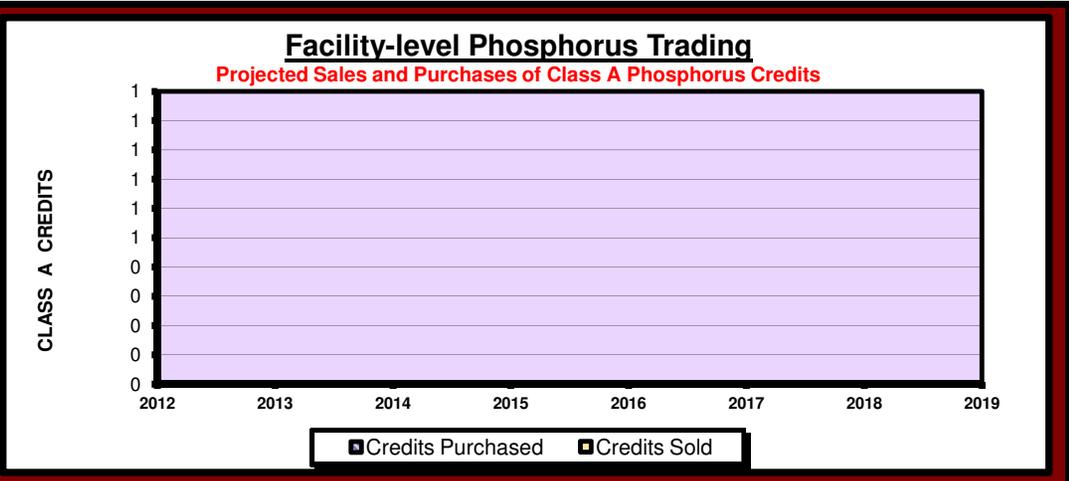


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	0.44	0.46	0.40	0.42	0.44	0.46	0.46	0.46
Projected Avg. Annual Concentration (mg/L)	34.80	34.80	31.00	27.81	23.78	23.78	23.78	23.78
Discharged Load (end of pipe)	46,634	48,753	37,765	35,573	31,866	33,315	33,315	33,315
Delivery Factor	0.44	0.44	0.44	0.44	0.24	0.24	0.24	0.24
Expected Load	20,519	21,451	16,617	15,652	7,648	7,996	7,996	7,996
Delivered WLA	2,680	2,680	2,680	2,680	1,462	1,462	1,462	1,462
Expected Credits (delivered)	(17,839)	(18,771)	(13,937)	(12,972)	(6,186)	(6,534)	(6,534)	(6,534)
Transfers In (Out) within Owner Bubble	17,839	18,771	13,937	12,972	6,186	6,534	6,534	6,534
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



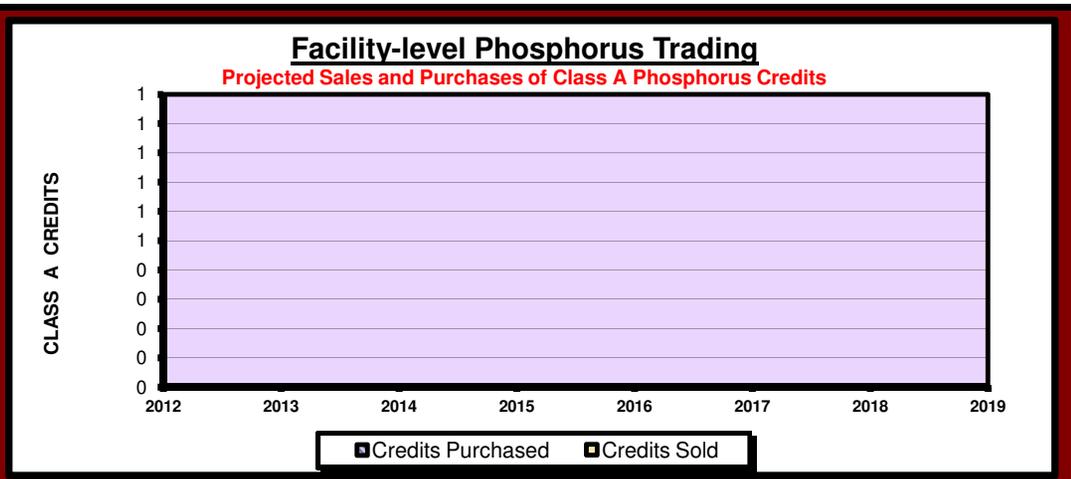
Loading & Credit Summary

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

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Projected Flow (mgd)	2.38	2.54	2.71	2.88	2.50	2.60	2.70	2.81
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)	2,175	2,321	2,476	2,631	2,284	2,376	2,471	2,569
Delivery Factor	0.77	0.77	0.77	0.77	0.54	0.54	0.54	0.54
Expected Load	1,674	1,787	1,907	2,026	1,233	1,283	1,334	1,387
Delivered WLA	2,814	2,814	2,814	2,814	1,974	1,974	1,974	1,974
Expected Credits (delivered)	1,140	1,027	907	788	741	691	640	587
Transfers In (Out) within Owner Bubble	(1,140)	(1,027)	(907)	(788)	(741)	(691)	(640)	(587)
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

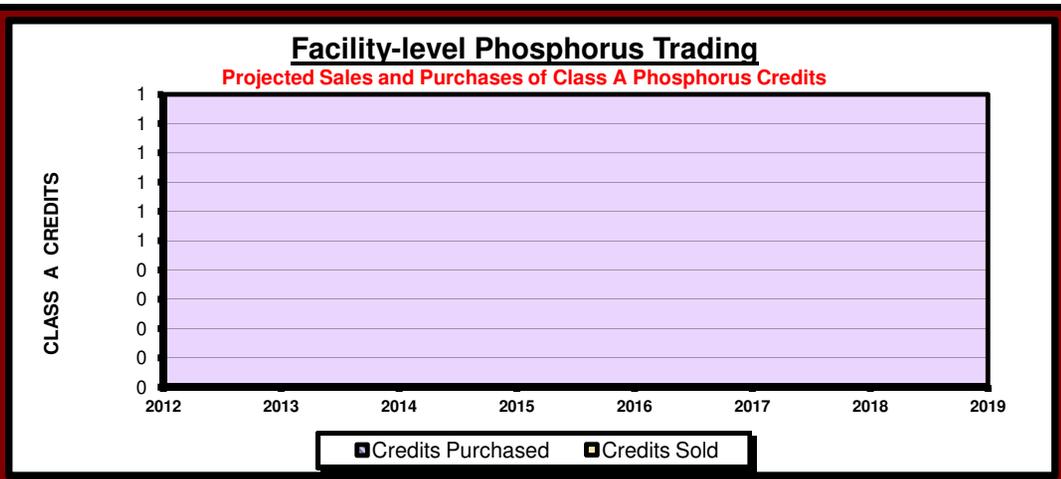
ACSA-Greenville
POTOMAC Trading Basin



Loading & Credit Summary	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Projected Flow (mgd)	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Projected Avg. Annual Concentration (mg/L)	8.00	8.00	6.90	6.43	6.41	6.41	6.41	6.41
Discharged Load (end of pipe)	731	731	630	587	586	586	586	586
Delivery Factor	0.77	0.77	0.77	0.77	0.54	0.54	0.54	0.54
Expected Load	563	563	485	452	316	316	316	316
Delivered WLA	1,466	1,466	1,466	1,466	1,028	1,028	1,028	1,028
Expected Credits (delivered)	903	903	981	1,014	712	712	712	712
Transfers In (Out) within Owner Bubble	(903)	(903)	(981)	(1,014)	(712)	(712)	(712)	(712)
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-Harriston
POTOMAC Trading Basin



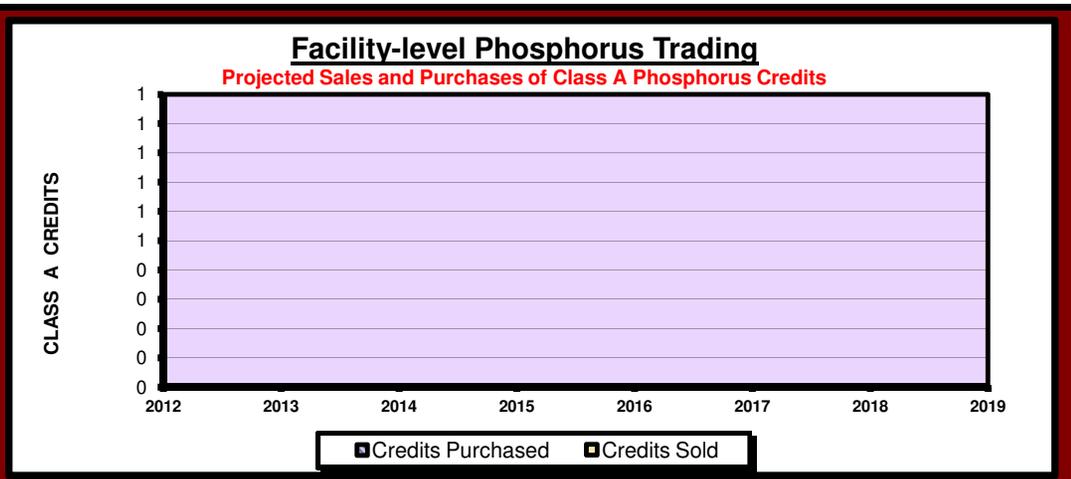
Loading & Credit Summary

Design Flow (mgd)	0.10
Projected Flow (mgd)	0.06
Projected Avg. Annual Concentration (mg/L)	2.70
Discharged Load (end of pipe)	493
Delivery Factor	0.77
Expected Load	380
Delivered WLA	586
Expected Credits (delivered)	206
Transfers In (Out) within Owner Bubble	(206)
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

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Projected Avg. Annual Concentration (mg/L)	2.70	2.70	3.70	4.45	4.25	4.25	4.25	4.25
Discharged Load (end of pipe)	493	493	676	813	777	777	777	777
Delivery Factor	0.77	0.77	0.77	0.77	0.54	0.54	0.54	0.54
Expected Load	380	380	521	626	419	419	419	419
Delivered WLA	586	586	586	586	411	411	411	411
Expected Credits (delivered)	206	206	65	(40)	(8)	(8)	(8)	(8)
Transfers In (Out) within Owner Bubble	(206)	(206)	(65)	40	8	8	8	8
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-Middle River
POTOMAC Trading Basin

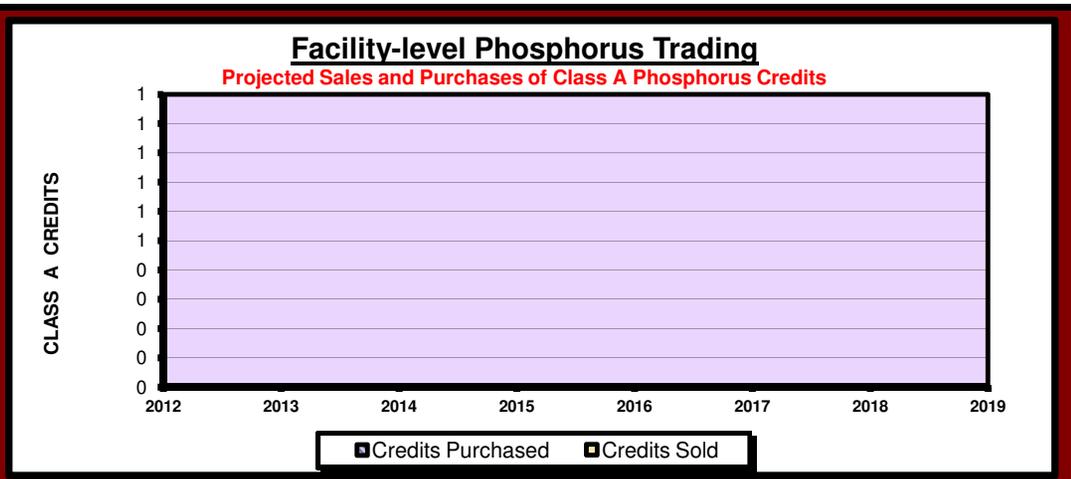


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	6.80	6.80	6.80	6.80	6.80	6.80	6.80	6.80
Projected Flow (mgd)	5.12	5.23	5.34	5.45	5.00	5.10	5.20	5.31
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)	4,678	4,778	4,879	4,979	4,568	4,660	4,753	4,848
Delivery Factor	0.77	0.77	0.77	0.77	0.54	0.54	0.54	0.54
Expected Load	3,602	3,679	3,757	3,834	2,467	2,516	2,567	2,618
Delivered WLA	4,784	4,784	4,784	4,784	3,355	3,355	3,355	3,355
Expected Credits (delivered)	1,182	1,105	1,027	950	888	839	788	737
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	1,182	1,105	1,027	950	888	839	788	737
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	1,182	1,105	1,027	950	888	839	788	737

PHOSPHORUS FACILITY SUMMARY

ACSA-Mt. Sidney
POTOMAC Trading Basin

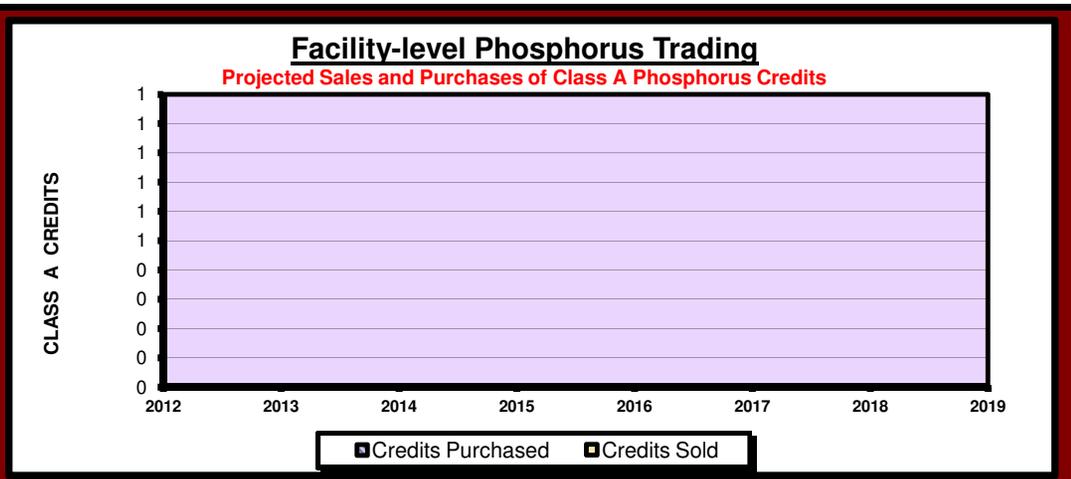


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Projected Flow (mgd)	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Projected Avg. Annual Concentration (mg/L)	4.90	4.90	5.20	5.07	4.81	4.81	4.81	4.81
Discharged Load (end of pipe)	1,045	1,045	1,109	1,081	1,025	1,025	1,025	1,025
Delivery Factor	0.77	0.77	0.77	0.77	0.54	0.54	0.54	0.54
Expected Load	804	804	854	832	554	554	554	554
Delivered WLA	879	879	879	879	617	617	617	617
Expected Credits (delivered)	75	75	25	47	63	63	63	63
Transfers In (Out) within Owner Bubble	(75)	(75)	(25)	(47)	(63)	(63)	(63)	(63)
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

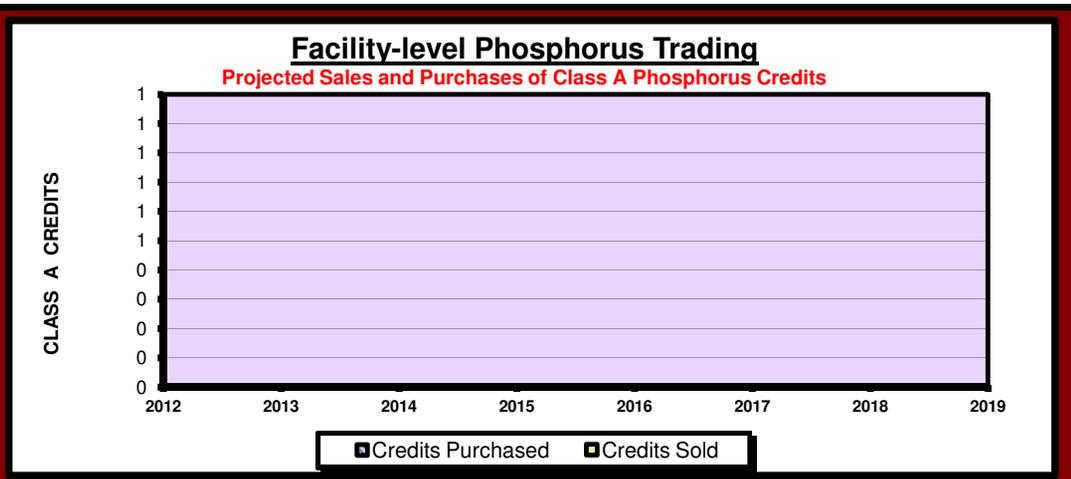
Design Flow (mgd)	4.00
Projected Flow (mgd)	1.72
Projected Avg. Annual Concentration (mg/L)	0.30
Discharged Load (end of pipe)	1,572
Delivery Factor	0.77
Expected Load	1,210
Delivered WLA	2,814
Expected Credits (delivered)	1,604
Transfers In (Out) within Owner Bubble	(647)
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	957
Class A Credit Sales (Purchases)	0
Expected Class B Credits	957

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Projected Flow (mgd)	1.72	1.80	1.89	1.97	2.05	2.13	2.21	2.30
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)	1,572	1,645	1,727	1,800	1,873	1,946	2,022	2,101
Delivery Factor	0.77	0.77	0.77	0.77	0.54	0.54	0.54	0.54
Expected Load	1,210	1,266	1,330	1,386	1,011	1,051	1,092	1,135
Delivered WLA	2,814	2,814	2,814	2,814	1,974	1,974	1,974	1,974
Expected Credits (delivered)	1,604	1,548	1,484	1,428	963	923	882	839
Transfers In (Out) within Owner Bubble	(647)	(915)	(812)	(1,152)	(439)	(589)	(640)	(693)
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	957	633	672	276	524	334	242	146
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	957	633	672	276	524	334	242	146

PHOSPHORUS FACILITY SUMMARY

ACSA-Vesper View

POTOMAC Trading Basin

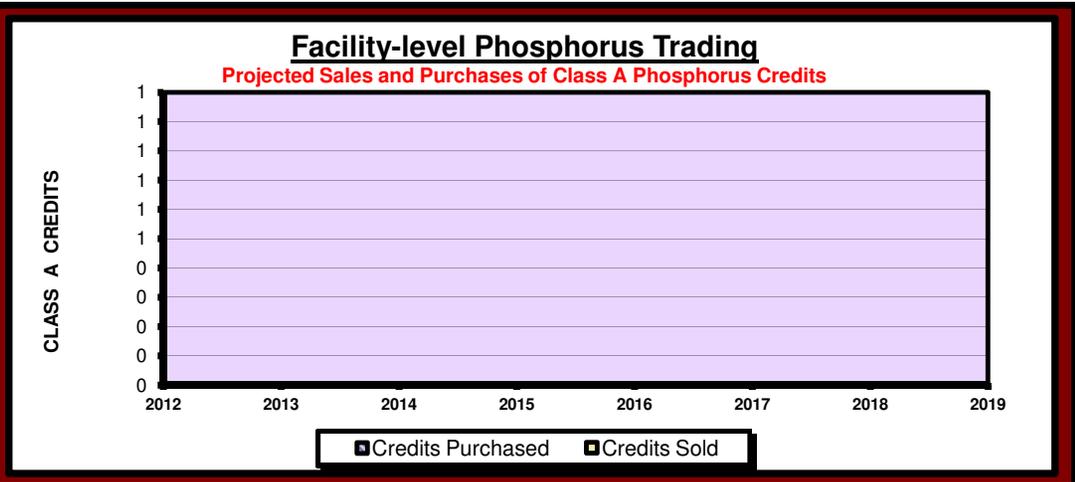


Loading & Credit Summary	
Design Flow (mgd)	
Design Flow (mgd)	0.10
Projected Flow (mgd)	0.05
Projected Avg. Annual Concentration (mg/L)	4.30
Discharged Load (end of pipe)	
Discharged Load (end of pipe)	655
Delivery Factor	0.77
Expected Load	504
Delivered WLA	586
Expected Credits (delivered)	
Expected Credits (delivered)	82
Transfers In (Out) within Owner Bubble	(82)
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	
Expected Net Credits	0
Class A Credit Sales (Purchases)	
Class A Credit Sales (Purchases)	0
Expected Class B Credits	
Expected Class B Credits	0

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06
4.30	4.30	4.60	4.40	3.96	3.96	3.96	3.96
655	655	700	804	724	724	724	724
0.77	0.77	0.77	0.77	0.54	0.54	0.54	0.54
504	504	539	619	391	391	391	391
586	586	586	586	411	411	411	411
82	82	47	(33)	20	20	20	20
(82)	(82)	(47)	33	(20)	(20)	(20)	(20)
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



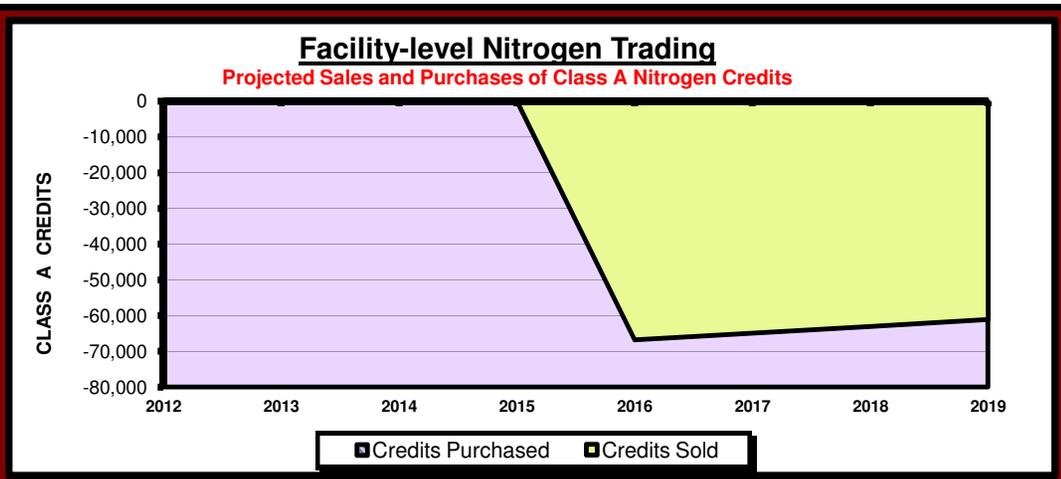
Loading & Credit Summary

Design Flow (mgd)	0.50
Projected Flow (mgd)	0.44
Projected Avg. Annual Concentration (mg/L)	3.30
Discharged Load (end of pipe)	4,422
Delivery Factor	0.77
Expected Load	3,405
Delivered WLA	352
Expected Credits (delivered)	(3,053)
Transfers In (Out) within Owner Bubble	3,053
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

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	0.44	0.46	0.40	0.42	0.44	0.46	0.46	0.46
Projected Avg. Annual Concentration (mg/L)	3.30	3.30	3.40	3.33	3.11	3.11	3.11	3.11
Discharged Load (end of pipe)	4,422	4,623	4,142	4,260	4,168	4,357	4,357	4,357
Delivery Factor	0.77	0.77	0.77	0.77	0.53	0.53	0.53	0.53
Expected Load	3,405	3,560	3,189	3,280	2,209	2,309	2,309	2,309
Delivered WLA	352	352	352	352	242	242	242	242
Expected Credits (delivered)	(3,053)	(3,208)	(2,837)	(2,928)	(1,967)	(2,067)	(2,067)	(2,067)
Transfers In (Out) within Owner Bubble	3,053	3,208	2,837	2,928	1,967	2,067	2,067	2,067
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

Alexandria S.A.
POTOMAC Trading Basin

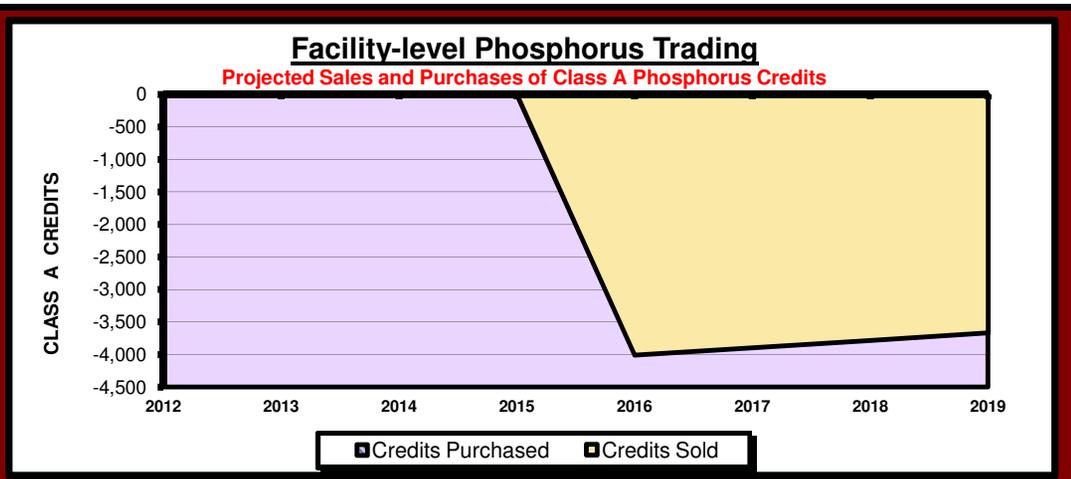


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00
Projected Flow (mgd)	40.50	41.00	38.30	38.96	39.38	39.80	40.21	40.63
Projected Avg. Annual Concentration (mg/L)	4.00	3.95	4.23	4.16	3.00	3.00	3.00	3.00
Discharged Load (end of pipe)	493,381	493,381	493,373	493,381	359,802	363,640	367,386	371,223
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	493,381	493,381	493,373	493,381	359,802	363,640	367,386	371,223
Delivered WLA	493,381	493,381	493,381	493,381	493,381	493,381	493,381	493,381
Expected Credits (delivered)	0	0	8	0	133,579	129,741	125,995	122,158
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	8	0	133,579	129,741	125,995	122,158
Class A Credit Sales (Purchases)	0	0	0	0	66,790	64,871	62,998	61,079
Expected Class B Credits	0	0	8	0	66,789	64,870	62,997	61,079

PHOSPHORUS FACILITY SUMMARY

Alexandria S.A.
POTOMAC Trading Basin



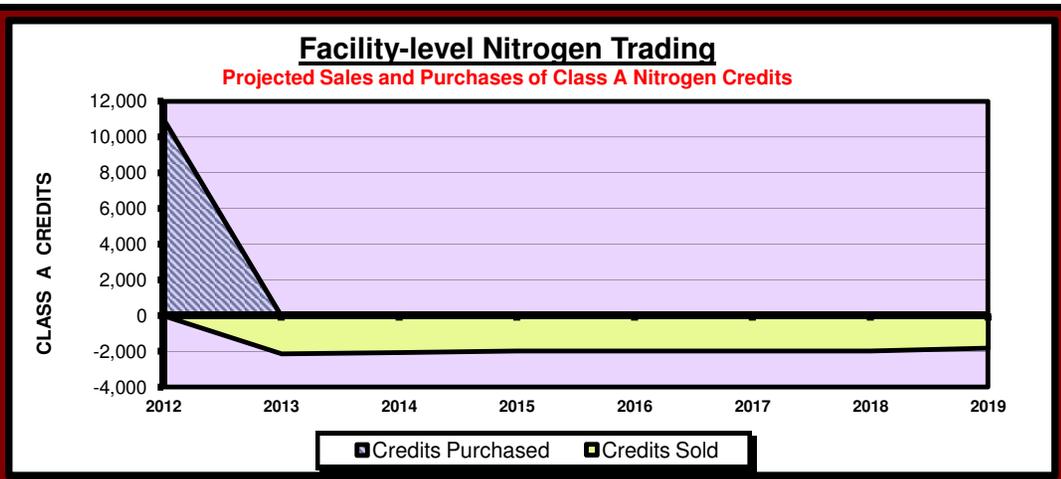
Loading & Credit Summary

Design Flow (mgd)	54.00
Projected Flow (mgd)	40.50
Projected Avg. Annual Concentration (mg/L)	0.18
Discharged Load (end of pipe)	22,202
Delivery Factor	1.00
Expected Load	22,202
Delivered WLA	29,603
Expected Credits (delivered)	7,401
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	7,401
Class A Credit Sales (Purchases)	0
Expected Class B Credits	7,401

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00
Projected Flow (mgd)	40.50	41.00	38.30	38.96	39.38	39.80	40.21	40.63
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)	22,202	22,476	20,996	21,358	21,588	21,818	22,043	22,273
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	22,202	22,476	20,996	21,358	21,588	21,818	22,043	22,273
Delivered WLA	29,603	29,603	29,603	29,603	29,603	29,603	29,603	29,603
Expected Credits (delivered)	7,401	7,127	8,607	8,245	8,015	7,785	7,560	7,330
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	7,401	7,127	8,607	8,245	8,015	7,785	7,560	7,330
Class A Credit Sales (Purchases)	0	0	0	0	4,008	3,893	3,780	3,665
Expected Class B Credits	7,401	7,127	8,607	8,245	4,007	3,892	3,780	3,665

NITROGEN FACILITY SUMMARY

Berryville
 POTOMAC Trading Basin

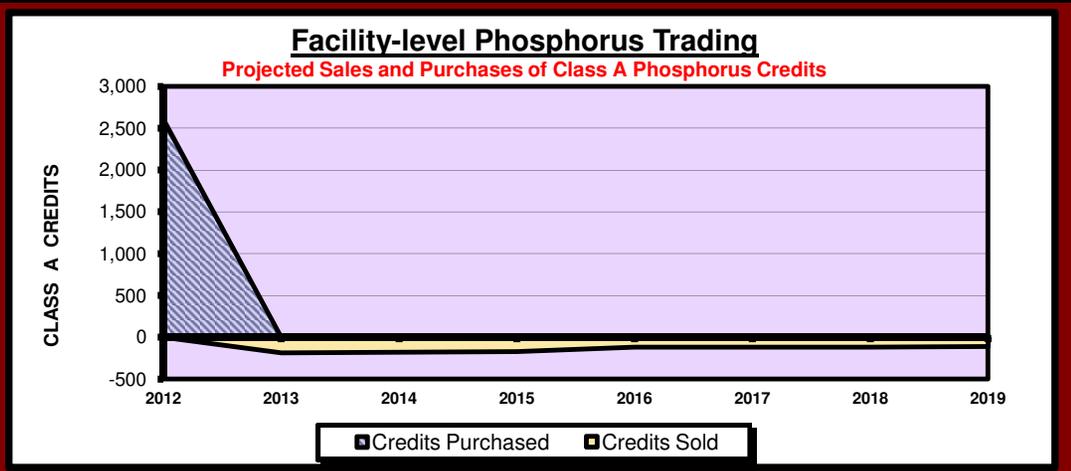


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Projected Flow (mgd)	0.40	0.41	0.42	0.43	0.43	0.43	0.43	0.45
Projected Avg. Annual Concentration (mg/L)	20.50	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Discharged Load (end of pipe)	24,974	4,995	5,117	5,238	5,238	5,238	5,238	5,482
Delivery Factor	0.67	0.67	0.67	0.67	0.63	0.63	0.63	0.63
Expected Load	16,732	3,346	3,428	3,510	3,300	3,300	3,300	3,454
Delivered WLA	5,713	5,713	5,713	5,713	5,373	5,373	5,373	5,373
Expected Credits (delivered)	(11,019)	2,367	2,285	2,203	2,073	2,073	2,073	1,919
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	(11,019)	2,367	2,285	2,203	2,073	2,073	2,073	1,919
Class A Credit Sales (Purchases)	(11,019)	2,130	2,057	1,983	1,969	1,969	1,969	1,823
Expected Class B Credits	0	237	228	220	104	104	104	96

PHOSPHORUS FACILITY SUMMARY

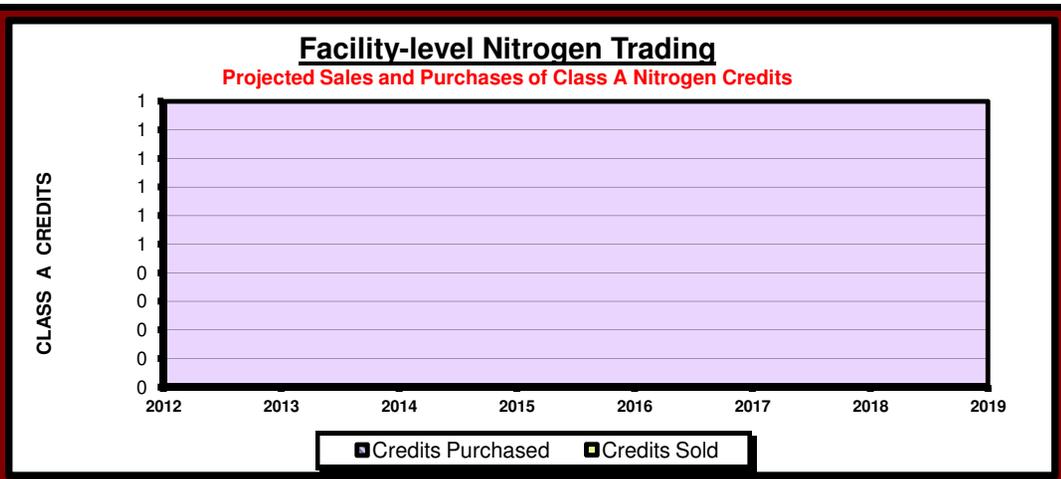
Berryville
POTOMAC Trading Basin



Loading & Credit Summary	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Projected Flow (mgd)	0.40	0.41	0.42	0.43	0.43	0.43	0.43	0.45
Projected Avg. Annual Concentration (mg/L)	3.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	4,020	375	384	393	393	393	393	411
Delivery Factor	0.77	0.77	0.77	0.77	0.53	0.53	0.53	0.53
Expected Load	3,096	288	295	303	208	208	208	218
Delivered WLA	492	492	492	492	339	339	339	339
Expected Credits (delivered)	(2,604)	204	197	189	131	131	131	121
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	(2,604)	204	197	189	131	131	131	121
Class A Credit Sales (Purchases)	(2,604)	184	177	170	118	118	118	109
Expected Class B Credits	0	20	20	19	13	13	13	12

NITROGEN FACILITY SUMMARY

Broadway Regional
POTOMAC Trading Basin

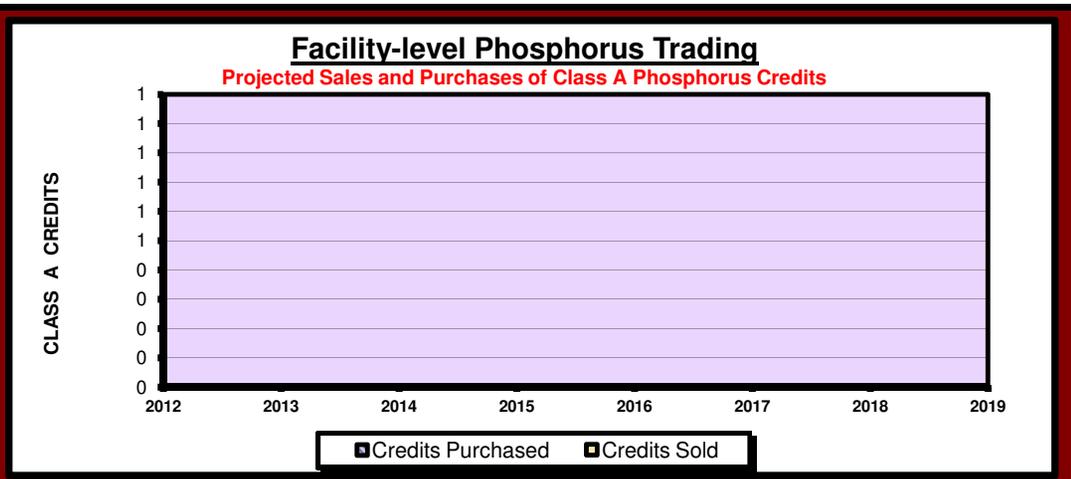


Loading & Credit Summary	
Design Flow (mgd)	2.92
Projected Flow (mgd)	2.10
Projected Avg. Annual Concentration (mg/L)	3.70
Discharged Load (end of pipe)	23,664
Delivery Factor	0.67
Expected Load	15,855
Delivered WLA	19,752
Expected Credits (delivered)	3,897
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	3,897
Class A Credit Sales (Purchases)	0
Expected Class B Credits	3,897

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
Projected Flow (mgd)	2.10	2.20	2.19	2.21	2.24	2.27	2.30	2.33
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)	23,664	24,791	24,678	24,904	25,242	25,580	25,918	26,256
Delivery Factor	0.67	0.67	0.67	0.67	0.19	0.19	0.19	0.19
Expected Load	15,855	16,610	16,534	16,685	4,796	4,860	4,924	4,989
Delivered WLA	19,752	19,752	19,752	19,752	5,601	5,601	5,601	5,601
Expected Credits (delivered)	3,897	3,142	3,218	3,067	805	741	677	612
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	3,897	3,142	3,218	3,067	805	741	677	612
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	3,897	3,142	3,218	3,067	805	741	677	612

PHOSPHORUS FACILITY SUMMARY

Broadway Regional
POTOMAC Trading Basin



Loading & Credit Summary

Design Flow (mgd)	2.92
Projected Flow (mgd)	2.10
Projected Avg. Annual Concentration (mg/L)	0.30
Discharged Load (end of pipe)	1,919
Delivery Factor	0.77
Expected Load	1,477
Delivered WLA	1,703
Expected Credits (delivered)	226
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	226
Class A Credit Sales (Purchases)	0
Expected Class B Credits	226

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
Projected Flow (mgd)	2.10	2.20	2.19	2.21	2.24	2.27	2.30	2.33
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)	1,919	2,010	2,001	2,019	2,047	2,074	2,101	2,129
Delivery Factor	0.77	0.77	0.77	0.77	0.53	0.53	0.53	0.53
Expected Load	1,477	1,548	1,541	1,555	1,085	1,099	1,114	1,128
Delivered WLA	1,703	1,703	1,703	1,703	1,172	1,172	1,172	1,172
Expected Credits (delivered)	226	155	162	148	87	73	58	44
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	226	155	162	148	87	73	58	44
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	226	155	162	148	87	73	58	44

Broadway Regional - Additional Information

The Town of Broadway has executed a Wastewater Treatment Agreement with the Town of New Market to discontinue operation of the Town of New Market Wastewater Treatment Plant (VPDES Permit No VA0022853) and to convey all wastewater to the Town of Broadway Regional Wastewater Treatment Facility (VPDES Permit No VA0090263). Expansion of the Broadway Regional WWTF to 2.923-mgd, to accommodate the 1-mgd design flow from the Town of New Market, was completed September 1, 2010. The Town of Broadway has requested that the Potomac Basin registration list in the Watershed General Permit be modified to reflect this transfer to and consolidation of TN and TP wasteload allocations in the Town of Broadway Regional Wastewater Treatment Facility. This Plan Update reflects such consolidation.

Owner Bubble: Dale Service Corporation

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.

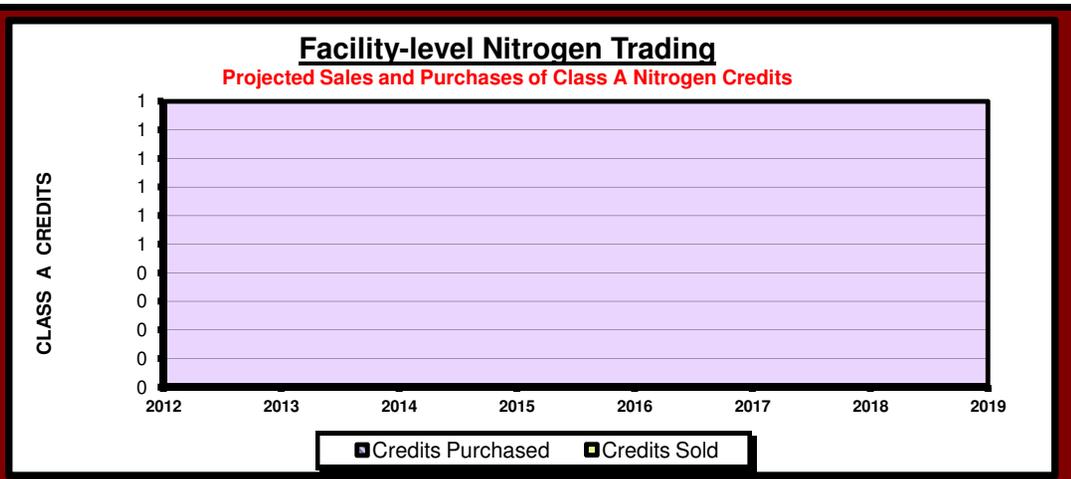
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply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

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
Dale Service Corp #1	-	-	-	-	-	-	-	-
Dale Service Corp #8	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Dale Service Corp #1	5,939	5,482	4,569	3,655	2,741	2,741	2,741	2,741
Dale Service Corp #8	5,939	5,482	4,569	3,655	2,741	2,741	2,741	2,741
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	11,878	10,964	9,138	7,310	5,482	5,482	5,482	5,482
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
<i>Expected Class B Credits</i>	<i>11,878</i>	<i>10,964</i>	<i>9,138</i>	<i>7,310</i>	<i>5,482</i>	<i>5,482</i>	<i>5,482</i>	<i>5,482</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		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
Dale Service Corp #1	-	-	-	-	-	-	-	-
Dale Service Corp #8	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Dale Service Corp #1	357	329	274	220	165	165	165	165
Dale Service Corp #8	357	329	274	220	165	165	165	165
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	714	658	548	440	330	330	330	330
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
<i>Expected Class B Credits</i>	<i>714</i>	<i>658</i>	<i>548</i>	<i>440</i>	<i>330</i>	<i>330</i>	<i>330</i>	<i>330</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

Dale Service Corp #1
POTOMAC Trading Basin

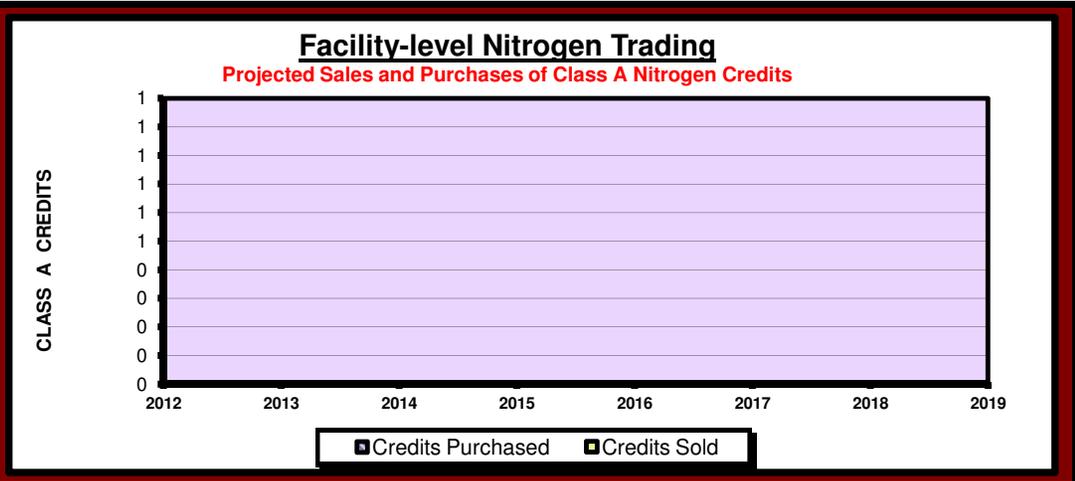


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60
Projected Flow (mgd)	3.95	4.00	4.10	4.20	4.30	4.30	4.30	4.30
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)	36,090	36,547	37,460	38,374	39,288	39,288	39,288	39,288
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	36,090	36,547	37,460	38,374	39,288	39,288	39,288	39,288
Delivered WLA	42,029	42,029	42,029	42,029	42,029	42,029	42,029	42,029
Expected Credits (delivered)	5,939	5,482	4,569	3,655	2,741	2,741	2,741	2,741
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	5,939	5,482	4,569	3,655	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	5,939	5,482	4,569	3,655	2,741	2,741	2,741	2,741

NITROGEN FACILITY SUMMARY

Dale Service Corp #8
POTOMAC Trading Basin



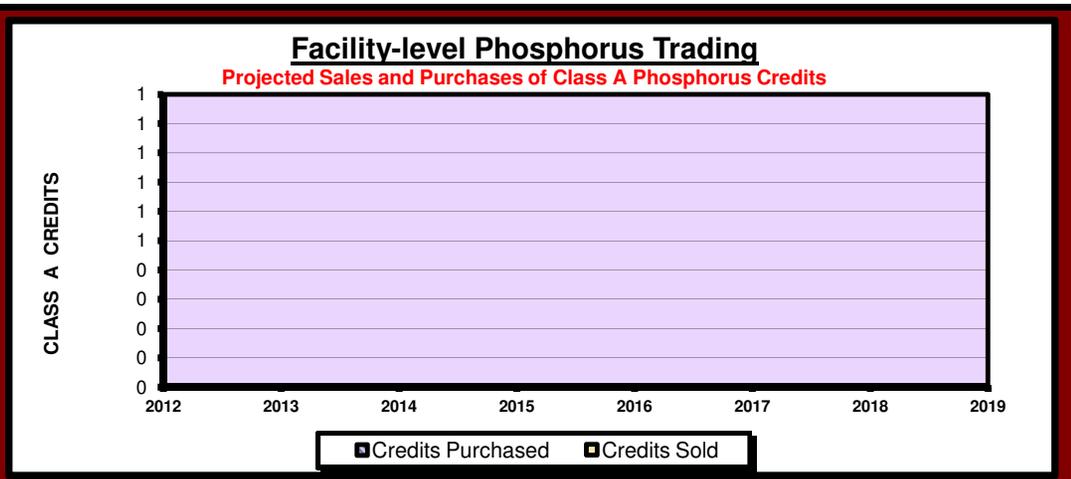
Loading & Credit Summary

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

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60
3.95	4.00	4.10	4.20	4.30	4.30	4.30	4.30
3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
36,090	36,547	37,460	38,374	39,288	39,288	39,288	39,288
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
36,090	36,547	37,460	38,374	39,288	39,288	39,288	39,288
42,029	42,029	42,029	42,029	42,029	42,029	42,029	42,029
5,939	5,482	4,569	3,655	2,741	2,741	2,741	2,741
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
5,939	5,482	4,569	3,655	2,741	2,741	2,741	2,741
0	0	0	0	0	0	0	0
5,939	5,482	4,569	3,655	2,741	2,741	2,741	2,741

PHOSPHORUS FACILITY SUMMARY

Dale Service Corp #1
POTOMAC Trading Basin



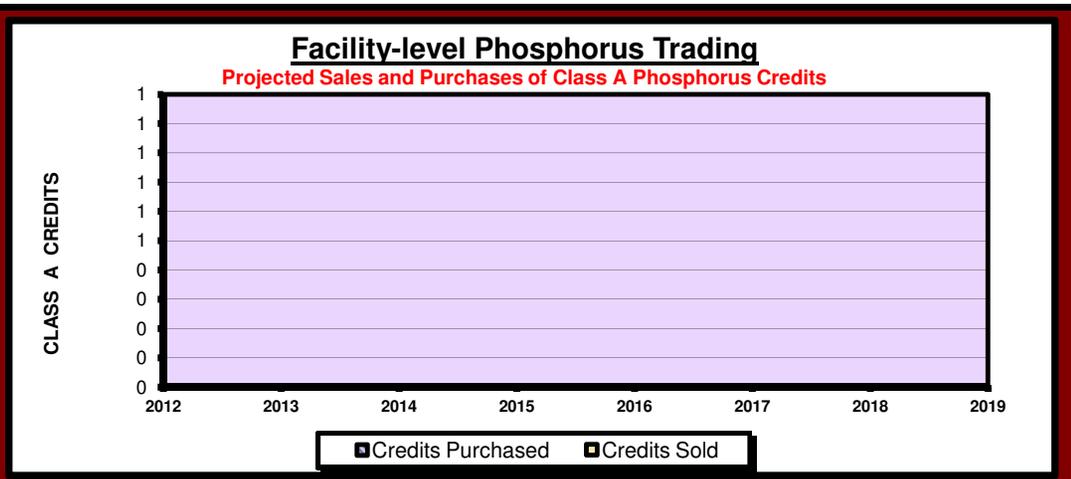
Loading & Credit Summary

Design Flow (mgd)	4.60
Projected Flow (mgd)	3.95
Projected Avg. Annual Concentration (mg/L)	0.18
Discharged Load (end of pipe)	2,165
Delivery Factor	1.00
Expected Load	2,165
Delivered WLA	2,522
Expected Credits (delivered)	357
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	357
Class A Credit Sales (Purchases)	0
Expected Class B Credits	357

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60
Projected Flow (mgd)	3.95	4.00	4.10	4.20	4.30	4.30	4.30	4.30
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)	2,165	2,193	2,248	2,302	2,357	2,357	2,357	2,357
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	2,165	2,193	2,248	2,302	2,357	2,357	2,357	2,357
Delivered WLA	2,522	2,522	2,522	2,522	2,522	2,522	2,522	2,522
Expected Credits (delivered)	357	329	274	220	165	165	165	165
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	357	329	274	220	165	165	165	165
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	357	329	274	220	165	165	165	165

PHOSPHORUS FACILITY SUMMARY

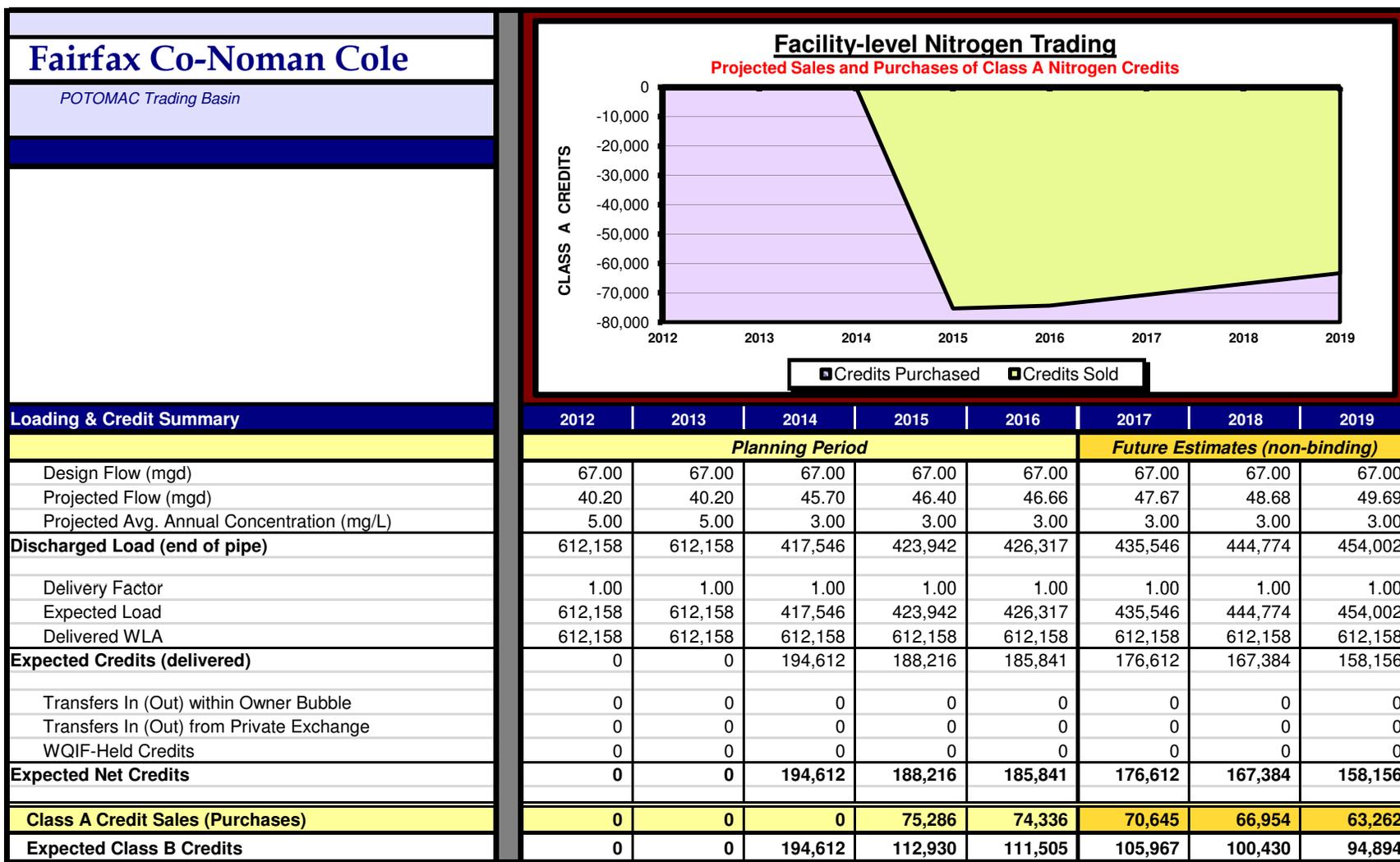
Dale Service Corp #8
POTOMAC Trading Basin



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	

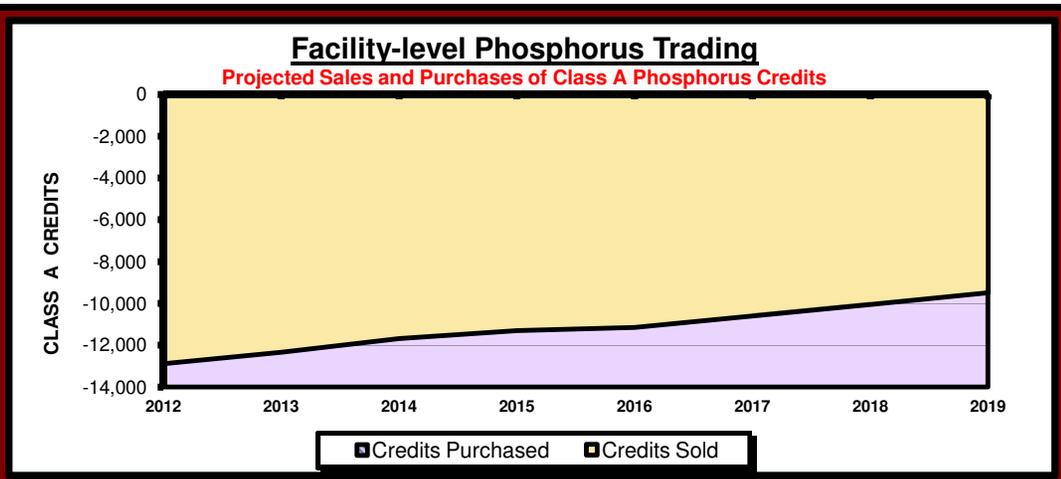
	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60
Projected Flow (mgd)	3.95	4.00	4.10	4.20	4.30	4.30	4.30	4.30
Projected Avg. Annual Concentration (mg/L)	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Discharged Load (end of pipe)	2,165	2,193	2,248	2,302	2,357	2,357	2,357	2,357
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	2,165	2,193	2,248	2,302	2,357	2,357	2,357	2,357
Delivered WLA	2,522	2,522	2,522	2,522	2,522	2,522	2,522	2,522
Expected Credits (delivered)	357	329	274	220	165	165	165	165
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	357	329	274	220	165	165	165	165
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	357	329	274	220	165	165	165	165

NITROGEN FACILITY SUMMARY



PHOSPHORUS FACILITY SUMMARY

Fairfax Co-Noman Cole
POTOMAC Trading Basin

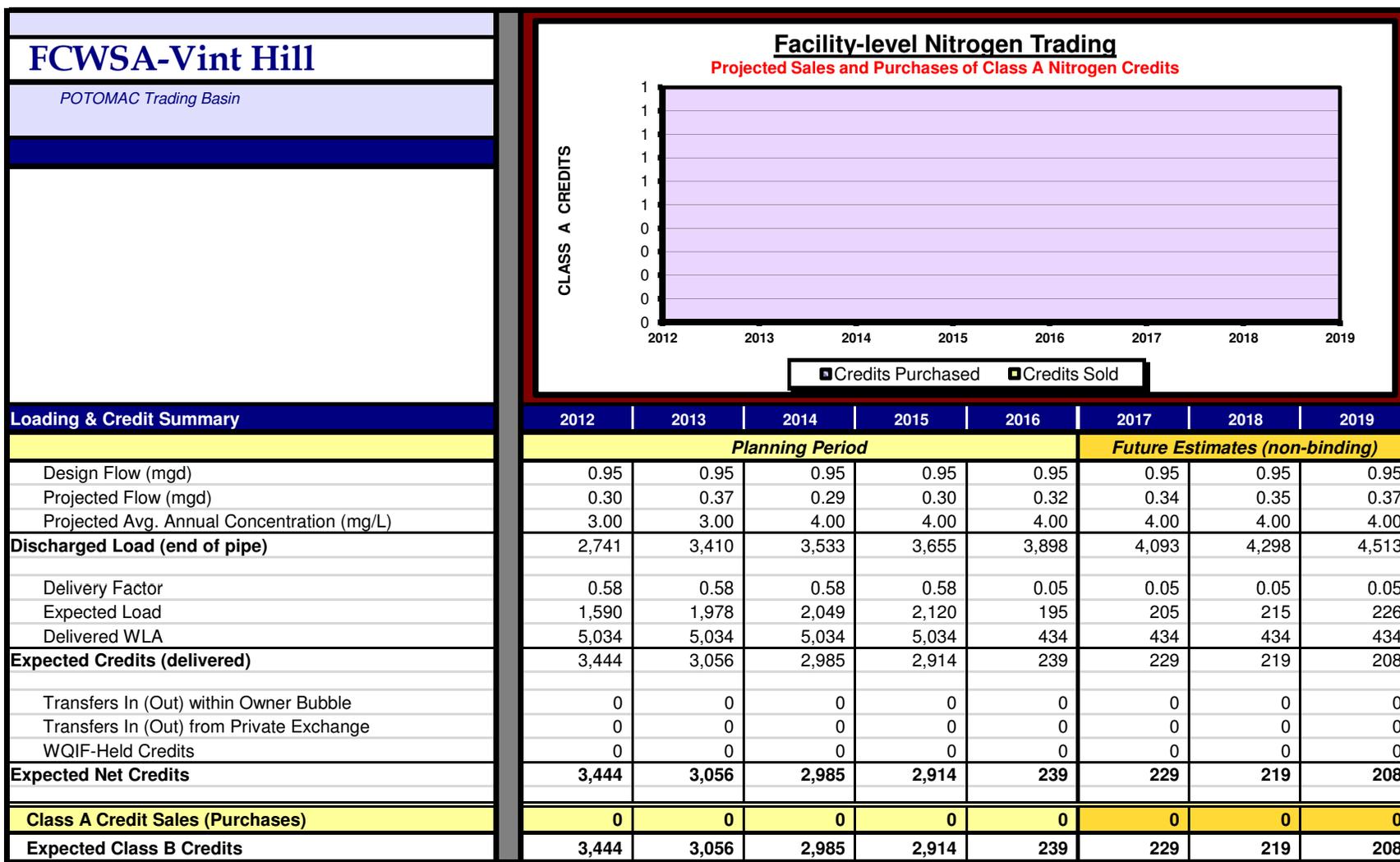


Loading & Credit Summary

Design Flow (mgd)	67.00
Projected Flow (mgd)	40.20
Projected Avg. Annual Concentration (mg/L)	0.18
Discharged Load (end of pipe)	22,038
Delivery Factor	1.00
Expected Load	22,038
Delivered WLA	36,729
Expected Credits (delivered)	14,691
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	14,691
Class A Credit Sales (Purchases)	12,882
Expected Class B Credits	1,809

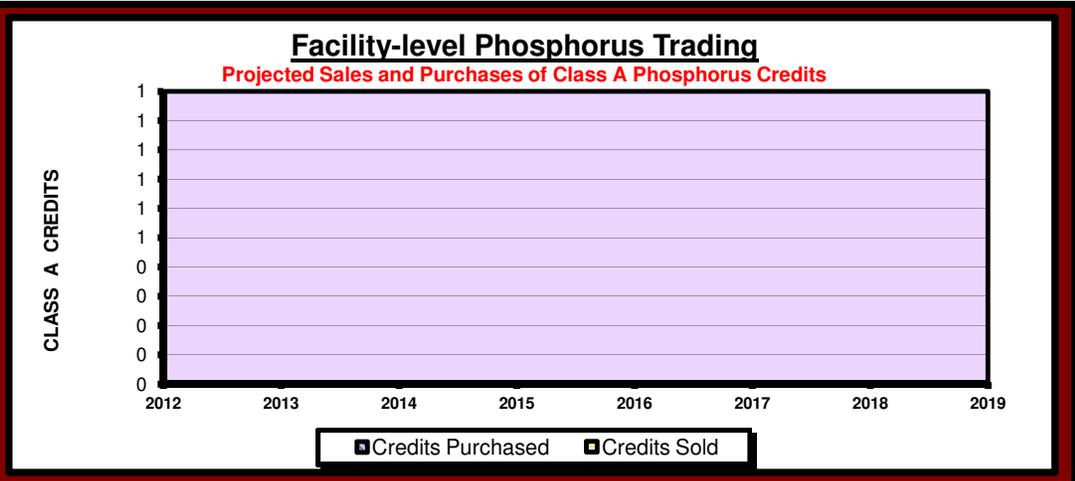
	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	67.00	67.00	67.00	67.00	67.00	67.00	67.00	67.00
Projected Flow (mgd)	40.20	40.20	45.70	46.40	46.66	47.67	48.68	49.69
Projected Avg. Annual Concentration (mg/L)	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Discharged Load (end of pipe)	22,038	22,038	25,053	25,437	25,579	26,133	26,686	27,240
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	22,038	22,038	25,053	25,437	25,579	26,133	26,686	27,240
Delivered WLA	36,729	36,729	36,729	36,729	36,729	36,729	36,729	36,729
Expected Credits (delivered)	14,691	14,691	11,676	11,292	11,150	10,596	10,043	9,489
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	14,691	14,691	11,676	11,292	11,150	10,596	10,043	9,489
Class A Credit Sales (Purchases)	12,882	12,334	11,676	11,292	11,150	10,596	10,043	9,489
Expected Class B Credits	1,809	2,357	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY



PHOSPHORUS FACILITY SUMMARY

FCWSA-Vint Hill
POTOMAC Trading Basin



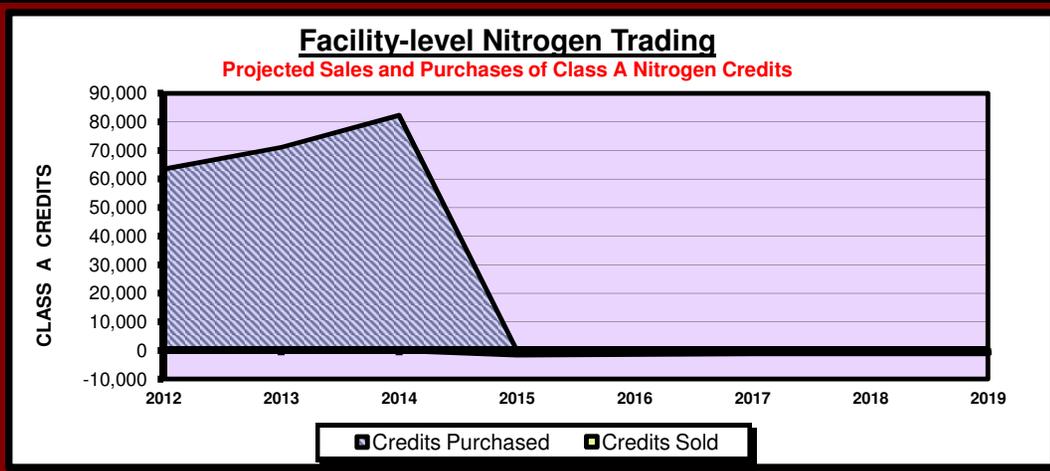
Loading & Credit Summary

Design Flow (mgd)	0.95
Projected Flow (mgd)	0.30
Projected Avg. Annual Concentration (mg/L)	0.31
Discharged Load (end of pipe)	283
Delivery Factor	0.44
Expected Load	125
Delivered WLA	382
Expected Credits (delivered)	257
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	257
Class A Credit Sales (Purchases)	0
Expected Class B Credits	257

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Projected Flow (mgd)	0.30	0.37	0.29	0.30	0.32	0.34	0.35	0.37
Projected Avg. Annual Concentration (mg/L)	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Discharged Load (end of pipe)	283	352	274	283	302	317	333	350
Delivery Factor	0.44	0.44	0.44	0.44	0.17	0.17	0.17	0.17
Expected Load	125	155	120	125	51	54	57	59
Delivered WLA	382	382	382	382	148	148	148	148
Expected Credits (delivered)	257	227	262	257	97	94	91	89
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	257	227	262	257	97	94	91	89
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	257	227	262	257	97	94	91	89

NITROGEN FACILITY SUMMARY

Front Royal
POTOMAC Trading Basin



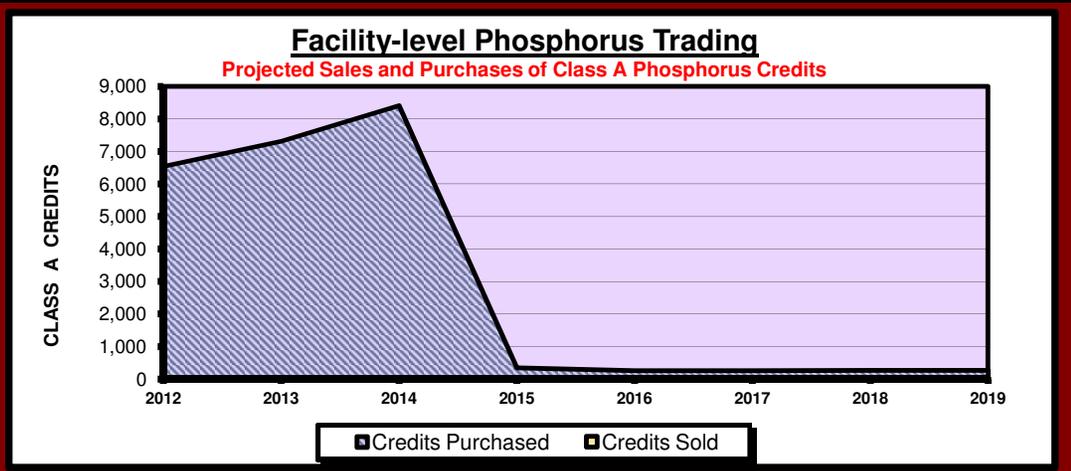
Loading & Credit Summary

Design Flow (mgd)	4.00
Projected Flow (mgd)	3.50
Projected Avg. Annual Concentration (mg/L)	13.46
Discharged Load (end of pipe)	143,476
Delivery Factor	0.67
Expected Load	96,129
Delivered WLA	32,648
Expected Credits (delivered)	(63,481)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(63,481)
Class A Credit Sales (Purchases)	(63,481)
Expected Class B Credits	0

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
3.50	3.60	3.80	4.50	4.52	4.53	4.54	4.55
13.46	14.13	14.83	3.00	3.00	3.00	3.00	3.00
143,476	154,922	171,629	41,115	41,298	41,389	41,481	41,572
0.67	0.67	0.67	0.67	0.61	0.61	0.61	0.61
96,129	103,797	114,992	27,547	25,192	25,247	25,303	25,359
32,648	32,648	32,648	32,648	29,725	29,725	29,725	29,725
(63,481)	(71,149)	(82,344)	5,101	4,533	4,478	4,422	4,366
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
(63,481)	(71,149)	(82,344)	5,101	4,533	4,478	4,422	4,366
(63,481)	(71,149)	(82,344)	1,530	1,360	1,120	1,106	1,092
0	0	0	3,571	3,173	3,358	3,316	3,274

PHOSPHORUS FACILITY SUMMARY

Front Royal
POTOMAC Trading Basin



Loading & Credit Summary	
Design Flow (mgd)	4.00
Projected Flow (mgd)	3.50
Projected Avg. Annual Concentration (mg/L)	1.14
Discharged Load (end of pipe)	12,152
Delivery Factor	0.77
Expected Load	9,357
Delivered WLA	2,814
Expected Credits (delivered)	(6,543)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(6,543)
Class A Credit Sales (Purchases)	(6,543)
Expected Class B Credits	0

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
3.50	3.60	3.80	4.50	4.52	4.53	4.54	4.55
1.14	1.20	1.26	0.30	0.30	0.30	0.30	0.30
12,152	13,157	14,582	4,112	4,130	4,139	4,148	4,157
0.77	0.77	0.77	0.77	0.54	0.54	0.54	0.54
9,357	10,131	11,228	3,166	2,230	2,235	2,240	2,245
2,814	2,814	2,814	2,814	1,974	1,974	1,974	1,974
(6,543)	(7,317)	(8,414)	(352)	(256)	(261)	(266)	(271)
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
(6,543)	(7,317)	(8,414)	(352)	(256)	(261)	(266)	(271)
(6,543)	(7,317)	(8,414)	(352)	(256)	(261)	(266)	(271)
0	0	0	0	0	0	0	0

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.

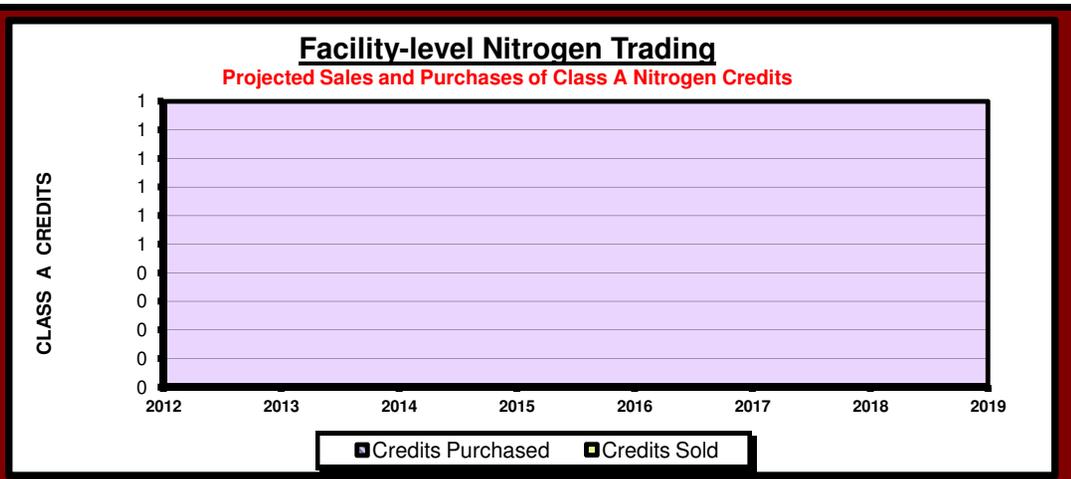
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply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

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
Opequon	-	-	-	-	-	-	-	-
Parkins Mills	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Opequon	39,732	38,244	36,622	35,067	11,917	11,441	10,729	10,301
Parkins Mills	26,864	24,700	22,537	20,373	6,335	5,701	6,414	5,860
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	66,596	62,944	59,159	55,440	18,252	17,142	17,143	16,161
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
<i>Expected Class B Credits</i>	<i>66,596</i>	<i>62,944</i>	<i>59,159</i>	<i>55,440</i>	<i>18,252</i>	<i>17,142</i>	<i>17,143</i>	<i>16,161</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		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
Opequon	-	-	-	-	-	-	-	-
Parkins Mills	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Opequon	4,490	4,361	4,221	4,086	2,112	2,013	1,865	1,777
Parkins Mills	2,097	1,928	1,759	1,590	987	888	790	691
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	6,587	6,289	5,980	5,676	3,099	2,901	2,655	2,468
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
<i>Expected Class B Credits</i>	<i>6,587</i>	<i>6,289</i>	<i>5,980</i>	<i>5,676</i>	<i>3,099</i>	<i>2,901</i>	<i>2,655</i>	<i>2,468</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

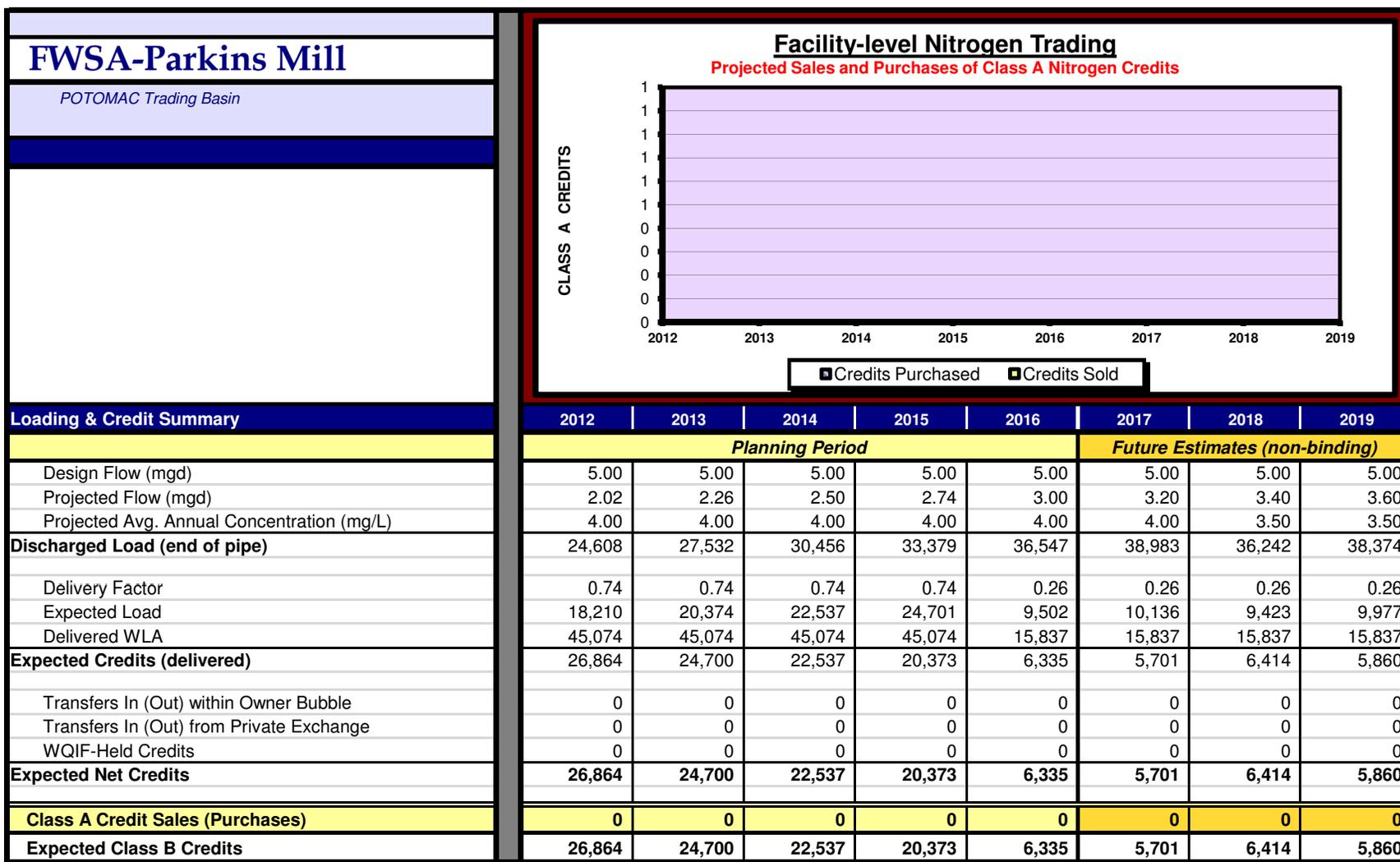
FWSA-Opequon
POTOMAC Trading Basin



Loading & Credit Summary

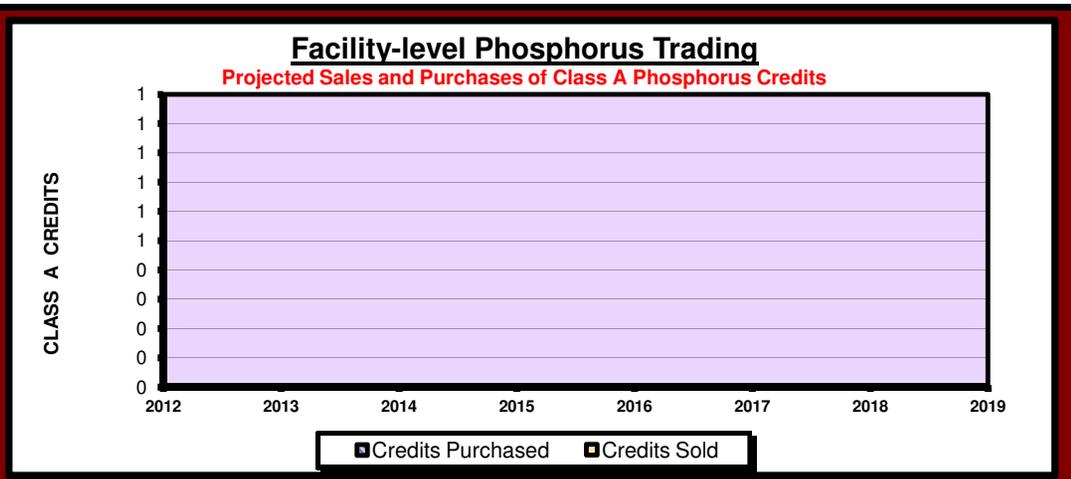
	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	12.60	12.60	12.60	12.60	12.60	12.60	12.60	12.60
Projected Flow (mgd)	7.46	7.68	7.92	8.15	8.32	8.52	8.82	9.00
Projected Avg. Annual Concentration (mg/L)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Discharged Load (end of pipe)	68,160	70,170	72,363	74,464	76,017	77,845	80,586	82,230
Delivery Factor	0.74	0.74	0.74	0.74	0.26	0.26	0.26	0.26
Expected Load	50,438	51,926	53,548	55,103	19,764	20,240	20,952	21,380
Delivered WLA	90,170	90,170	90,170	90,170	31,681	31,681	31,681	31,681
Expected Credits (delivered)	39,732	38,244	36,622	35,067	11,917	11,441	10,729	10,301
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	39,732	38,244	36,622	35,067	11,917	11,441	10,729	10,301
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	39,732	38,244	36,622	35,067	11,917	11,441	10,729	10,301

NITROGEN FACILITY SUMMARY



PHOSPHORUS FACILITY SUMMARY

FWSA-Opequon
POTOMAC Trading Basin



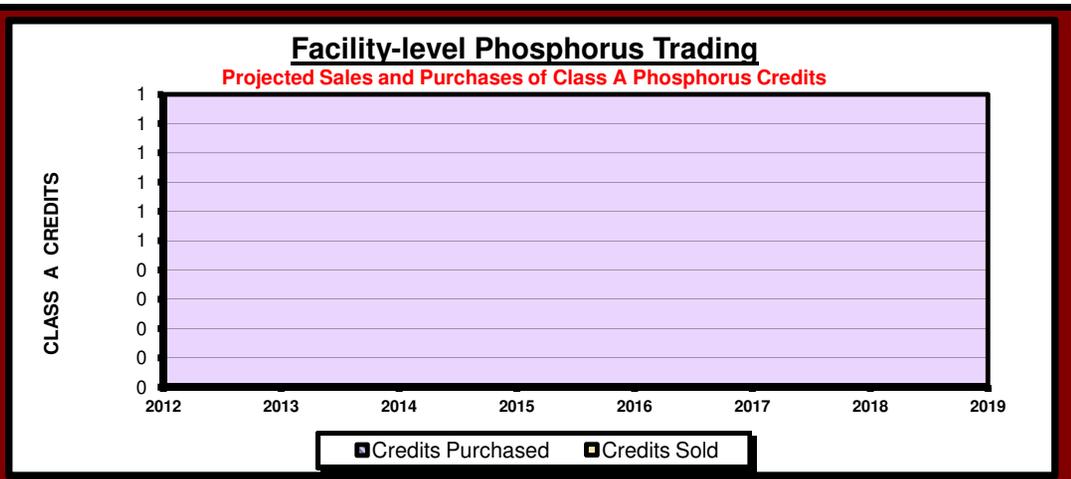
Loading & Credit Summary

Design Flow (mgd)	12.60
Projected Flow (mgd)	7.46
Projected Avg. Annual Concentration (mg/L)	0.25
Discharged Load (end of pipe)	5,680
Delivery Factor	0.77
Expected Load	4,374
Delivered WLA	8,864
Expected Credits (delivered)	4,490
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	4,490
Class A Credit Sales (Purchases)	0
Expected Class B Credits	4,490

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	12.60	12.60	12.60	12.60	12.60	12.60	12.60	12.60
Projected Flow (mgd)	7.46	7.68	7.92	8.15	8.32	8.52	8.82	9.00
Projected Avg. Annual Concentration (mg/L)	0.25	0.25	0.25	0.25	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	5,680	5,847	6,030	6,205	7,602	7,784	8,059	8,223
Delivery Factor	0.77	0.77	0.77	0.77	0.54	0.54	0.54	0.54
Expected Load	4,374	4,503	4,643	4,778	4,105	4,204	4,352	4,440
Delivered WLA	8,864	8,864	8,864	8,864	6,217	6,217	6,217	6,217
Expected Credits (delivered)	4,490	4,361	4,221	4,086	2,112	2,013	1,865	1,777
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	4,490	4,361	4,221	4,086	2,112	2,013	1,865	1,777
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	4,490	4,361	4,221	4,086	2,112	2,013	1,865	1,777

PHOSPHORUS FACILITY SUMMARY

FWSA-Parkins Mill
POTOMAC Trading Basin

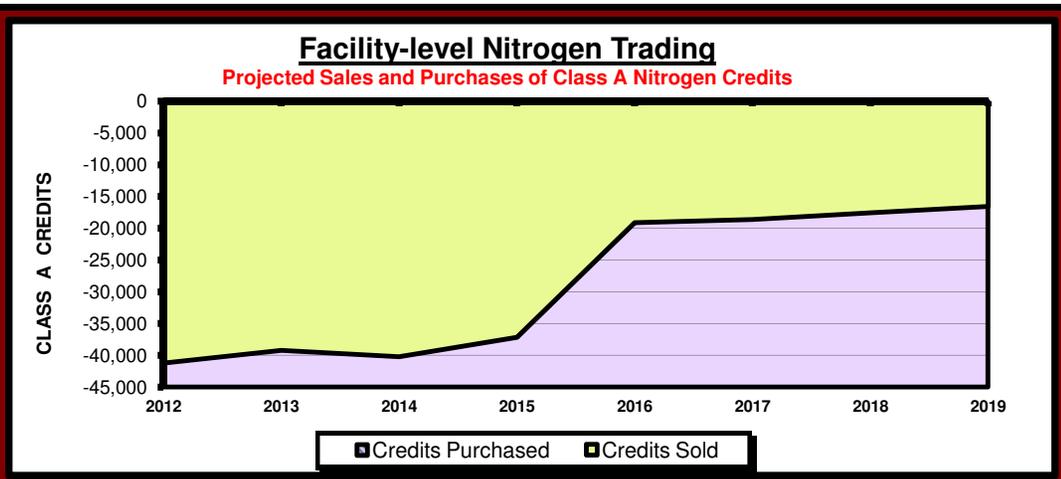


Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Projected Flow (mgd)	2.02	2.26	2.50	2.74	3.00	3.20	3.40	3.60
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)	1,846	2,065	2,284	2,503	2,741	2,924	3,106	3,289
Delivery Factor	0.77	0.77	0.77	0.77	0.54	0.54	0.54	0.54
Expected Load	1,421	1,590	1,759	1,928	1,480	1,579	1,677	1,776
Delivered WLA	3,518	3,518	3,518	3,518	2,467	2,467	2,467	2,467
Expected Credits (delivered)	2,097	1,928	1,759	1,590	987	888	790	691
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	2,097	1,928	1,759	1,590	987	888	790	691
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	2,097	1,928	1,759	1,590	987	888	790	691

NITROGEN FACILITY SUMMARY

HRRSA-North River
<i>POTOMAC Trading Basin</i>

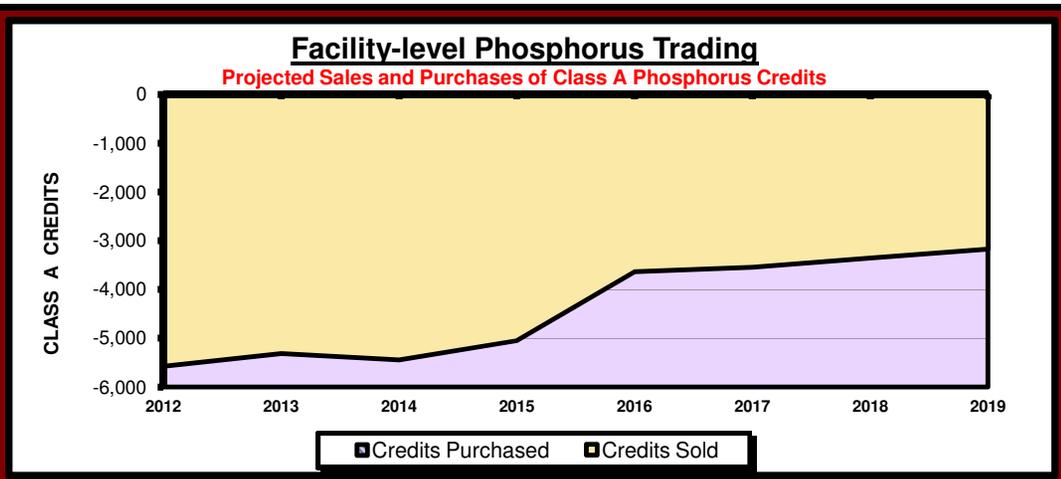


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	13.80	14.20	14.00	14.60	14.40	14.60	15.00	15.40
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)	159,709	164,338	162,024	168,968	166,653	168,968	173,597	178,226
Delivery Factor	0.44	0.44	0.44	0.44	0.22	0.22	0.22	0.22
Expected Load	70,272	72,309	71,290	74,346	36,664	37,173	38,191	39,210
Delivered WLA	111,492	111,492	111,492	111,492	55,746	55,746	55,746	55,746
Expected Credits (delivered)	41,220	39,183	40,202	37,146	19,082	18,573	17,555	16,536
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	41,220	39,183	40,202	37,146	19,082	18,573	17,555	16,536
Class A Credit Sales (Purchases)	41,220	39,183	40,202	37,146	19,082	18,573	17,555	16,536
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

HRRSA-North River
POTOMAC Trading Basin



Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	13.80	14.20	14.00	14.60	14.40	14.60	15.00	15.40
Projected Avg. Annual Concentration (mg/L)	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Discharged Load (end of pipe)	11,768	12,109	11,939	12,450	12,280	12,450	12,791	13,132
Delivery Factor	0.77	0.77	0.77	0.77	0.54	0.54	0.54	0.54
Expected Load	9,061	9,324	9,193	9,587	6,631	6,723	6,907	7,092
Delivered WLA	14,633	14,633	14,633	14,633	10,262	10,262	10,262	10,262
Expected Credits (delivered)	5,572	5,309	5,440	5,046	3,631	3,539	3,355	3,170
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	5,572	5,309	5,440	5,046	3,631	3,539	3,355	3,170
Class A Credit Sales (Purchases)	5,572	5,309	5,440	5,046	3,631	3,539	3,355	3,170
Expected Class B Credits	0	0	0	0	0	0	0	0

Owner Bubble: King George County SA (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.

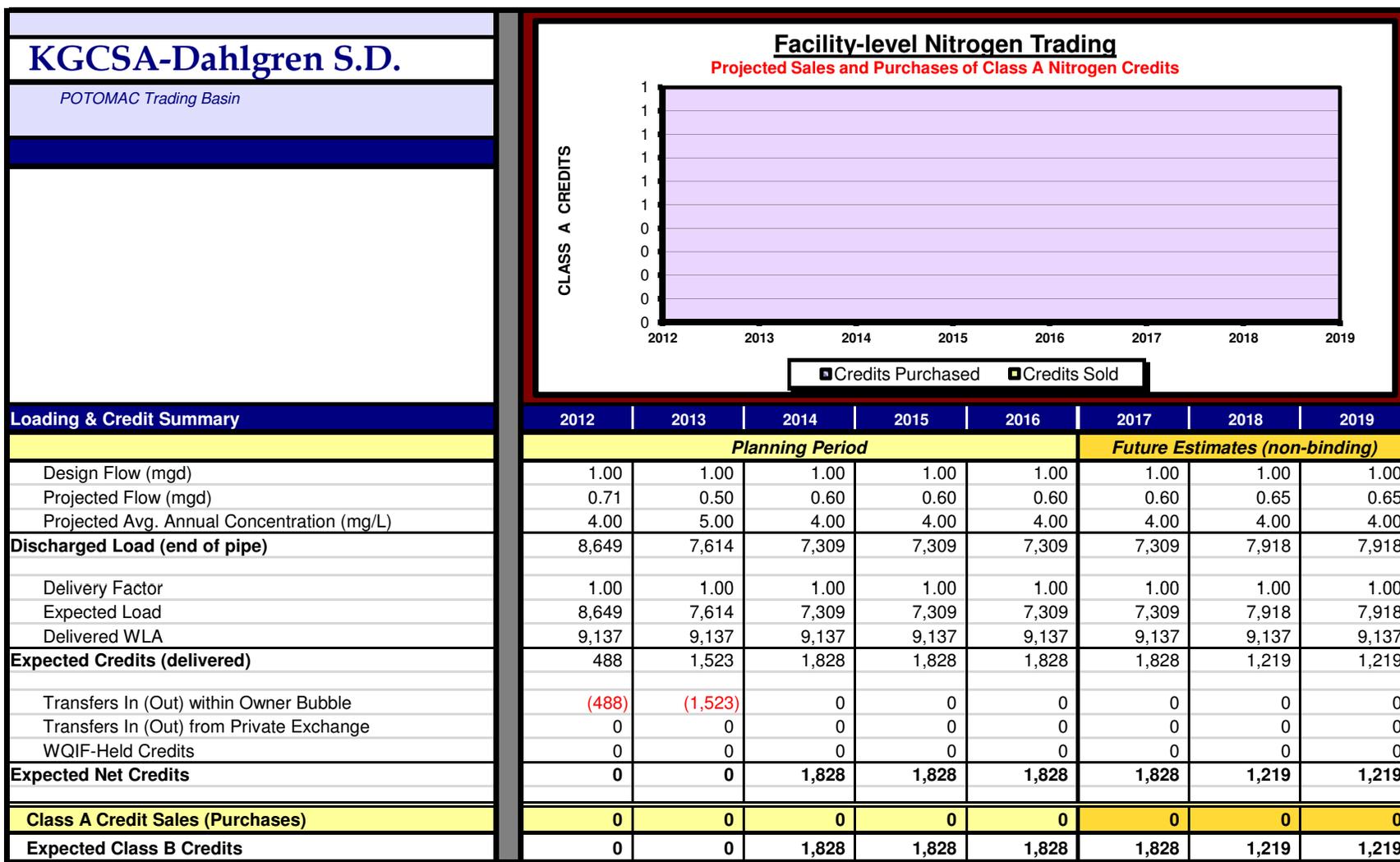
The “Credit Transferred within Bubble” section of each table forecasts the use of Credits within the owner bubble during each Compliance Year, and must necessarily sum to zero. The specific Credit transfers shown in this table are provided for internal planning purposes only and, accordingly, are not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

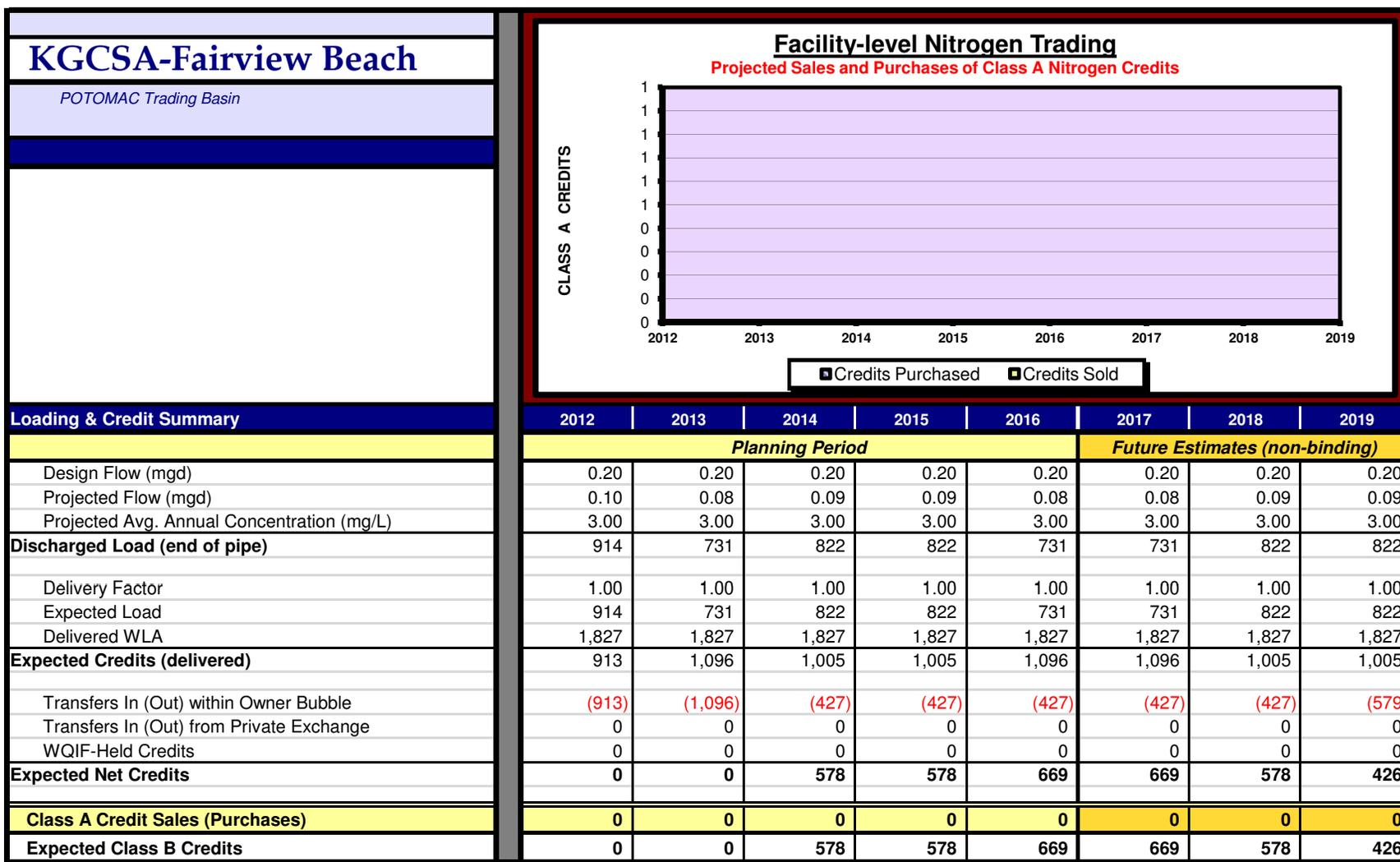
NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
Dahlgren	(488)	(1,523)	-	-	-	-	-	-
Fairview Beach	(913)	(1,096)	(427)	(427)	(427)	(427)	(427)	(579)
Purkins Corner	1,401	2,619	427	427	427	427	427	579
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Dahlgren	-	-	1,828	1,828	1,828	1,828	1,219	1,219
Fairview Beach	-	-	578	578	669	669	578	426
Purkins Corner	(5,117)	(1,158)	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	(5,117)	(1,158)	2,406	2,406	2,497	2,497	1,797	1,645
Class A Sales (Purchases)	(5,117)	(1,158)	0	0	0	0	0	0
<i>Expected Class B Credits</i>	<i>0</i>	<i>0</i>	<i>2,406</i>	<i>2,406</i>	<i>2,497</i>	<i>2,497</i>	<i>1,797</i>	<i>1,645</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		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
Dahlgren	(130)	(109)	(42)	(42)	(40)	(40)	(40)	(55)
Fairview Beach	(34)	-	-	-	-	-	-	-
Purkins Corner	164	109	42	42	40	40	40	55
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Dahlgren	27	196	324	324	326	326	280	265
Fairview Beach	58	86	101	101	107	107	98	98
Purkins Corner	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	85	282	425	425	433	433	378	363
Class A Sales (Purchases)	43	0	0	0	0	0	0	0
<i>Expected Class B Credits</i>	<i>42</i>	<i>282</i>	<i>425</i>	<i>425</i>	<i>433</i>	<i>433</i>	<i>378</i>	<i>363</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>

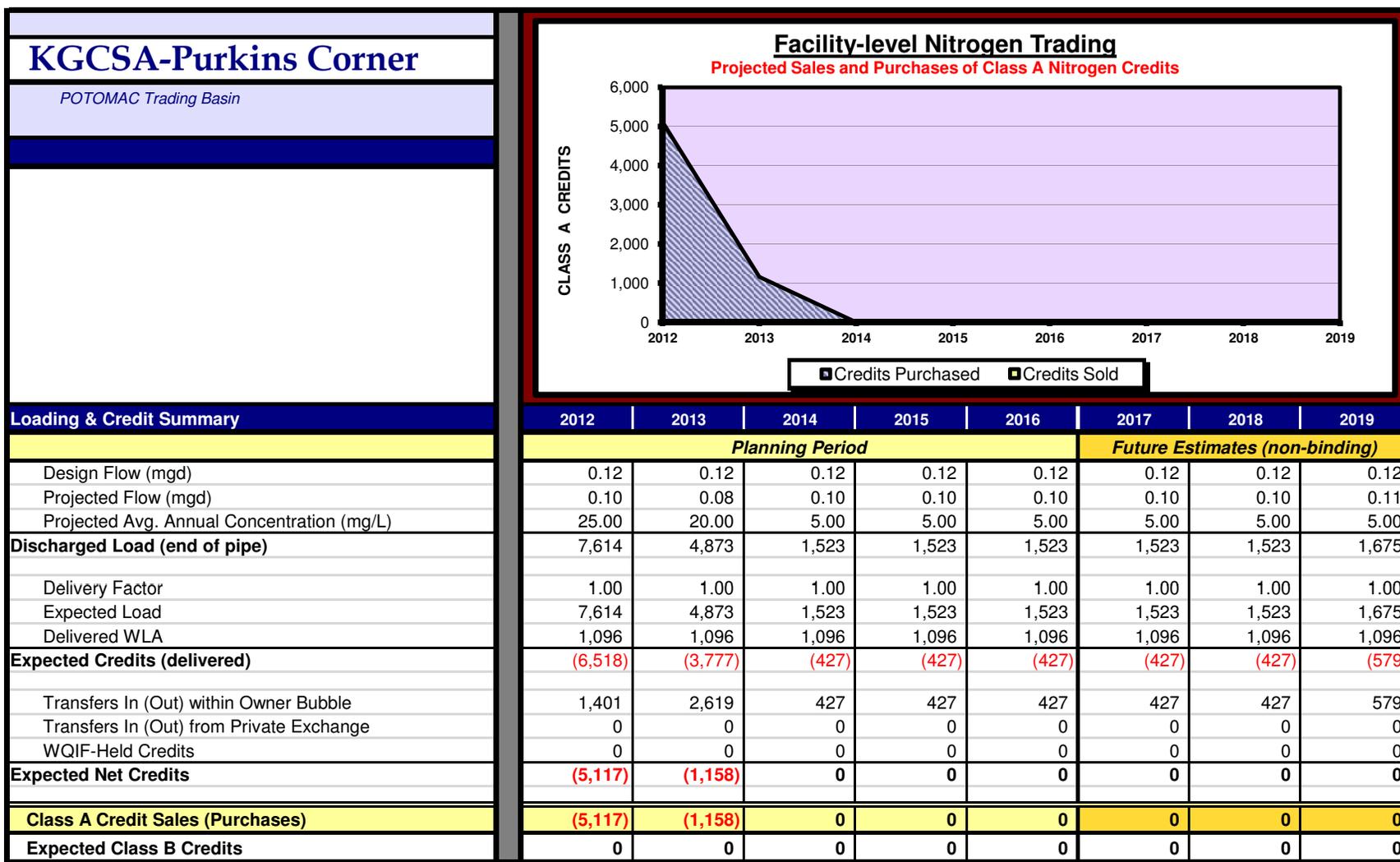
NITROGEN FACILITY SUMMARY



NITROGEN FACILITY SUMMARY

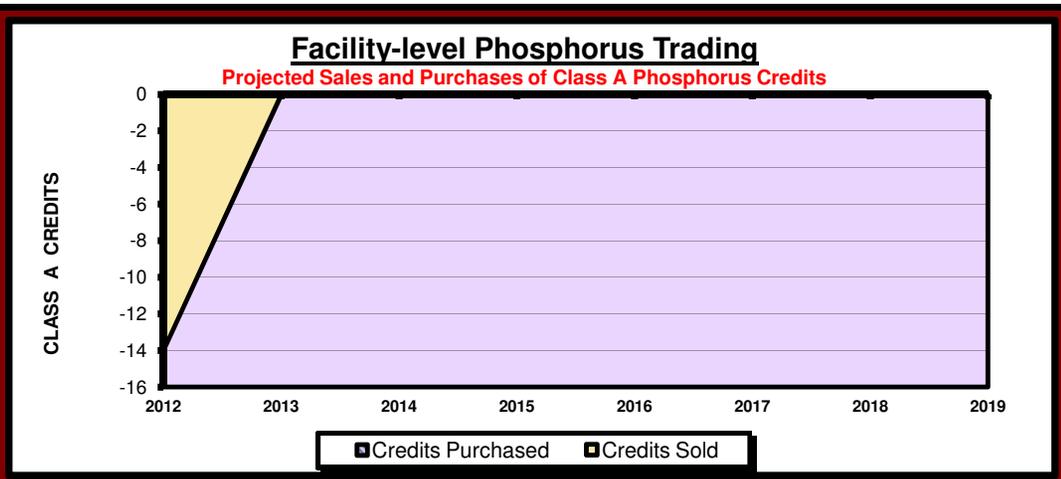


NITROGEN FACILITY SUMMARY



PHOSPHORUS FACILITY SUMMARY

KGCSA-Dahlgren S.D.
POTOMAC Trading Basin



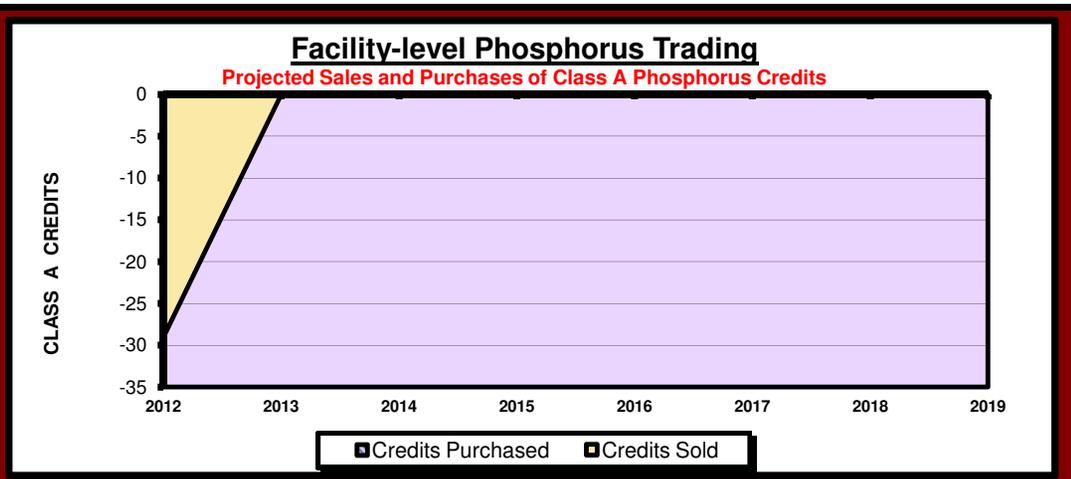
Loading & Credit Summary

Design Flow (mgd)	1.00
Projected Flow (mgd)	0.71
Projected Avg. Annual Concentration (mg/L)	0.35
Discharged Load (end of pipe)	757
Delivery Factor	1.00
Expected Load	757
Delivered WLA	914
Expected Credits (delivered)	157
Transfers In (Out) within Owner Bubble	(130)
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	27
Class A Credit Sales (Purchases)	14
Expected Class B Credits	13

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	0.71	0.50	0.60	0.60	0.60	0.60	0.65	0.65
Projected Avg. Annual Concentration (mg/L)	0.35	0.40	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	757	609	548	548	548	548	594	594
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	757	609	548	548	548	548	594	594
Delivered WLA	914	914	914	914	914	914	914	914
Expected Credits (delivered)	157	305	366	366	366	366	320	320
Transfers In (Out) within Owner Bubble	(130)	(109)	(42)	(42)	(40)	(40)	(40)	(55)
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	196	324	324	326	326	280	265
Class A Credit Sales (Purchases)	14	0	0	0	0	0	0	0
Expected Class B Credits	13	196	324	324	326	326	280	265

PHOSPHORUS FACILITY SUMMARY

KGCSA-Fairview Beach
POTOMAC Trading Basin



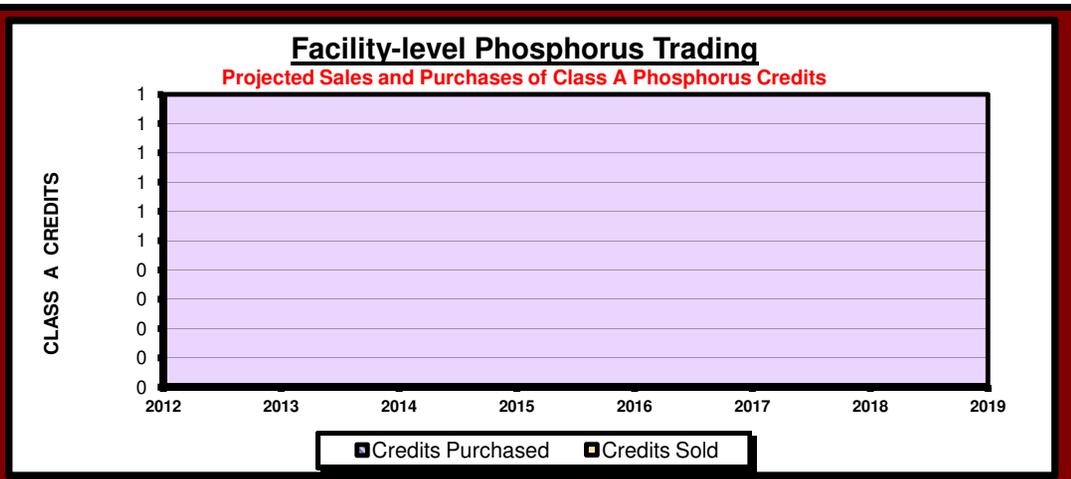
Loading & Credit Summary

Design Flow (mgd)	0.20
Projected Flow (mgd)	0.10
Projected Avg. Annual Concentration (mg/L)	0.30
Discharged Load (end of pipe)	91
Delivery Factor	1.00
Expected Load	91
Delivered WLA	183
Expected Credits (delivered)	92
Transfers In (Out) within Owner Bubble	(34)
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	58
Class A Credit Sales (Purchases)	29
Expected Class B Credits	29

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Projected Flow (mgd)	0.10	0.08	0.09	0.09	0.08	0.08	0.09	0.09
Projected Avg. Annual Concentration (mg/L)	0.30	0.40	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	91	97	82	82	73	73	82	82
Delivery Factor	1.00	1.00	1.00	1.00	0.98	0.98	0.98	0.98
Expected Load	91	97	82	82	72	72	81	81
Delivered WLA	183	183	183	183	179	179	179	179
Expected Credits (delivered)	92	86	101	101	107	107	98	98
Transfers In (Out) within Owner Bubble	(34)	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	58	86	101	101	107	107	98	98
Class A Credit Sales (Purchases)	29	0	0	0	0	0	0	0
Expected Class B Credits	29	86	101	101	107	107	98	98

PHOSPHORUS FACILITY SUMMARY

KGCSA-Purkins Corner
POTOMAC Trading Basin



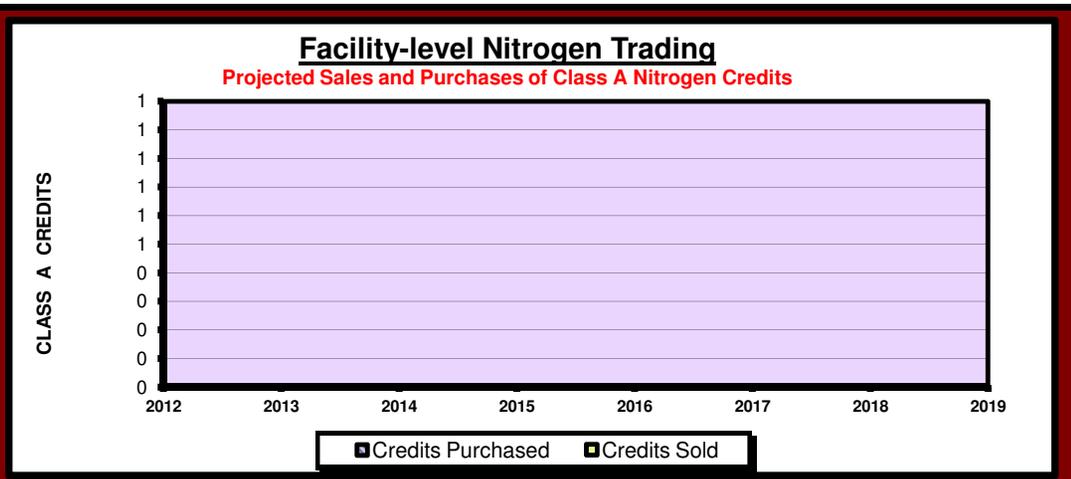
Loading & Credit Summary

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

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Projected Flow (mgd)	0.10	0.08	0.10	0.10	0.10	0.10	0.10	0.11
Projected Avg. Annual Concentration (mg/L)	0.90	0.90	0.50	0.50	0.50	0.50	0.50	0.50
Discharged Load (end of pipe)	274	219	152	152	152	152	152	168
Delivery Factor	1.00	1.00	1.00	1.00	0.96	0.96	0.96	0.96
Expected Load	274	219	152	152	146	146	146	161
Delivered WLA	110	110	110	110	106	106	106	106
Expected Credits (delivered)	(164)	(109)	(42)	(42)	(40)	(40)	(40)	(55)
Transfers In (Out) within Owner Bubble	164	109	42	42	40	40	40	55
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

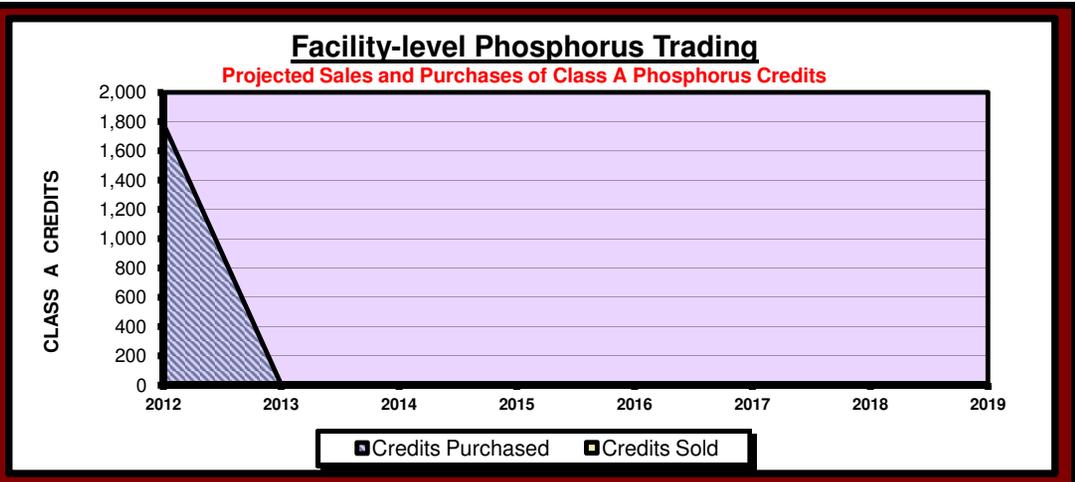
Leesburg
 POTOMAC Trading Basin



Loading & Credit Summary	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Projected Flow (mgd)	5.64	5.77	5.92	6.07	6.27	6.48	6.70	6.93
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)	68,708	70,292	72,119	73,946	76,419	78,990	81,658	84,435
Delivery Factor	0.83	0.83	0.83	0.83	0.80	0.80	0.80	0.80
Expected Load	57,028	58,342	59,859	61,375	61,135	63,192	65,326	67,548
Delivered WLA	101,113	101,113	101,113	101,113	97,458	97,458	97,458	97,458
Expected Credits (delivered)	44,085	42,771	41,254	39,738	36,323	34,266	32,132	29,910
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	(25,278)	(25,278)	(25,278)	(25,278)	(24,365)	(24,365)	(24,365)	(24,365)
Expected Net Credits	18,807	17,493	15,976	14,460	11,958	9,901	7,767	5,545
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	18,807	17,493	15,976	14,460	11,958	9,901	7,767	5,545

PHOSPHORUS FACILITY SUMMARY

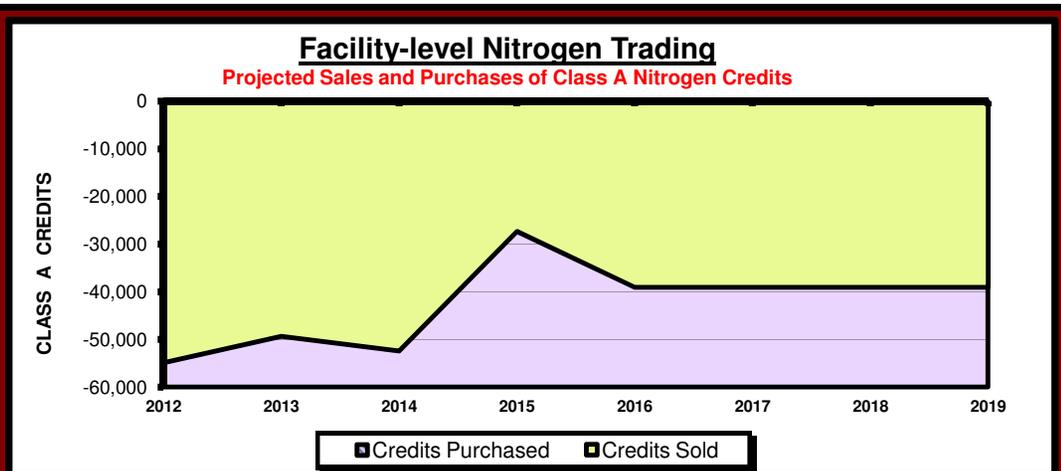
Leesburg
POTOMAC Trading Basin



	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Projected Flow (mgd)	5.64	5.77	5.92	6.07	6.27	6.48	6.70	6.93
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)	5,153	5,272	5,409	5,546	5,731	5,924	6,124	6,333
Delivery Factor	0.77	0.77	0.77	0.77	0.54	0.54	0.54	0.54
Expected Load	3,968	4,059	4,165	4,270	3,095	3,199	3,307	3,420
Delivered WLA	7,035	7,035	7,035	7,035	4,934	4,934	4,934	4,934
Expected Credits (delivered)	3,067	2,976	2,870	2,765	1,839	1,735	1,627	1,514
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	(1,759)	(1,759)	(1,759)	(1,759)	(1,234)	(1,234)	(1,234)	(1,234)
Expected Net Credits	1,308	1,217	1,111	1,006	605	501	393	280
Class A Credit Sales (Purchases)	(1,787)	0	0	0	0	0	0	0
Expected Class B Credits	3,095	1,217	1,111	1,006	605	501	393	280

NITROGEN FACILITY SUMMARY

Loudoun Water- Broad Run
<i>POTOMAC Trading Basin</i>

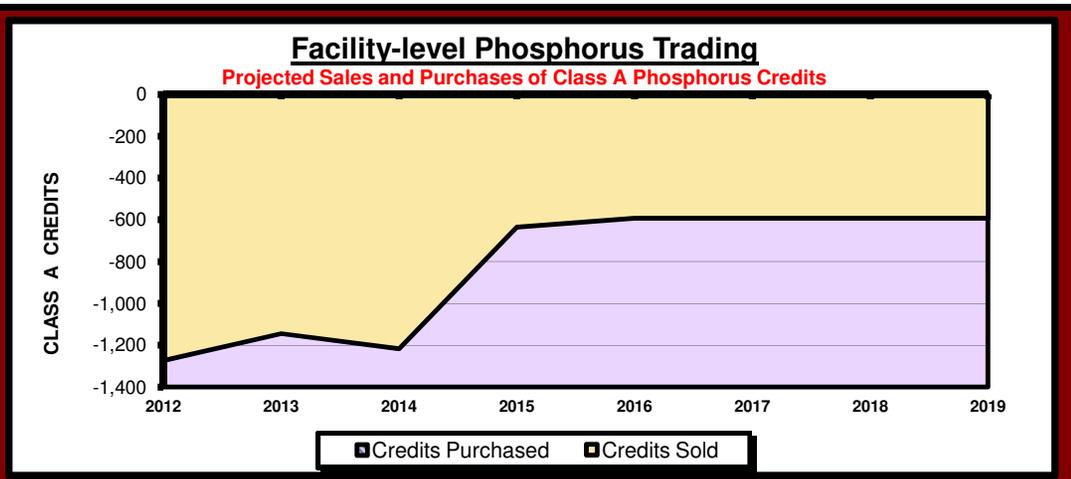


Loading & Credit Summary	
Design Flow (mgd)	11.00
Projected Flow (mgd)	4.97
Projected Avg. Annual Concentration (mg/L)	4.00
Discharged Load (end of pipe)	60,546
Delivery Factor	0.83
Expected Load	50,253
Delivered WLA	111,224
Expected Credits (delivered)	60,971
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	60,971
Class A Credit Sales (Purchases)	54,874
Expected Class B Credits	6,097

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
4.97	5.58	4.52	8.00	7.00	7.00	7.00	7.00
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
60,546	67,977	55,064	97,458	85,276	85,276	85,276	85,276
0.83	0.83	0.83	0.83	0.89	0.89	0.89	0.89
50,253	56,421	45,703	80,890	75,895	75,895	75,895	75,895
111,224	111,224	111,224	111,224	119,264	119,264	119,264	119,264
60,971	54,803	65,521	30,334	43,369	43,369	43,369	43,369
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
60,971	54,803	65,521	30,334	43,369	43,369	43,369	43,369
54,874	49,323	52,417	27,301	39,032	39,032	39,032	39,032
6,097	5,480	13,104	3,033	4,337	4,337	4,337	4,337

PHOSPHORUS FACILITY SUMMARY

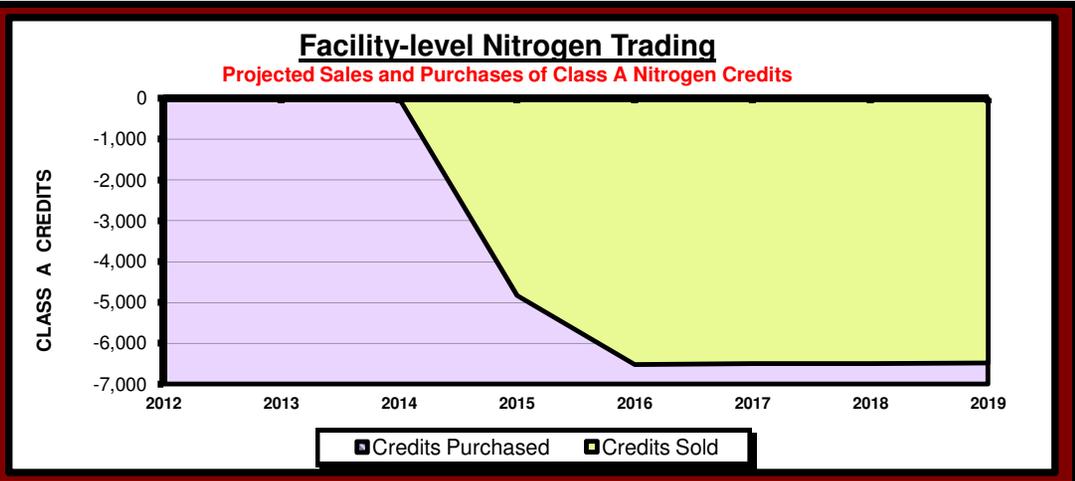
Loudoun Water- Broad Run
POTOMAC Trading Basin



Loading & Credit Summary	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
Projected Flow (mgd)	4.97	5.58	4.52	8.00	7.00	7.00	7.00	7.00
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)	1,514	1,699	1,377	2,436	2,132	2,132	2,132	2,132
Delivery Factor	0.77	0.77	0.77	0.77	0.54	0.54	0.54	0.54
Expected Load	1,166	1,309	1,060	1,876	1,151	1,151	1,151	1,151
Delivered WLA	2,580	2,580	2,580	2,580	1,809	1,809	1,809	1,809
Expected Credits (delivered)	1,414	1,271	1,520	704	658	658	658	658
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	1,414	1,271	1,520	704	658	658	658	658
Class A Credit Sales (Purchases)	1,273	1,144	1,216	634	592	592	592	592
Expected Class B Credits	141	127	304	70	66	66	66	66

NITROGEN FACILITY SUMMARY

Luray
 POTOMAC Trading Basin



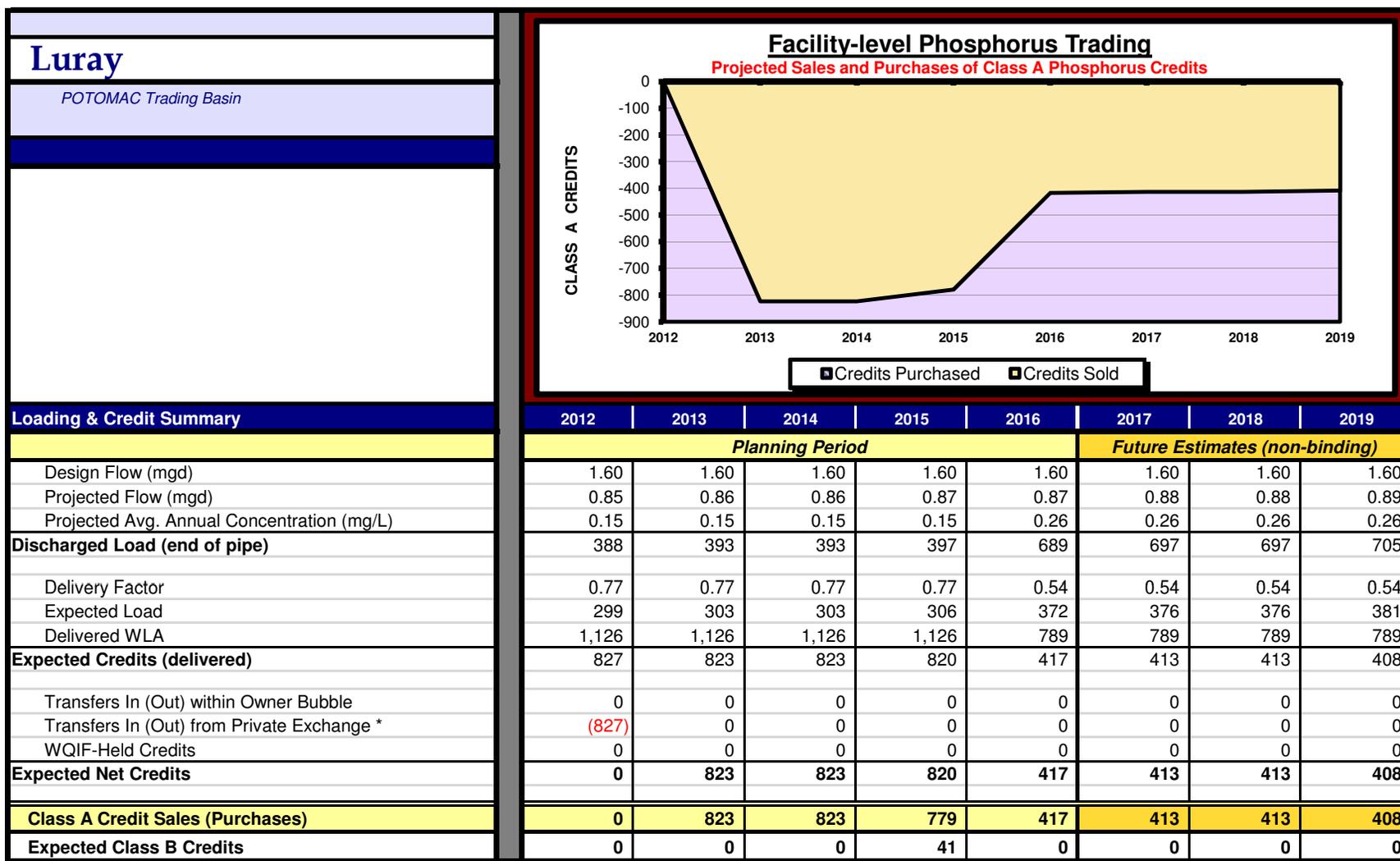
Loading & Credit Summary

Design Flow (mgd)	1.60
Projected Flow (mgd)	0.85
Projected Avg. Annual Concentration (mg/L)	3.00
Discharged Load (end of pipe)	7,766
Delivery Factor	0.44
Expected Load	3,417
Delivered WLA	8,576
Expected Credits (delivered)	5,159
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange *	(5,159)
WQIF-Held Credits	0
Expected Net Credits	0
Class A Credit Sales (Purchases)	0
Expected Class B Credits	0

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
Projected Flow (mgd)	0.85	0.86	0.86	0.87	0.87	0.88	0.88	0.89
Projected Avg. Annual Concentration (mg/L)	3.00	3.00	3.00	3.00	1.50	1.50	1.50	1.50
Discharged Load (end of pipe)	7,766	7,858	7,858	7,949	3,974	4,020	4,020	4,066
Delivery Factor	0.44	0.44	0.44	0.44	0.42	0.42	0.42	0.42
Expected Load	3,417	3,457	3,457	3,498	1,669	1,688	1,688	1,708
Delivered WLA	8,576	8,576	8,576	8,576	8,187	8,187	8,187	8,187
Expected Credits (delivered)	5,159	5,119	5,119	5,078	6,518	6,499	6,499	6,479
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange *	(5,159)	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	0	5,119	5,119	5,078	6,518	6,499	6,499	6,479
Class A Credit Sales (Purchases)	0	0	0	4,824	6,518	6,499	6,499	6,479
Expected Class B Credits	0	5,119	5,119	254	0	0	0	0

* This adjustment implements the Class A (4 year) and Class B (2 year) Credit sales restriction applicable to this new Participant (as of 2011 Update) in accordance with Section 4.8(d) of the Credit Exchange Policy

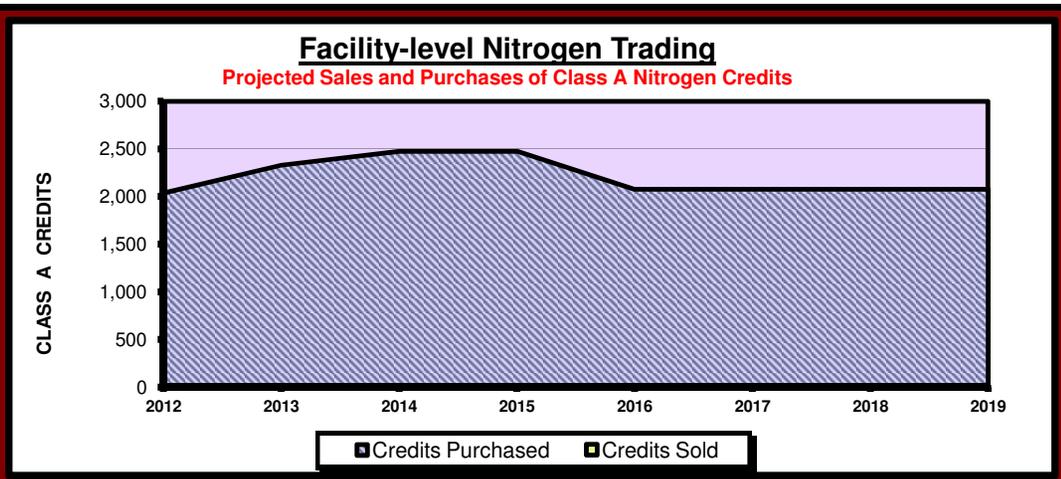
PHOSPHORUS FACILITY SUMMARY



* This adjustment implements the Class A (4 year) and Class B (2 year) Credit sales restriction applicable to this new Participant (as of 2011 Update) in accordance with Section 4.8(d) of the Credit Exchange Policy. Due to a projected Class A Credit shortfall in 2013 and 2014, the Participant is permitted to sell Class A credits in those years.

NITROGEN FACILITY SUMMARY

Massanutten PSC
POTOMAC Trading Basin

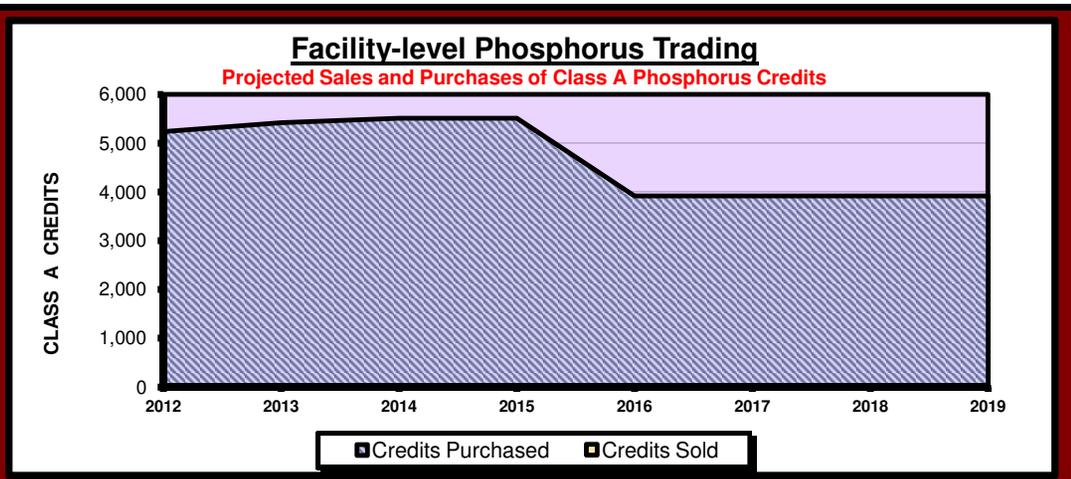


Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	0.69	0.71	0.72	0.72	0.74	0.74	0.74	0.74
Projected Avg. Annual Concentration (mg/L)	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90
Discharged Load (end of pipe)	22,906	23,570	23,902	23,902	24,565	24,565	24,565	24,565
Delivery Factor	0.44	0.44	0.44	0.44	0.33	0.33	0.33	0.33
Expected Load	10,078	10,371	10,517	10,517	8,107	8,107	8,107	8,107
Delivered WLA	8,040	8,040	8,040	8,040	6,030	6,030	6,030	6,030
Expected Credits (delivered)	(2,038)	(2,331)	(2,477)	(2,477)	(2,077)	(2,077)	(2,077)	(2,077)
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	(2,038)	(2,331)	(2,477)	(2,477)	(2,077)	(2,077)	(2,077)	(2,077)
Class A Credit Sales (Purchases)	(2,038)	(2,331)	(2,477)	(2,477)	(2,077)	(2,077)	(2,077)	(2,077)
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

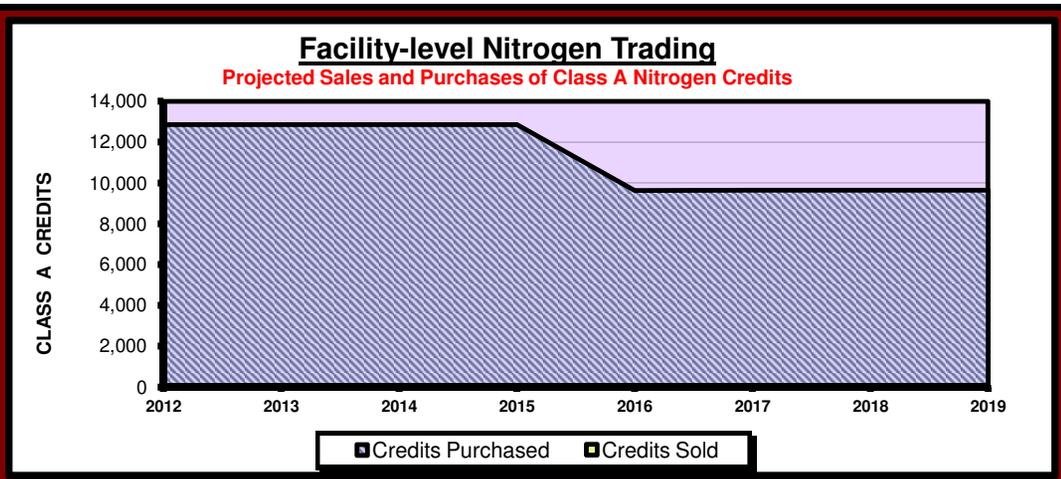
Massanutten PSC
POTOMAC Trading Basin



Loading & Credit Summary	2012	2013	2014	2015	2016	2017	2018	2019
	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)	0.69	0.71	0.72	0.72	0.74	0.74	0.74	0.74
Projected Avg. Annual Concentration (mg/L)	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89
Discharged Load (end of pipe)	8,175	8,412	8,530	8,530	8,767	8,767	8,767	8,767
Delivery Factor	0.77	0.77	0.77	0.77	0.53	0.53	0.53	0.53
Expected Load	6,294	6,477	6,568	6,568	4,646	4,646	4,646	4,646
Delivered WLA	1,055	1,055	1,055	1,055	727	727	727	727
Expected Credits (delivered)	(5,239)	(5,422)	(5,513)	(5,513)	(3,919)	(3,919)	(3,919)	(3,919)
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	(5,239)	(5,422)	(5,513)	(5,513)	(3,919)	(3,919)	(3,919)	(3,919)
Class A Credit Sales (Purchases)	(5,239)	(5,422)	(5,513)	(5,513)	(3,919)	(3,919)	(3,919)	(3,919)
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

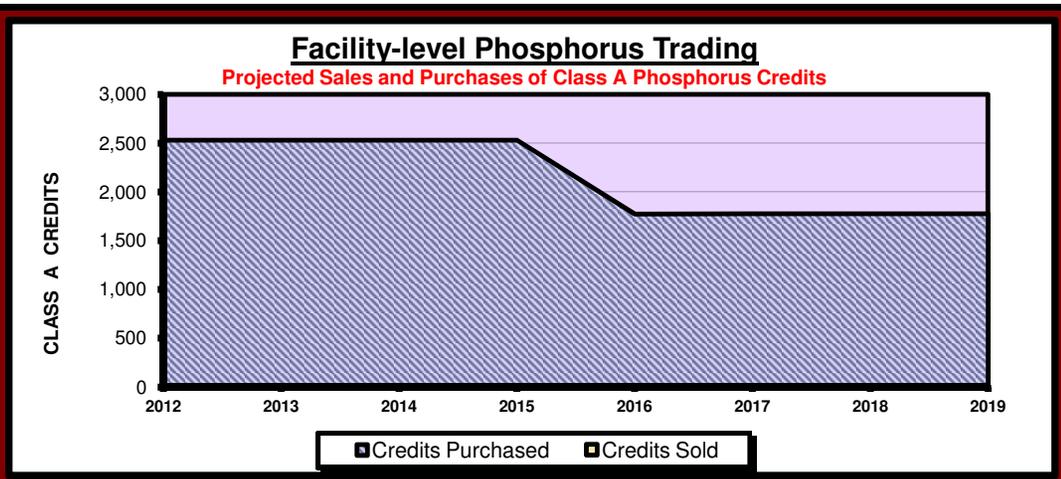
Merck
 POTOMAC Trading Basin



Loading & Credit Summary	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
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	11.99	12.00	12.00	12.00
Discharged Load (end of pipe)	43,856	43,856	43,856	43,856	43,835	43,856	43,856	43,856
Delivery Factor	0.44	0.44	0.44	0.44	0.33	0.33	0.33	0.33
Expected Load	19,297	19,297	19,297	19,297	14,466	14,473	14,473	14,473
Delivered WLA	6,432	6,432	6,432	6,432	4,824	4,824	4,824	4,824
Expected Credits (delivered)	(12,865)	(12,865)	(12,865)	(12,865)	(9,642)	(9,649)	(9,649)	(9,649)
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	(12,865)	(12,865)	(12,865)	(12,865)	(9,642)	(9,649)	(9,649)	(9,649)
Class A Credit Sales (Purchases)	(12,865)	(12,865)	(12,865)	(12,865)	(9,642)	(9,649)	(9,649)	(9,649)
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Merck
 POTOMAC Trading Basin



Loading & Credit Summary	
Design Flow (mgd)	1.20
Projected Flow (mgd)	1.20
Projected Avg. Annual Concentration (mg/L)	1.20
Discharged Load (end of pipe)	4,386
Delivery Factor	0.77
Expected Load	3,377
Delivered WLA	844
Expected Credits (delivered)	(2,533)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(2,533)
Class A Credit Sales (Purchases)	(2,533)
Expected Class B Credits	0

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
4,386	4,386	4,386	4,386	4,384	4,386	4,386	4,386
0.77	0.77	0.77	0.77	0.54	0.54	0.54	0.54
3,377	3,377	3,377	3,377	2,367	2,368	2,368	2,368
844	844	844	844	592	592	592	592
(2,533)	(2,533)	(2,533)	(2,533)	(1,775)	(1,776)	(1,776)	(1,776)
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
(2,533)	(2,533)	(2,533)	(2,533)	(1,775)	(1,776)	(1,776)	(1,776)
(2,533)	(2,533)	(2,533)	(2,533)	(1,775)	(1,776)	(1,776)	(1,776)
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: 6,432 lbs/yr (0.44 DF for Compliance Years 2012 to 2015)

Delivered TN WLA: 4,824 lbs/yr (0.33 DF for Compliance Year 2016 and beyond)

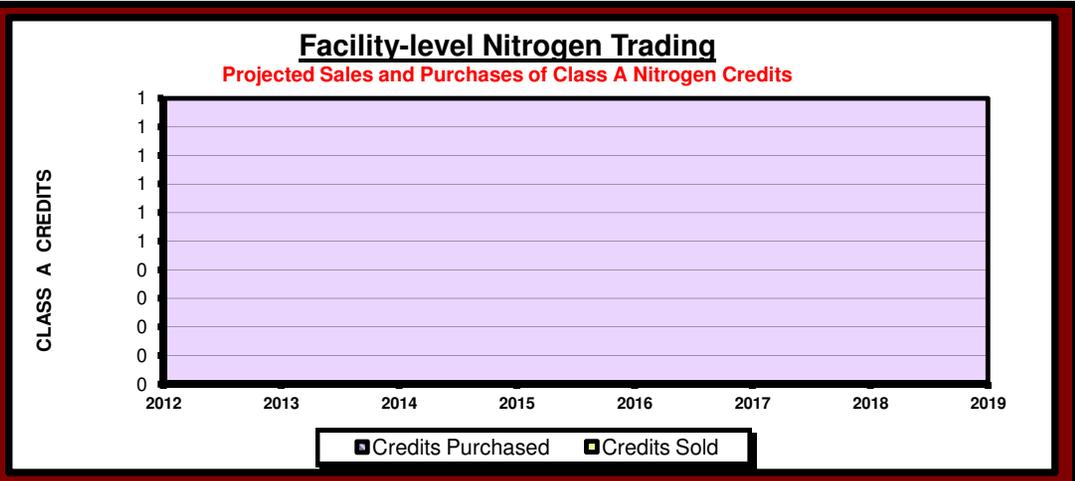
Delivered TP WLA: 844 lbs/yr (0.77 DF for Compliance Years 2012 to 2015)

Delivered TP WLA: 592 lbs/yr (0.54 DF for Compliance Year 2016 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

MillerCoors LLC
POTOMAC Trading Basin

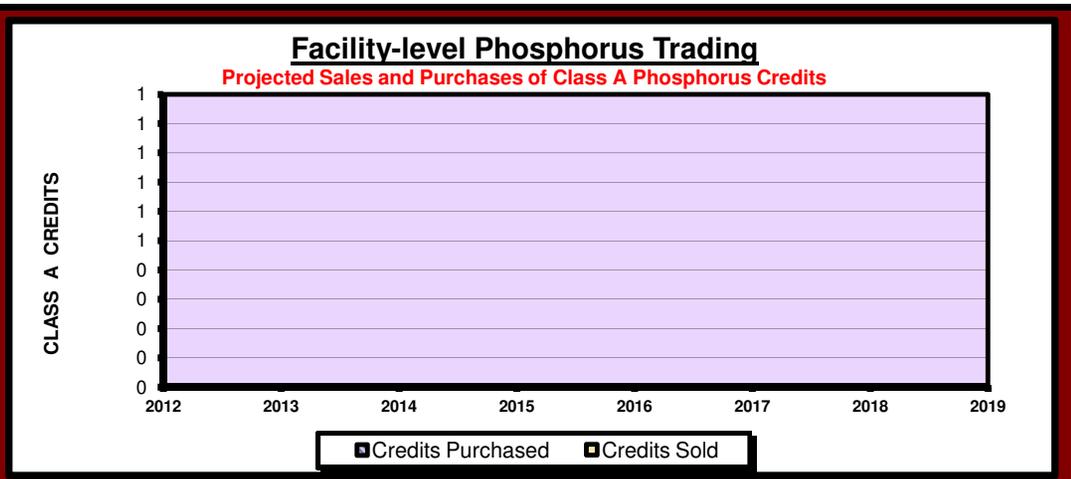


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
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	0.44	0.44	0.44	0.44	0.33	0.33	0.33	0.33
Expected Load	24,121	24,121	24,121	24,121	18,091	18,091	18,091	18,091
Delivered WLA	24,121	24,121	24,121	24,121	18,091	18,091	18,091	18,091
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

MillerCoors LLC
POTOMAC Trading Basin



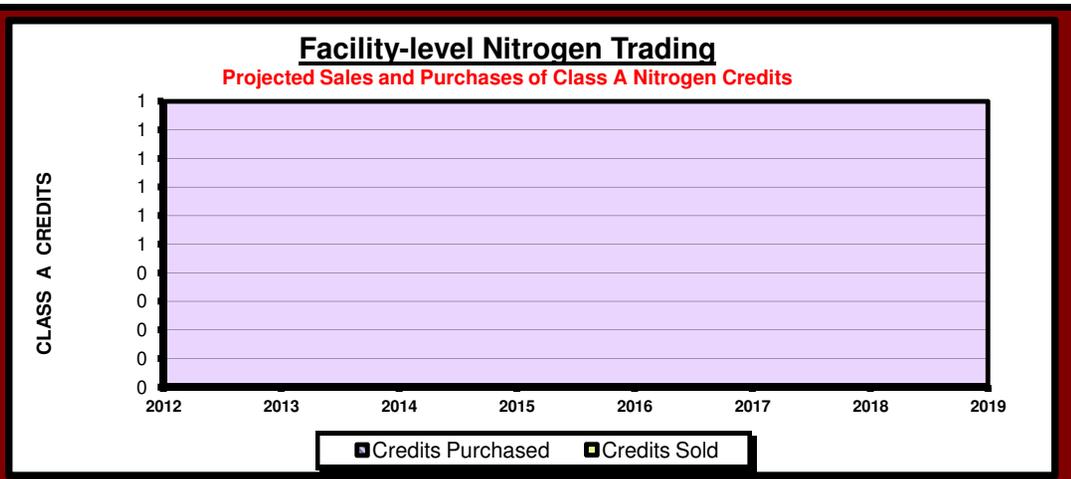
Loading & Credit Summary

Design Flow (mgd)	4.50
Projected Flow (mgd)	4.50
Projected Avg. Annual Concentration (mg/L)	0.30
Discharged Load (end of pipe)	4,112
Delivery Factor	0.77
Expected Load	3,166
Delivered WLA	3,166
Expected Credits (delivered)	0
Transfers In (Out) within Owner Bubble	0
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

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
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)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	4,112	4,112	4,112	4,112	4,112	4,112	4,112	4,112
Delivery Factor	0.77	0.77	0.77	0.77	0.54	0.54	0.54	0.54
Expected Load	3,166	3,166	3,166	3,166	2,220	2,220	2,220	2,220
Delivered WLA	3,166	3,166	3,166	3,166	2,220	2,220	2,220	2,220
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

NITROGEN FACILITY SUMMARY

Mt. Jackson
POTOMAC Trading Basin

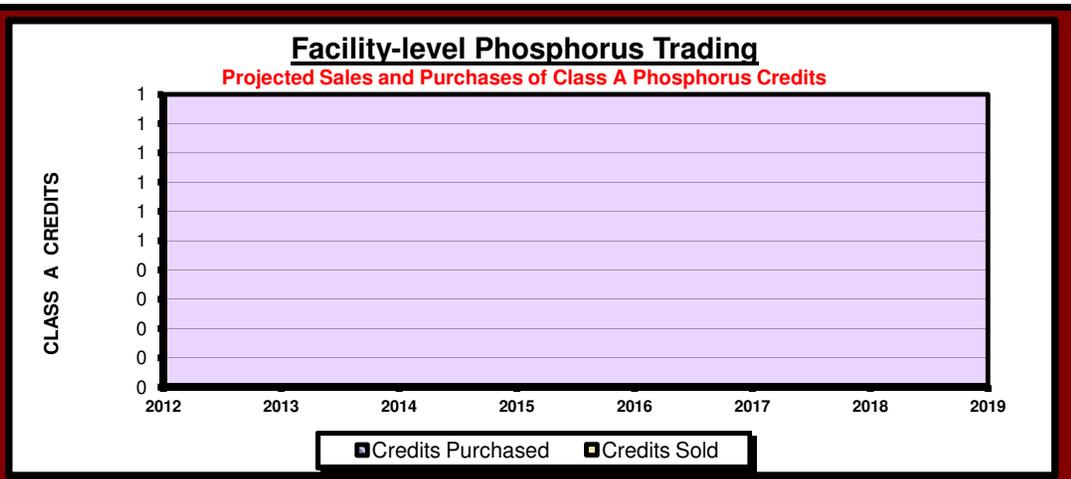


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Projected Flow (mgd)	0.50	0.55	0.55	0.60	0.50	0.52	0.54	0.54
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)	6,091	6,700	6,700	7,309	6,091	6,335	6,578	6,578
Delivery Factor	0.67	0.67	0.67	0.67	0.34	0.34	0.34	0.34
Expected Load	4,081	4,489	4,489	4,897	2,071	2,154	2,237	2,237
Delivered WLA	5,713	5,713	5,713	5,713	2,900	2,900	2,900	2,900
Expected Credits (delivered)	1,632	1,224	1,224	816	829	746	663	663
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	1,632	1,224	1,224	816	829	746	663	663
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	1,632	1,224	1,224	816	829	746	663	663

PHOSPHORUS FACILITY SUMMARY

Mt. Jackson
POTOMAC Trading Basin



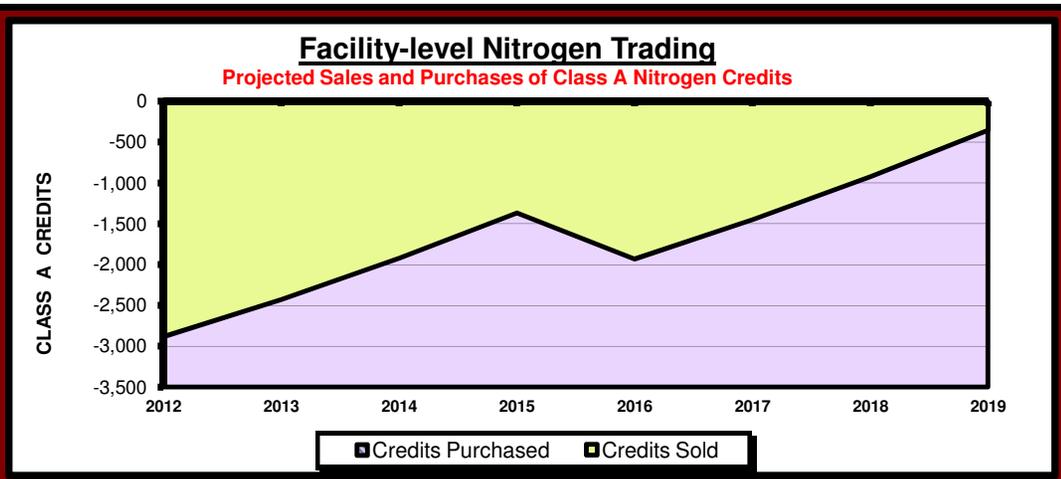
Loading & Credit Summary

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

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Projected Flow (mgd)	0.50	0.55	0.55	0.60	0.50	0.52	0.54	0.54
Projected Avg. Annual Concentration (mg/L)	0.30	0.30	0.30	0.30	0.20	0.20	0.20	0.20
Discharged Load (end of pipe)	457	503	503	548	305	317	329	329
Delivery Factor	0.77	0.77	0.77	0.77	0.53	0.53	0.53	0.53
Expected Load	352	387	387	422	161	168	174	174
Delivered WLA	492	492	492	492	339	339	339	339
Expected Credits (delivered)	140	105	105	70	178	171	165	165
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	140	105	105	70	178	171	165	165
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	140	105	105	70	178	171	165	165

NITROGEN FACILITY SUMMARY

Purcellville
<i>POTOMAC Trading Basin</i>

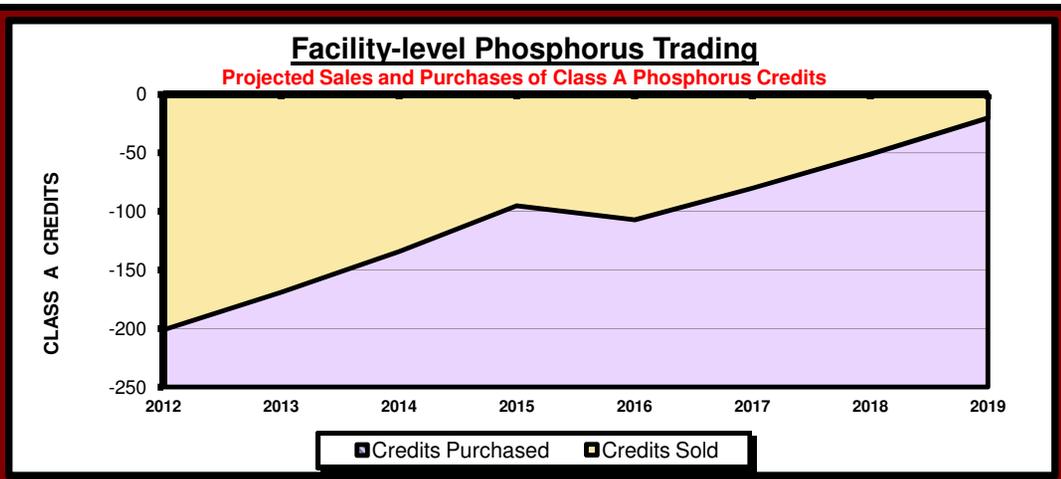


Loading & Credit Summary	
Design Flow (mgd)	1.50
Projected Flow (mgd)	0.93
Projected Avg. Annual Concentration (mg/L)	4.00
Discharged Load (end of pipe)	11,329
Delivery Factor	0.83
Expected Load	9,403
Delivered WLA	15,167
Expected Credits (delivered)	5,764
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	5,764
Class A Credit Sales (Purchases)	2,882
Expected Class B Credits	2,882

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
0.93	1.02	1.12	1.23	1.06	1.17	1.29	1.42
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
11,329	12,426	13,644	14,984	12,913	14,253	15,715	17,299
0.83	0.83	0.83	0.83	0.72	0.72	0.72	0.72
9,403	10,313	11,325	12,437	9,297	10,262	11,315	12,455
15,167	15,167	15,167	15,167	13,157	13,157	13,157	13,157
5,764	4,854	3,842	2,730	3,860	2,895	1,842	702
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
5,764	4,854	3,842	2,730	3,860	2,895	1,842	702
2,882	2,427	1,921	1,365	1,930	1,448	921	351
2,882	2,427	1,921	1,365	1,930	1,447	921	351

PHOSPHORUS FACILITY SUMMARY

Purcellville
POTOMAC Trading Basin

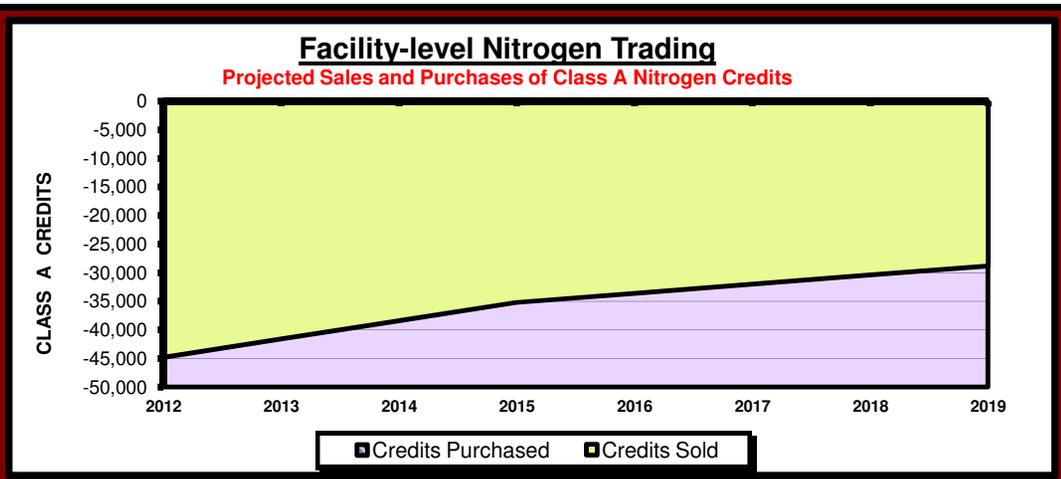


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	0.93	1.02	1.12	1.23	1.06	1.17	1.29	1.42
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)	850	932	1,023	1,124	968	1,069	1,179	1,297
Delivery Factor	0.77	0.77	0.77	0.77	0.53	0.53	0.53	0.53
Expected Load	654	718	788	865	513	567	625	688
Delivered WLA	1,055	1,055	1,055	1,055	727	727	727	727
Expected Credits (delivered)	401	337	267	190	214	160	102	39
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	401	337	267	190	214	160	102	39
Class A Credit Sales (Purchases)	201	169	134	95	107	80	51	20
Expected Class B Credits	200	168	133	95	107	80	51	19

NITROGEN FACILITY SUMMARY

PWCSA-HL Mooney
POTOMAC Trading Basin

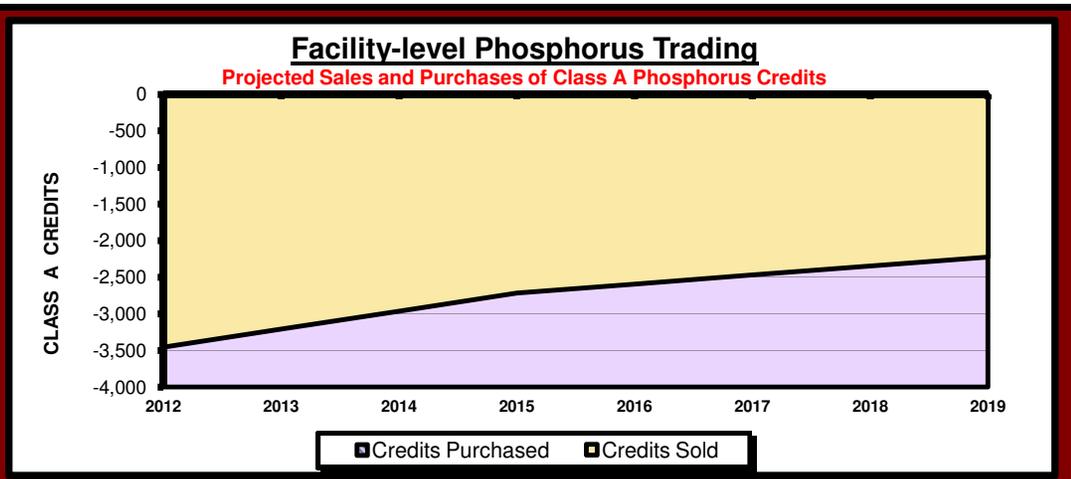


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Projected Flow (mgd)	17.00	17.50	18.00	18.50	18.75	19.00	19.25	19.50
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)	155,324	159,892	164,460	169,029	171,313	173,597	175,881	178,165
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	155,324	159,892	164,460	169,029	171,313	173,597	175,881	178,165
Delivered WLA	219,280	219,280	219,280	219,280	219,280	219,280	219,280	219,280
Expected Credits (delivered)	63,956	59,388	54,820	50,251	47,967	45,683	43,399	41,115
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	63,956	59,388	54,820	50,251	47,967	45,683	43,399	41,115
Class A Credit Sales (Purchases)	44,769	41,572	38,374	35,176	33,577	31,978	30,379	28,781
Expected Class B Credits	19,187	17,816	16,446	15,075	14,390	13,705	13,020	12,334

PHOSPHORUS FACILITY SUMMARY

PWCSA-HL Mooney
POTOMAC Trading Basin

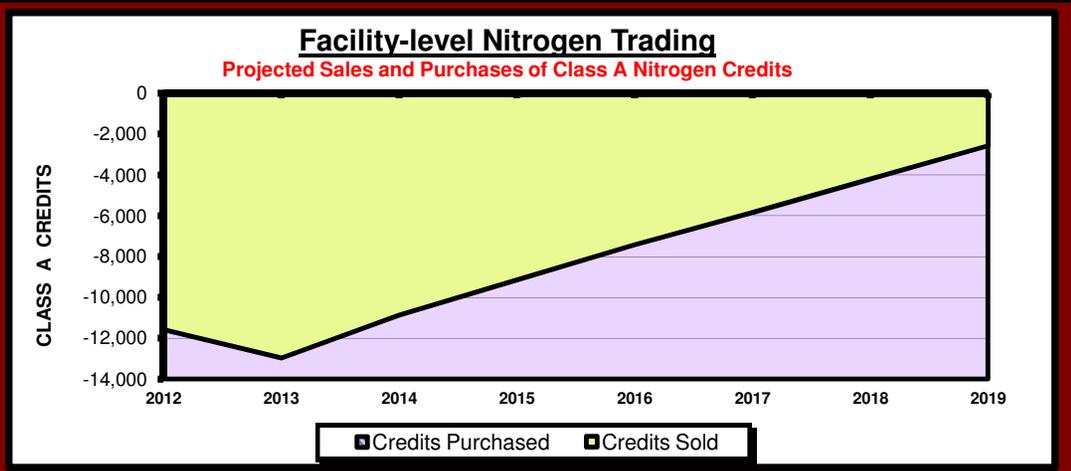


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Projected Flow (mgd)	17.00	17.50	18.00	18.50	18.75	19.00	19.25	19.50
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)	9,319	9,594	9,868	10,142	10,279	10,416	10,553	10,690
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	9,319	9,594	9,868	10,142	10,279	10,416	10,553	10,690
Delivered WLA	13,157	13,157	13,157	13,157	13,157	13,157	13,157	13,157
Expected Credits (delivered)	3,838	3,563	3,289	3,015	2,878	2,741	2,604	2,467
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	3,838	3,563	3,289	3,015	2,878	2,741	2,604	2,467
Class A Credit Sales (Purchases)	3,454	3,207	2,960	2,714	2,590	2,467	2,344	2,220
Expected Class B Credits	384	356	329	301	288	274	260	247

NITROGEN FACILITY SUMMARY

Stafford Co-Aquia
POTOMAC Trading Basin

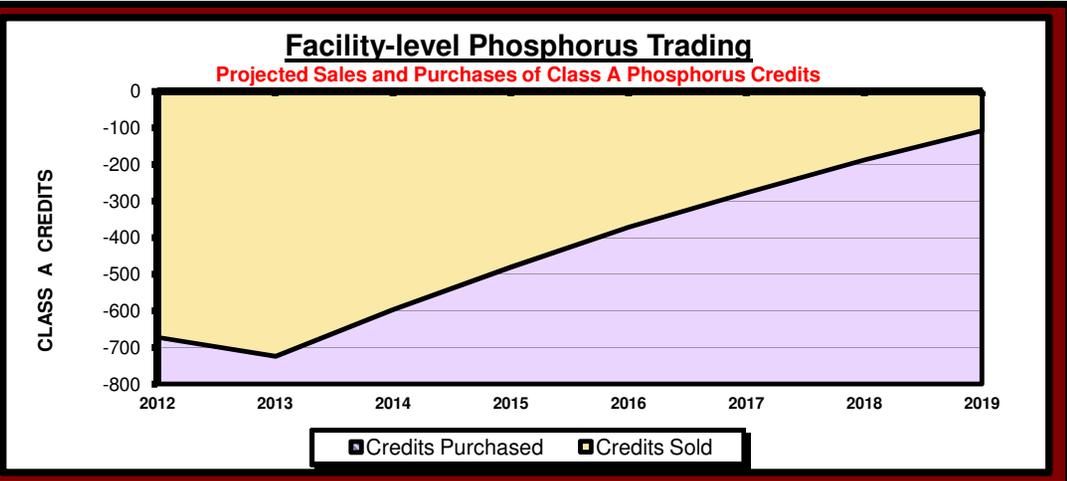


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Projected Flow (mgd)	6.56	6.35	6.55	6.75	6.96	7.16	7.38	7.61
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)	59,937	58,018	59,845	61,673	63,591	65,419	67,429	69,530
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	59,937	58,018	59,845	61,673	63,591	65,419	67,429	69,530
Delivered WLA	73,093	73,093	73,093	73,093	73,093	73,093	73,093	73,093
Expected Credits (delivered)	13,156	15,075	13,248	11,420	9,502	7,674	5,664	3,563
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	13,156	15,075	13,248	11,420	9,502	7,674	5,664	3,563
Class A Credit Sales (Purchases)	11,577	12,965	10,863	9,136	7,412	5,832	4,191	2,565
Expected Class B Credits	1,579	2,110	2,385	2,284	2,090	1,842	1,473	998

PHOSPHORUS FACILITY SUMMARY

Stafford Co-Aquia
POTOMAC Trading Basin



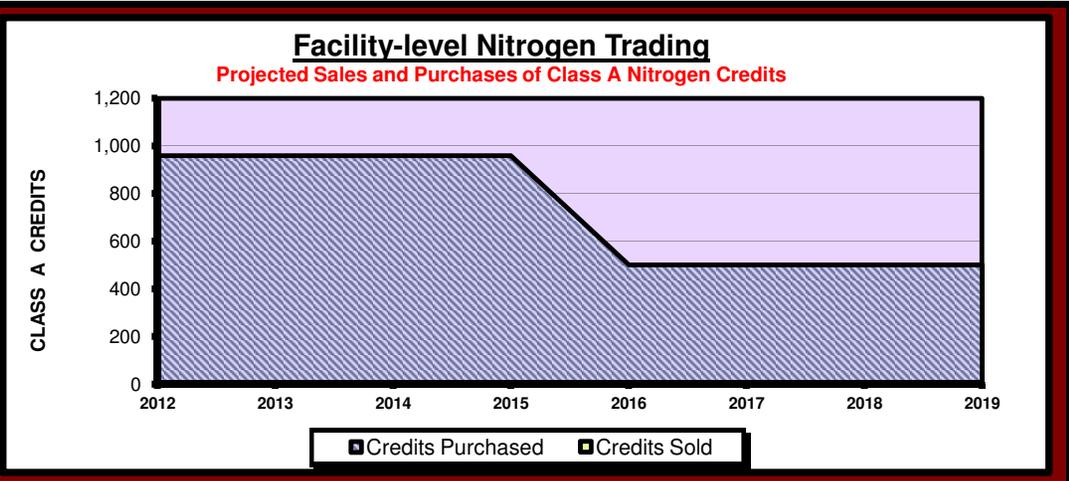
Loading & Credit Summary

Design Flow (mgd)	8.00
Projected Flow (mgd)	6.56
Projected Avg. Annual Concentration (mg/L)	0.18
Discharged Load (end of pipe)	3,596
Delivery Factor	1.00
Expected Load	3,596
Delivered WLA	4,386
Expected Credits (delivered)	790
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	790
Class A Credit Sales (Purchases)	672
Expected Class B Credits	118

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Projected Flow (mgd)	6.56	6.35	6.55	6.75	6.96	7.16	7.38	7.61
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)	3,596	3,481	3,591	3,700	3,815	3,925	4,046	4,172
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	3,596	3,481	3,591	3,700	3,815	3,925	4,046	4,172
Delivered WLA	4,386	4,386	4,386	4,386	4,386	4,386	4,386	4,386
Expected Credits (delivered)	790	905	795	686	571	461	340	214
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	790	905	795	686	571	461	340	214
Class A Credit Sales (Purchases)	672	724	596	480	371	277	187	107
Expected Class B Credits	118	181	199	206	200	184	153	107

NITROGEN FACILITY SUMMARY

Stoney Creek
POTOMAC Trading Basin



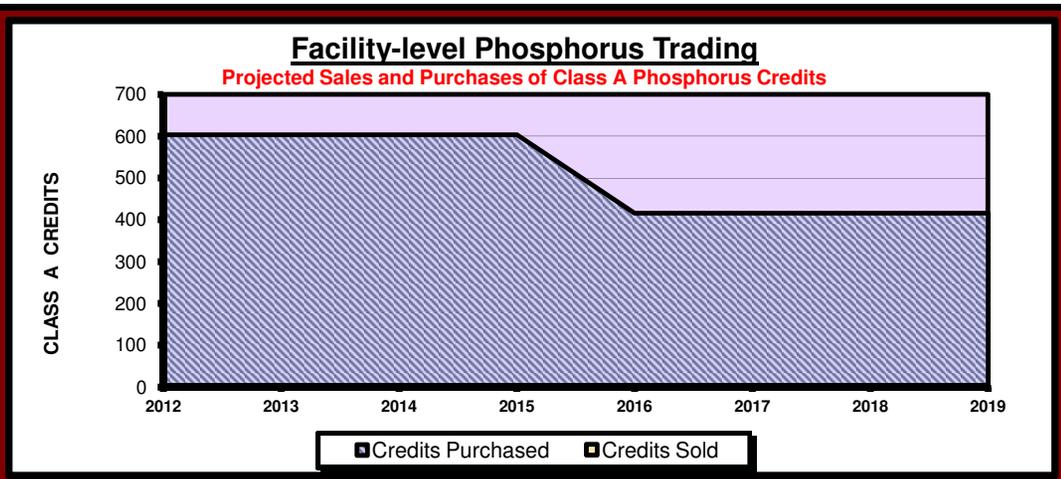
Loading & Credit Summary

Design Flow (mgd)	0.60
Projected Flow (mgd)	0.35
Projected Avg. Annual Concentration (mg/L)	8.20
Discharged Load (end of pipe)	8,741
Delivery Factor	0.67
Expected Load	5,856
Delivered WLA	4,897
Expected Credits (delivered)	(959)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(959)
Class A Credit Sales (Purchases)	(959)
Expected Class B Credits	0

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
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	0.35	0.35	0.35	0.35
Projected Avg. Annual Concentration (mg/L)	8.20	8.20	8.20	8.20	8.20	8.20	8.20	8.20
Discharged Load (end of pipe)	8,741	8,741	8,741	8,741	8,741	8,741	8,741	8,741
Delivery Factor	0.67	0.67	0.67	0.67	0.35	0.35	0.35	0.35
Expected Load	5,856	5,856	5,856	5,856	3,059	3,059	3,059	3,059
Delivered WLA	4,897	4,897	4,897	4,897	2,558	2,558	2,558	2,558
Expected Credits (delivered)	(959)	(959)	(959)	(959)	(501)	(501)	(501)	(501)
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	(959)	(959)	(959)	(959)	(501)	(501)	(501)	(501)
Class A Credit Sales (Purchases)	(959)	(959)	(959)	(959)	(501)	(501)	(501)	(501)
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Stoney Creek
POTOMAC Trading Basin



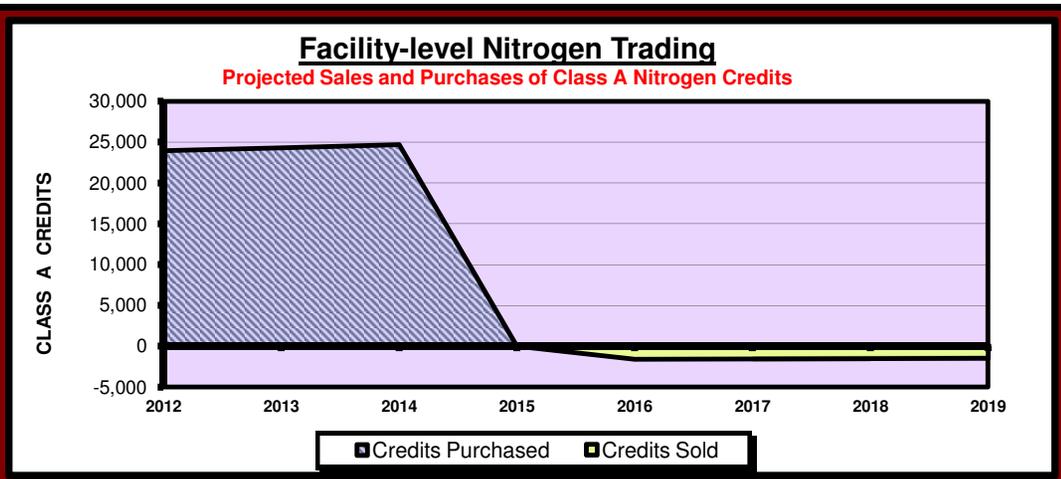
Loading & Credit Summary

Design Flow (mgd)	0.60
Projected Flow (mgd)	0.35
Projected Avg. Annual Concentration (mg/L)	1.25
Discharged Load (end of pipe)	1,332
Delivery Factor	0.77
Expected Load	1,026
Delivered WLA	422
Expected Credits (delivered)	(604)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(604)
Class A Credit Sales (Purchases)	(604)
Expected Class B Credits	0

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
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	0.35	0.35	0.35	0.35
Projected Avg. Annual Concentration (mg/L)	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Discharged Load (end of pipe)	1,332	1,332	1,332	1,332	1,332	1,332	1,332	1,332
Delivery Factor	0.77	0.77	0.77	0.77	0.53	0.53	0.53	0.53
Expected Load	1,026	1,026	1,026	1,026	706	706	706	706
Delivered WLA	422	422	422	422	290	290	290	290
Expected Credits (delivered)	(604)	(604)	(604)	(604)	(416)	(416)	(416)	(416)
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	(604)	(604)	(604)	(604)	(416)	(416)	(416)	(416)
Class A Credit Sales (Purchases)	(604)	(604)	(604)	(604)	(416)	(416)	(416)	(416)
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

Strasburg
 POTOMAC Trading Basin

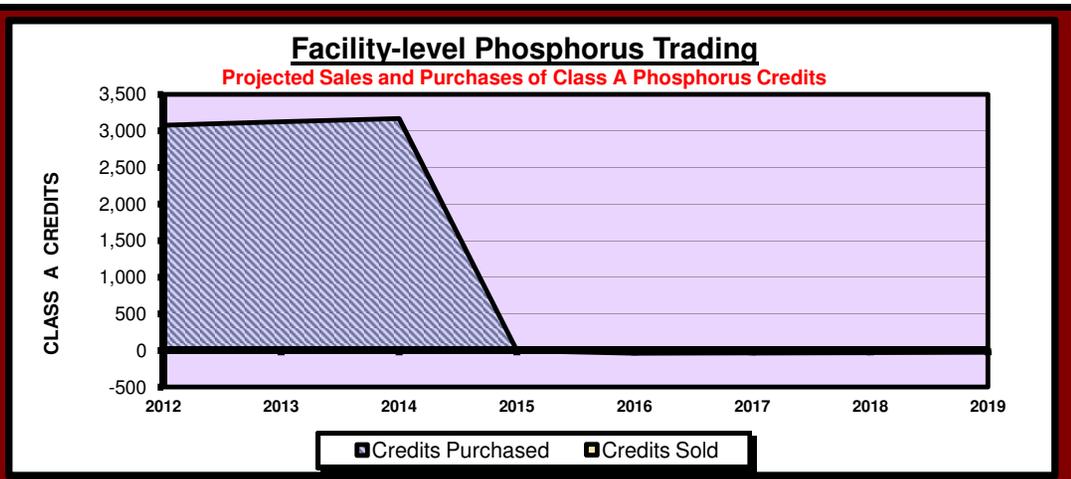


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.98	0.98	0.98	2.00	2.00	2.00	2.00	2.00
Projected Flow (mgd)	0.86	0.87	0.88	0.89	0.90	0.91	0.92	0.93
Projected Avg. Annual Concentration (mg/L)	18.21	18.21	18.21	3.00	3.00	3.00	3.00	3.00
Discharged Load (end of pipe)	47,695	48,250	48,804	8,132	8,223	8,314	8,406	8,497
Delivery Factor	0.67	0.67	0.67	0.67	0.43	0.43	0.43	0.43
Expected Load	31,956	32,327	32,699	5,448	3,536	3,575	3,614	3,654
Delivered WLA	7,999	7,999	7,999	7,999	5,134	5,134	5,134	5,134
Expected Credits (delivered)	(23,957)	(24,328)	(24,700)	2,551	1,598	1,559	1,520	1,480
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	(23,957)	(24,328)	(24,700)	2,551	1,598	1,559	1,520	1,480
Class A Credit Sales (Purchases)	(23,957)	(24,328)	(24,700)	0	1,598	1,559	1,520	1,480
Expected Class B Credits	0	0	0	2,551	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Strasburg
POTOMAC Trading Basin

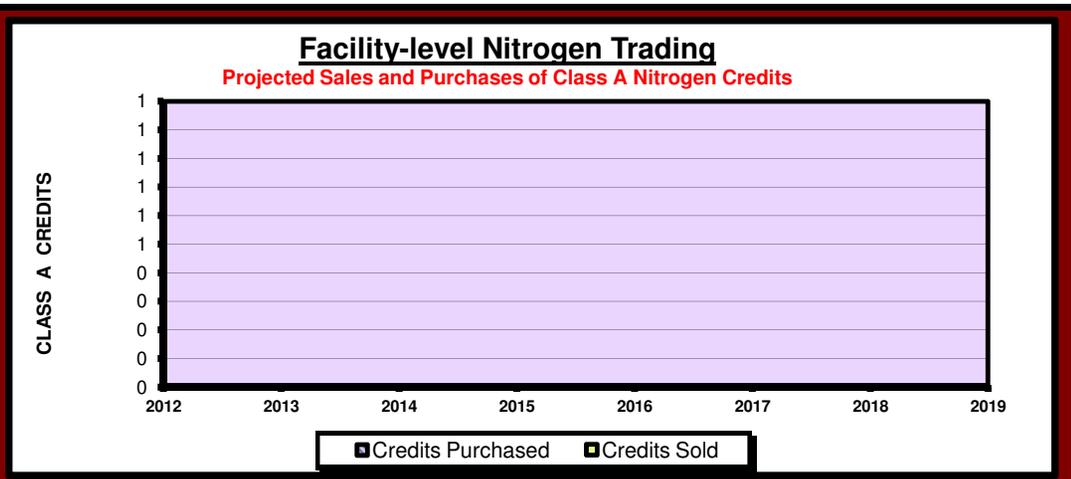


Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

2012	2013	2014	2015	2016	2017	2018	2019	
Planning Period					Future Estimates (non-binding)			
0.98	0.98	0.98	2.00	2.00	2.00	2.00	2.00	
0.86	0.87	0.88	0.89	0.90	0.91	0.92	0.93	
1.87	1.87	1.87	0.30	0.30	0.30	0.30	0.30	
4,898	4,955	5,012	813	822	831	841	850	
0.77	0.77	0.77	0.77	0.53	0.53	0.53	0.53	
3,771	3,815	3,859	626	436	441	446	450	
689	689	689	689	474	474	474	474	
(3,082)	(3,126)	(3,170)	63	38	33	28	24	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
(3,082)	(3,126)	(3,170)	63	38	33	28	24	
(3,082)	(3,126)	(3,170)	0	38	33	28	24	
0	0	0	63	0	0	0	0	

NITROGEN FACILITY SUMMARY

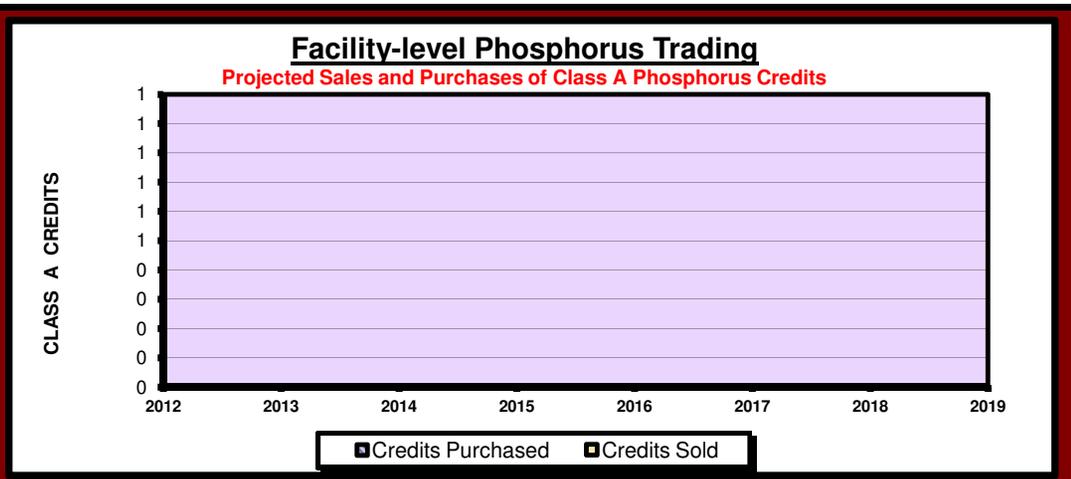
UOSA
 POTOMAC Trading Basin



Loading & Credit Summary	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00
Projected Flow (mgd)	34.41	35.27	35.94	35.77	35.25	35.82	36.40	36.98
Projected Avg. Annual Concentration (mg/L)	12.00	11.50	11.94	11.50	12.00	11.80	11.60	11.40
Discharged Load (end of pipe)	1,257,573	1,235,294	1,306,922	1,252,806	1,288,272	1,287,285	1,285,957	1,283,923
Delivery Factor	0.58	0.58	0.58	0.58	0.23	0.23	0.23	0.23
Expected Load	729,392	716,471	758,015	726,628	296,303	296,076	295,770	295,302
Delivered WLA	763,096	763,096	763,096	763,096	302,607	302,607	302,607	302,607
Expected Credits (delivered)	33,704	46,625	5,081	36,468	6,304	6,531	6,837	7,305
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	33,704	46,625	5,081	36,468	6,304	6,531	6,837	7,305
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	33,704	46,625	5,081	36,468	6,304	6,531	6,837	7,305

PHOSPHORUS FACILITY SUMMARY

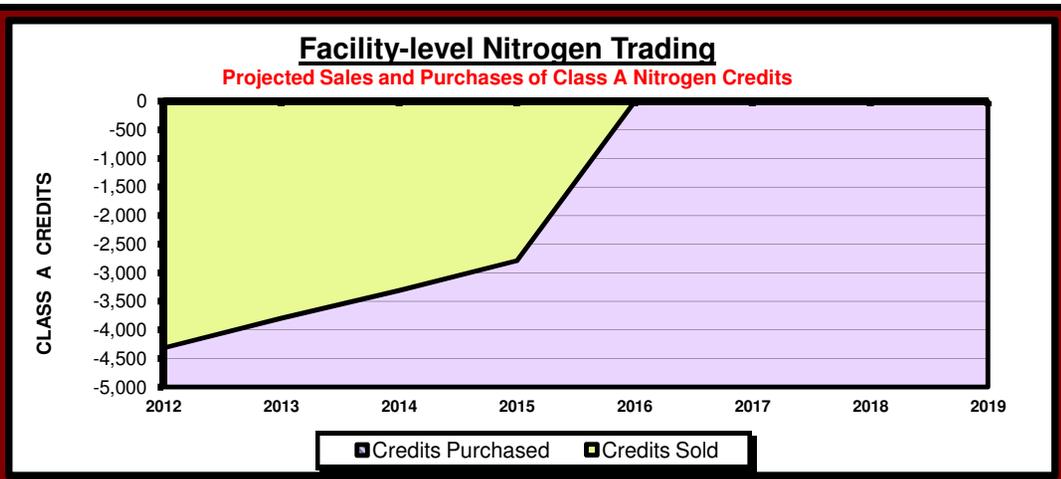
UOSA
POTOMAC Trading Basin



	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00
Projected Flow (mgd)	34.41	35.27	35.94	35.77	35.25	35.82	36.40	36.98
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)	10,480	10,742	10,946	10,894	10,736	10,909	11,086	11,262
Delivery Factor	0.44	0.44	0.44	0.44	0.30	0.30	0.30	0.30
Expected Load	4,611	4,726	4,816	4,793	3,221	3,273	3,326	3,379
Delivered WLA	7,236	7,236	7,236	7,236	4,934	4,934	4,934	4,934
Expected Credits (delivered)	2,625	2,510	2,420	2,443	1,713	1,661	1,608	1,555
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	2,625	2,510	2,420	2,443	1,713	1,661	1,608	1,555
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	2,625	2,510	2,420	2,443	1,713	1,661	1,608	1,555

NITROGEN FACILITY SUMMARY

Waynesboro
POTOMAC Trading Basin

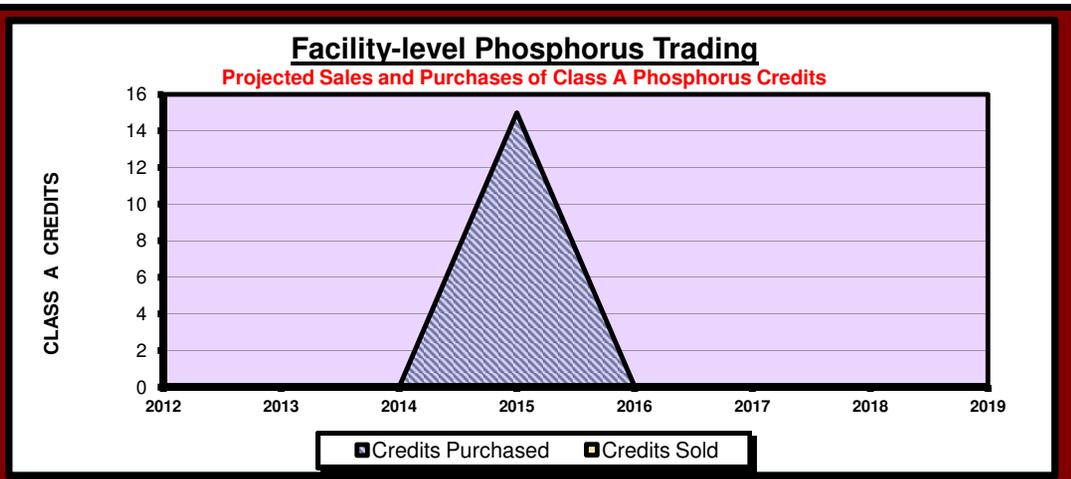


Loading & Credit Summary	
Design Flow (mgd)	4.00
Projected Flow (mgd)	4.26
Projected Avg. Annual Concentration (mg/L)	3.00
Discharged Load (end of pipe)	38,922
Delivery Factor	0.44
Expected Load	17,126
Delivered WLA	21,441
Expected Credits (delivered)	4,315
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	4,315
Class A Credit Sales (Purchases)	4,315
Expected Class B Credits	0

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
4.26	4.39	4.51	4.64	4.76	4.89	5.01	5.14
3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
38,922	40,110	41,206	42,394	43,491	44,678	45,775	46,963
0.44	0.44	0.44	0.44	0.14	0.14	0.14	0.14
17,126	17,648	18,131	18,653	6,089	6,255	6,408	6,575
21,441	21,441	21,441	21,441	6,822	6,822	6,822	6,822
4,315	3,793	3,310	2,788	733	567	414	247
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
4,315	3,793	3,310	2,788	733	567	414	247
4,315	3,793	3,310	2,788	0	0	0	0
0	0	0	0	733	567	414	247

PHOSPHORUS FACILITY SUMMARY

Waynesboro
POTOMAC Trading Basin



Loading & Credit Summary

Design Flow (mgd)	4.00
Projected Flow (mgd)	4.26
Projected Avg. Annual Concentration (mg/L)	0.28
Discharged Load (end of pipe)	3,633
Delivery Factor	0.77
Expected Load	2,797
Delivered WLA	2,814
Expected Credits (delivered)	17
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	17
Class A Credit Sales (Purchases)	0
Expected Class B Credits	17

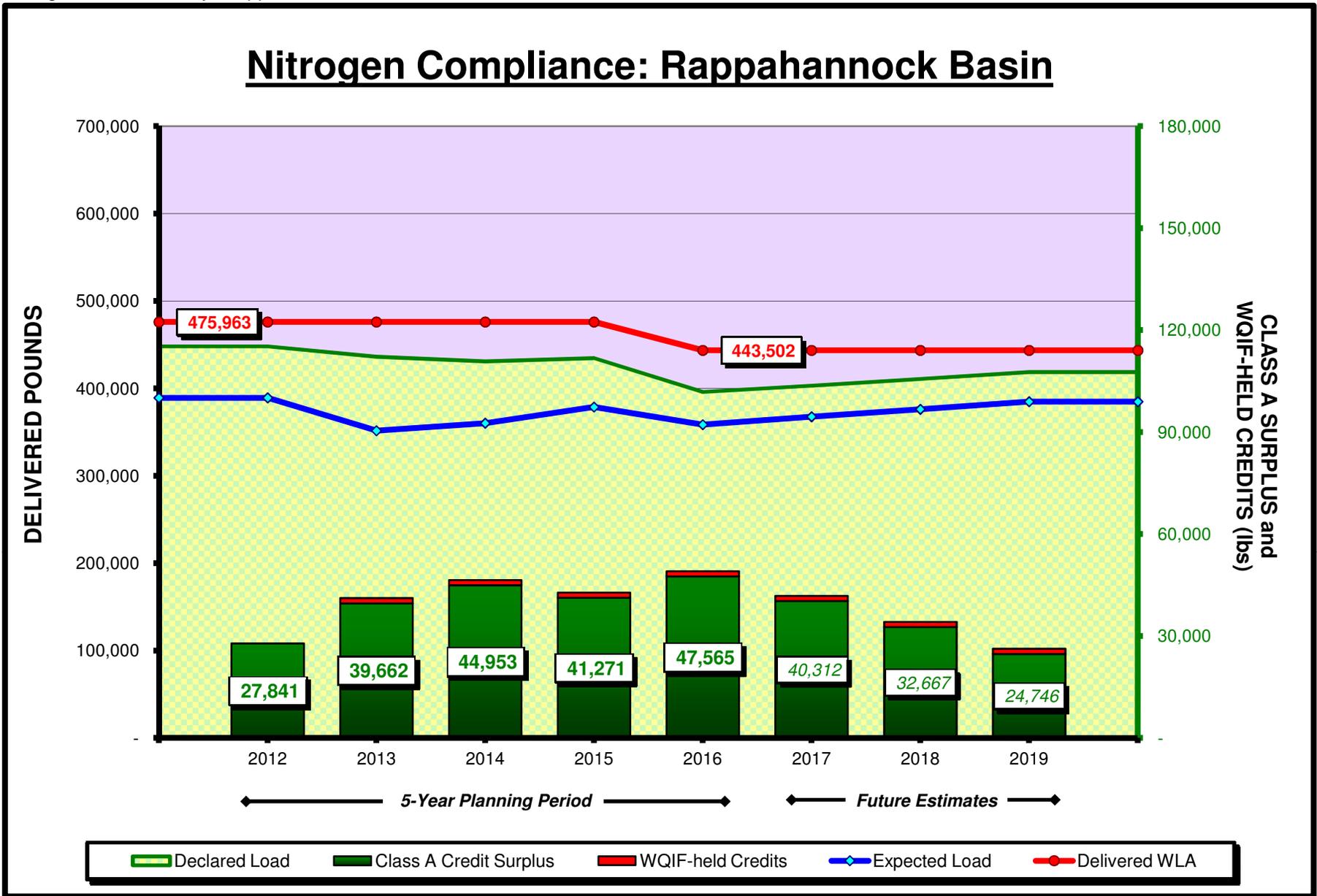
	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Projected Flow (mgd)	4.26	4.39	4.51	4.64	4.76	4.89	5.01	5.14
Projected Avg. Annual Concentration (mg/L)	0.28	0.27	0.26	0.26	0.25	0.24	0.23	0.23
Discharged Load (end of pipe)	3,633	3,610	3,571	3,674	3,624	3,574	3,509	3,600
Delivery Factor	0.77	0.77	0.77	0.77	0.54	0.54	0.54	0.54
Expected Load	2,797	2,780	2,750	2,829	1,957	1,930	1,895	1,944
Delivered WLA	2,814	2,814	2,814	2,814	1,974	1,974	1,974	1,974
Expected Credits (delivered)	17	34	64	(15)	17	44	79	30
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	34	64	(15)	17	44	79	30
Class A Credit Sales (Purchases)	0	0	0	(15)	0	0	0	0
Expected Class B Credits	17	34	64	0	17	44	79	30

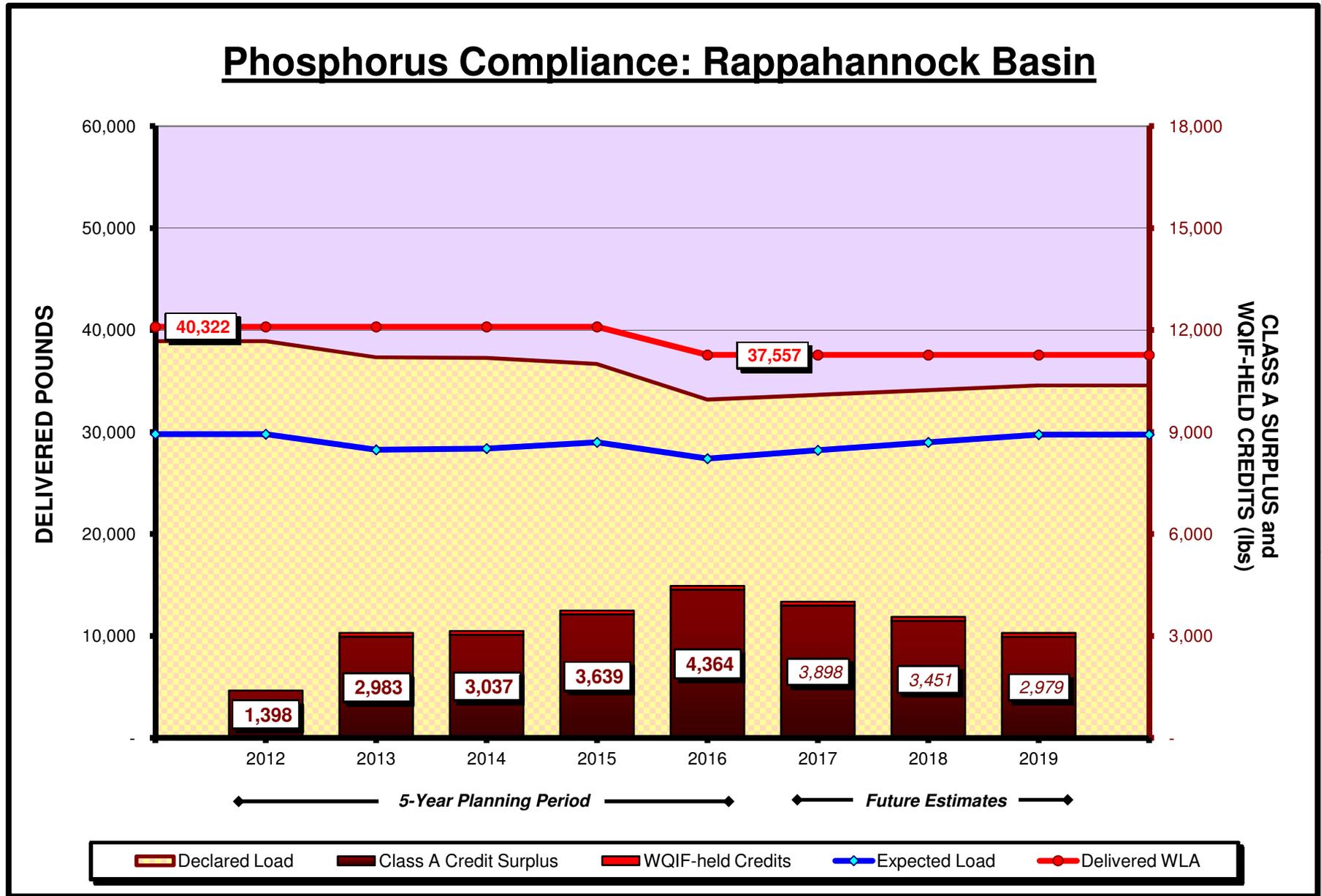
SECTION 3

Rappahannock River Basin Exchange Compliance Plan



Nitrogen Compliance: Rappahannock Basin





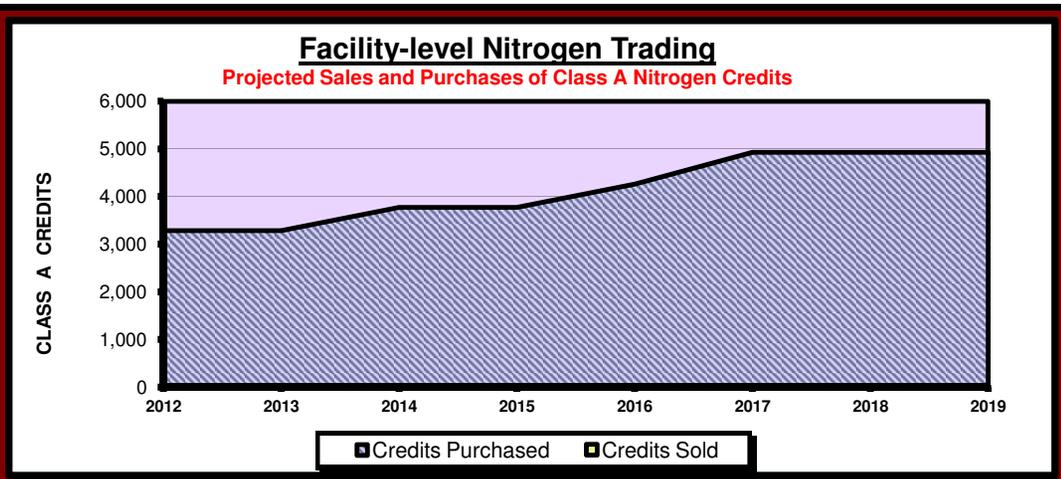
Rappahannock River Basin

Supplemental Information for Individual Facilities



NITROGEN FACILITY SUMMARY

American Water-Fort Hill
RAPPAHANNOCK Trading Basin

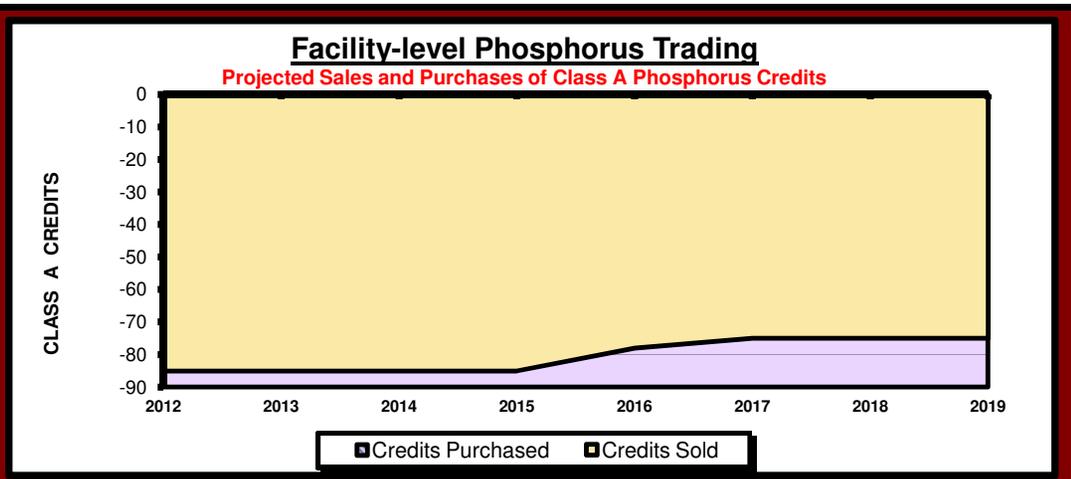


Loading & Credit Summary	
Design Flow (mgd)	0.53
Projected Flow (mgd)	0.16
Projected Avg. Annual Concentration (mg/L)	20.00
Discharged Load (end of pipe)	9,746
Delivery Factor	1.00
Expected Load	9,746
Delivered WLA	6,457
Expected Credits (delivered)	(3,289)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(3,289)
Class A Credit Sales (Purchases)	(3,289)
Expected Class B Credits	0

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53
0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.17
20.00	20.00	21.00	21.00	22.00	22.00	22.00	22.00
9,746	9,746	10,233	10,233	10,720	11,390	11,390	11,390
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
9,746	9,746	10,233	10,233	10,720	11,390	11,390	11,390
6,457	6,457	6,457	6,457	6,457	6,457	6,457	6,457
(3,289)	(3,289)	(3,776)	(3,776)	(4,263)	(4,933)	(4,933)	(4,933)
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
(3,289)	(3,289)	(3,776)	(3,776)	(4,263)	(4,933)	(4,933)	(4,933)
(3,289)	(3,289)	(3,776)	(3,776)	(4,263)	(4,933)	(4,933)	(4,933)
0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

American Water-Fort Hill
RAPPAHANNOCK Trading Basin

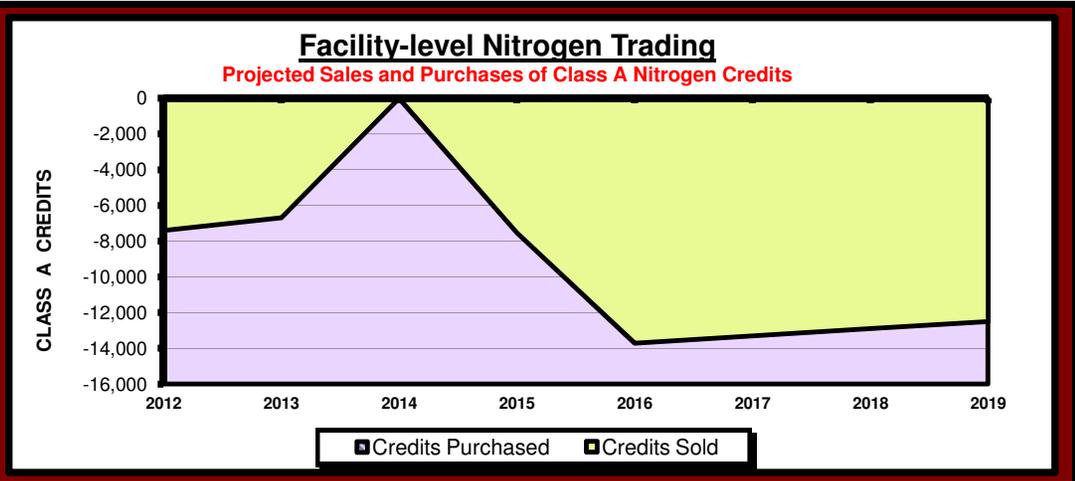


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53
Projected Flow (mgd)	0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.17
Projected Avg. Annual Concentration (mg/L)	0.30	0.30	0.30	0.30	0.35	0.35	0.35	0.35
Discharged Load (end of pipe)	146	146	146	146	171	181	181	181
Delivery Factor	1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.99
Expected Load	146	146	146	146	169	179	179	179
Delivered WLA	484	484	484	484	479	479	479	479
Expected Credits (delivered)	338	338	338	338	310	300	300	300
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	338	338	338	338	310	300	300	300
Class A Credit Sales (Purchases)	85	85	85	85	78	75	75	75
Expected Class B Credits	253	253	253	253	232	225	225	225

NITROGEN FACILITY SUMMARY

Culpeper (Town)
RAPPAHANNOCK Trading Basin



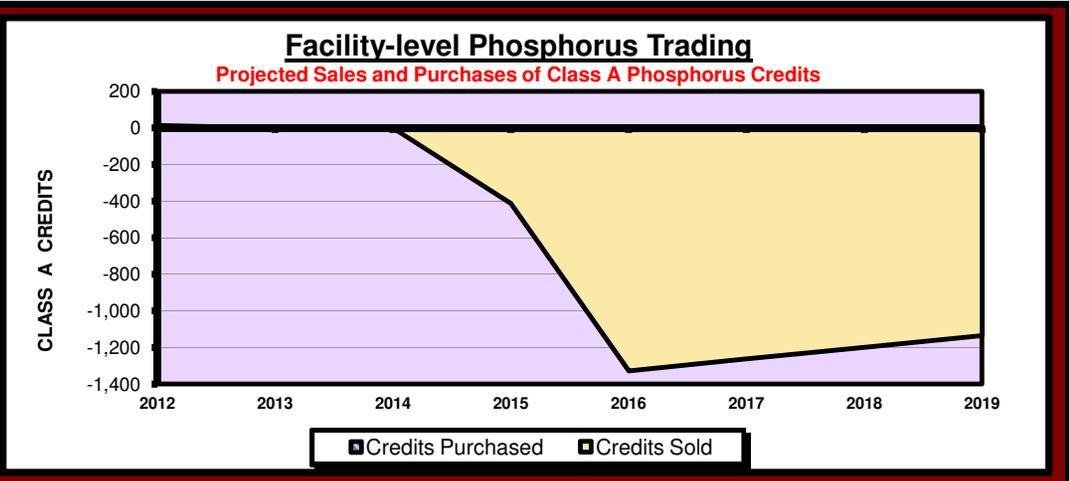
Loading & Credit Summary

Design Flow (mgd)	6.00
Projected Flow (mgd)	4.67
Projected Avg. Annual Concentration (mg/L)	3.00
Discharged Load (end of pipe)	42,687
Delivery Factor	0.61
Expected Load	26,039
Delivered WLA	44,587
Expected Credits (delivered)	18,548
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	18,548
Class A Credit Sales (Purchases)	7,401
Expected Class B Credits	11,147

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Projected Flow (mgd)	4.67	4.80	4.50	4.50	4.60	4.70	4.80	4.90
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)	42,687	43,856	41,115	41,115	42,029	42,942	43,856	44,770
Delivery Factor	0.61	0.61	0.61	0.61	0.49	0.49	0.49	0.49
Expected Load	26,039	26,752	25,080	25,080	20,594	21,042	21,489	21,937
Delivered WLA	44,587	44,587	44,587	44,587	35,816	35,816	35,816	35,816
Expected Credits (delivered)	18,548	17,835	19,507	19,507	15,222	14,774	14,327	13,879
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	18,548	17,835	19,507	19,507	15,222	14,774	14,327	13,879
Class A Credit Sales (Purchases)	7,401	6,688	0	7,524	13,700	13,297	12,894	12,491
Expected Class B Credits	11,147	11,147	19,507	11,983	1,522	1,477	1,433	1,388

PHOSPHORUS FACILITY SUMMARY

Culpeper (Town)
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

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Projected Flow (mgd)	4.67	4.80	4.50	4.50	4.60	4.70	4.80	4.90
Projected Avg. Annual Concentration (mg/L)	0.29	0.28	0.27	0.27	0.27	0.27	0.27	0.27
Discharged Load (end of pipe)	4,126	4,093	3,700	3,700	3,783	3,865	3,947	4,029
Delivery Factor	1.00	1.00	1.00	1.00	0.78	0.78	0.78	0.78
Expected Load	4,126	4,093	3,700	3,700	2,950	3,015	3,079	3,143
Delivered WLA	5,483	5,483	5,483	5,483	4,277	4,277	4,277	4,277
Expected Credits (delivered)	1,357	1,390	1,783	1,783	1,327	1,262	1,198	1,134
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	1,357	1,390	1,783	1,783	1,327	1,262	1,198	1,134
Class A Credit Sales (Purchases)	(14)	0	0	412	1,327	1,262	1,198	1,134
Expected Class B Credits	1,371	1,390	1,783	1,371	0	0	0	0

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.

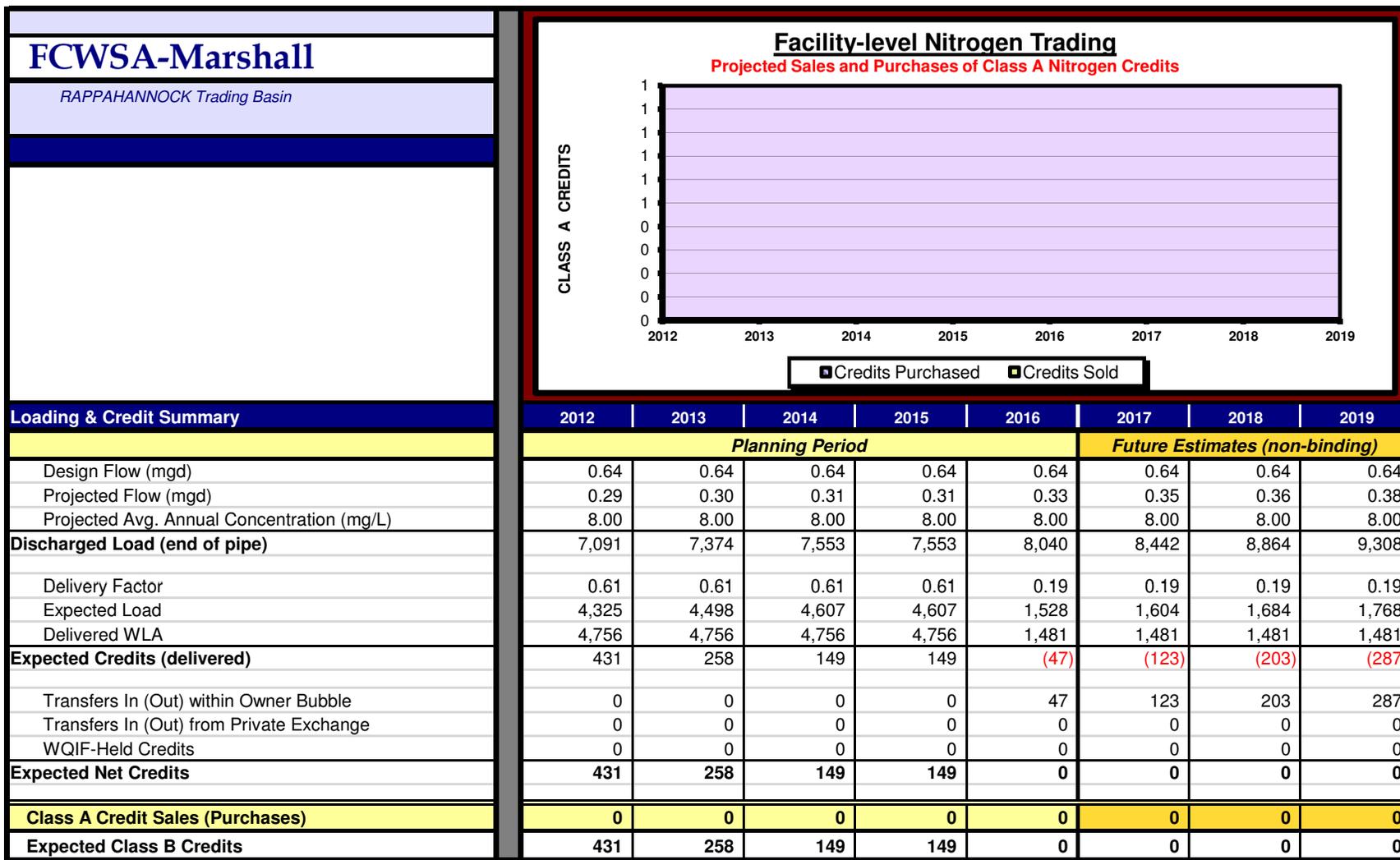
The “Credit Transferred within Bubble” section of each table forecasts the use of Credits within the owner bubble during each Compliance Year, and must necessarily sum to zero. The specific Credit transfers shown in this table are provided for internal planning purposes only and, accordingly, are not 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		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
Marshall	-	-	-	-	47	123	203	287
Remington	-	-	-	-	(47)	(123)	(203)	(287)
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Marshall	431	258	149	149	-	-	-	-
Remington	7,622	7,332	7,059	6,688	4,967	4,544	4,101	3,635
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	8,053	7,590	7,208	6,837	4,967	4,544	4,101	3,635
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
<i>Expected Class B Credits</i>	<i>8,053</i>	<i>7,590</i>	<i>7,208</i>	<i>6,837</i>	<i>4,967</i>	<i>4,544</i>	<i>4,101</i>	<i>3,635</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>

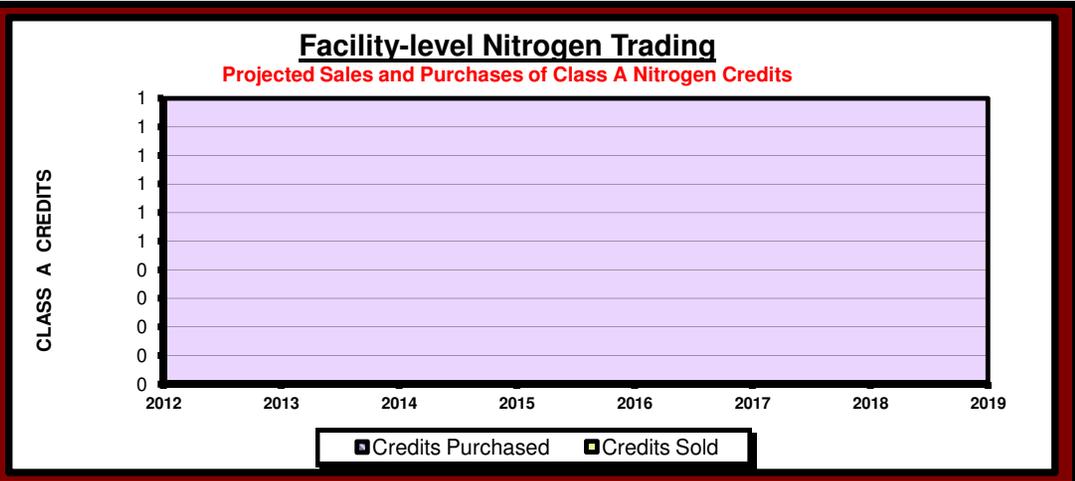
PHOSPHORUS Credits	Exchange 5-year Planning Period					Future Projections		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
Marshall	301	337	-	-	-	-	-	-
Remington	(301)	(337)	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Marshall	-	-	302	302	218	206	194	181
Remington	606	533	836	788	571	528	483	436
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	606	533	1,138	1,090	789	734	677	617
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
<i>Expected Class B Credits</i>	<i>606</i>	<i>533</i>	<i>1,138</i>	<i>1,090</i>	<i>789</i>	<i>734</i>	<i>677</i>	<i>617</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



NITROGEN FACILITY SUMMARY

FCWSA-Remington
RAPPAHANNOCK Trading Basin



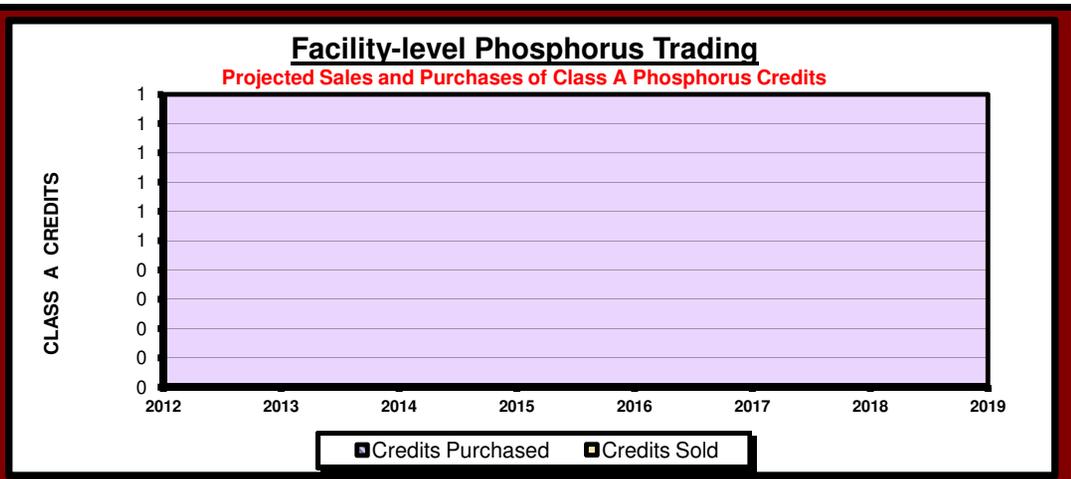
Loading & Credit Summary

Design Flow (mgd)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Projected Flow (mgd)	0.97	1.01	1.05	1.10	1.16	1.22	1.28	1.34
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)	11,869	12,344	12,791	13,400	14,131	14,838	15,580	16,359
Delivery Factor	0.61	0.61	0.61	0.61	0.49	0.49	0.49	0.49
Expected Load	7,240	7,530	7,803	8,174	6,924	7,271	7,634	8,016
Delivered WLA	14,862	14,862	14,862	14,862	11,938	11,938	11,938	11,938
Expected Credits (delivered)	7,622	7,332	7,059	6,688	5,014	4,667	4,304	3,922
Transfers In (Out) within Owner Bubble	0	0	0	0	(47)	(123)	(203)	(287)
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	7,622	7,332	7,059	6,688	4,967	4,544	4,101	3,635
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	7,622	7,332	7,059	6,688	4,967	4,544	4,101	3,635

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
0.97	1.01	1.05	1.10	1.16	1.22	1.28	1.34
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
11,869	12,344	12,791	13,400	14,131	14,838	15,580	16,359
0.61	0.61	0.61	0.61	0.49	0.49	0.49	0.49
7,240	7,530	7,803	8,174	6,924	7,271	7,634	8,016
14,862	14,862	14,862	14,862	11,938	11,938	11,938	11,938
7,622	7,332	7,059	6,688	5,014	4,667	4,304	3,922
0	0	0	0	(47)	(123)	(203)	(287)
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
7,622	7,332	7,059	6,688	4,967	4,544	4,101	3,635
0	0	0	0	0	0	0	0
7,622	7,332	7,059	6,688	4,967	4,544	4,101	3,635

PHOSPHORUS FACILITY SUMMARY

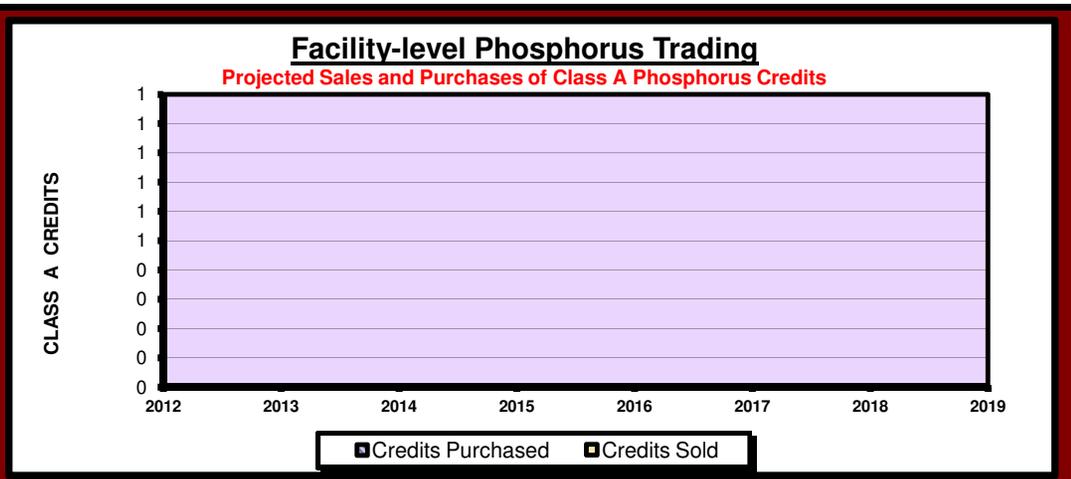
FCWSA-Marshall
RAPPAHANNOCK Trading Basin



	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64
Projected Flow (mgd)	0.29	0.30	0.31	0.31	0.33	0.35	0.36	0.38
Projected Avg. Annual Concentration (mg/L)	1.00	1.00	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	886	922	283	283	302	317	332	349
Delivery Factor	1.00	1.00	1.00	1.00	0.77	0.77	0.77	0.77
Expected Load	886	922	283	283	232	244	256	269
Delivered WLA	585	585	585	585	450	450	450	450
Expected Credits (delivered)	(301)	(337)	302	302	218	206	194	181
Transfers In (Out) within Owner Bubble	301	337	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	302	302	218	206	194	181
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	302	302	218	206	194	181

PHOSPHORUS FACILITY SUMMARY

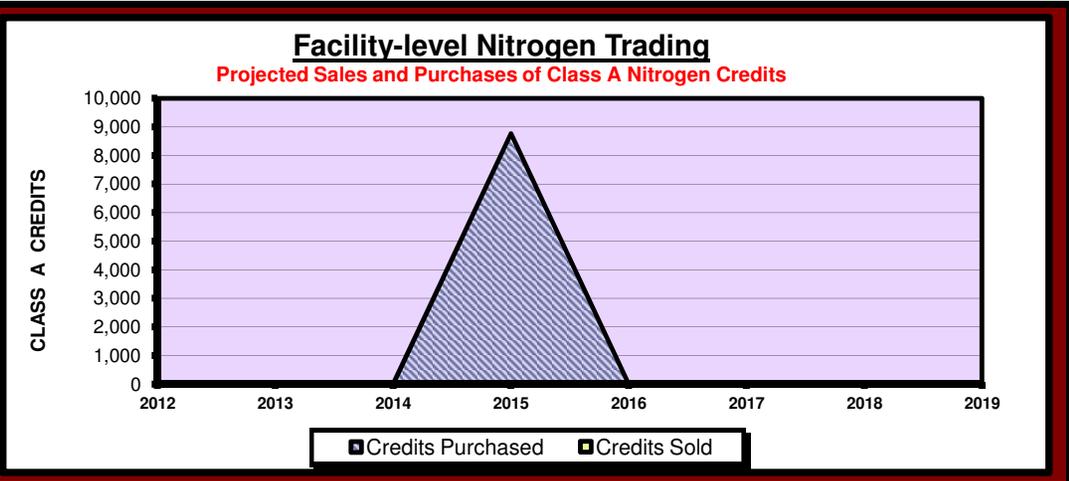
FCWSA-Remington
RAPPAHANNOCK Trading Basin



	2012	2013	2014	2015	2016	2017	2018	2019
	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)	0.97	1.01	1.05	1.10	1.16	1.22	1.28	1.34
Projected Avg. Annual Concentration (mg/L)	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Discharged Load (end of pipe)	920	957	991	1,039	1,095	1,150	1,207	1,268
Delivery Factor	1.00	1.00	1.00	1.00	0.78	0.78	0.78	0.78
Expected Load	920	957	991	1,039	854	897	942	989
Delivered WLA	1,827	1,827	1,827	1,827	1,425	1,425	1,425	1,425
Expected Credits (delivered)	907	870	836	788	571	528	483	436
Transfers In (Out) within Owner Bubble	(301)	(337)	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	606	533	836	788	571	528	483	436
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	606	533	836	788	571	528	483	436

NITROGEN FACILITY SUMMARY

Fredericksburg
RAPPAHANNOCK Trading Basin



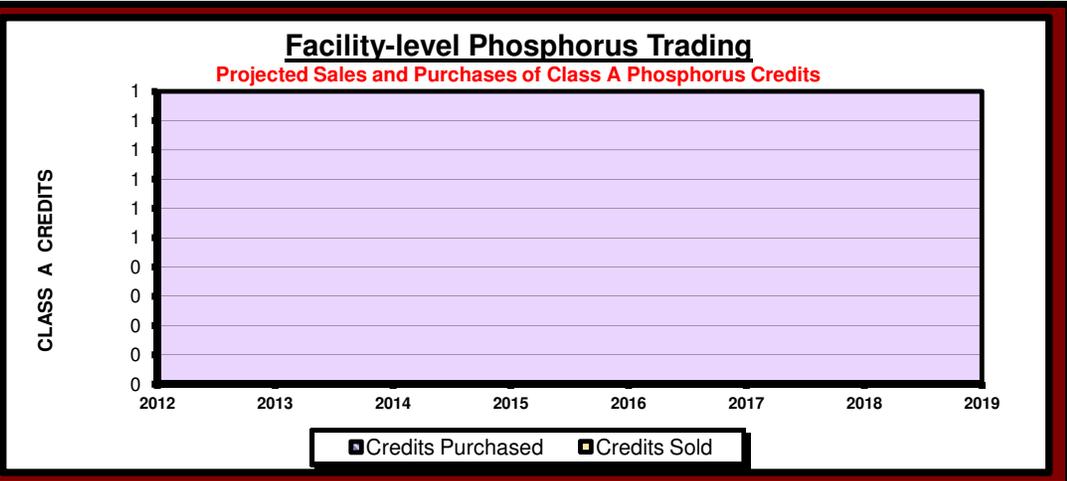
Loading & Credit Summary

Design Flow (mgd)	4.50
Projected Flow (mgd)	2.80
Projected Avg. Annual Concentration (mg/L)	6.20
Discharged Load (end of pipe)	52,871
Delivery Factor	1.00
Expected Load	52,871
Delivered WLA	54,820
Expected Credits (delivered)	1,949
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	1,949
Class A Credit Sales (Purchases)	0
Expected Class B Credits	1,949

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Projected Flow (mgd)	2.80	2.80	2.80	2.90	2.65	2.65	2.65	2.65
Projected Avg. Annual Concentration (mg/L)	6.20	6.20	6.20	7.20	6.50	6.50	6.50	6.50
Discharged Load (end of pipe)	52,871	52,871	52,871	63,591	52,460	52,460	52,460	52,460
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	52,871	52,871	52,871	63,591	52,460	52,460	52,460	52,460
Delivered WLA	54,820	54,820	54,820	54,820	54,820	54,820	54,820	54,820
Expected Credits (delivered)	1,949	1,949	1,949	(8,771)	2,360	2,360	2,360	2,360
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	1,949	1,949	1,949	(8,771)	2,360	2,360	2,360	2,360
Class A Credit Sales (Purchases)	0	0	0	(8,771)	0	0	0	0
Expected Class B Credits	1,949	1,949	1,949	0	2,360	2,360	2,360	2,360

PHOSPHORUS FACILITY SUMMARY

Fredericksburg
RAPPAHANNOCK Trading Basin

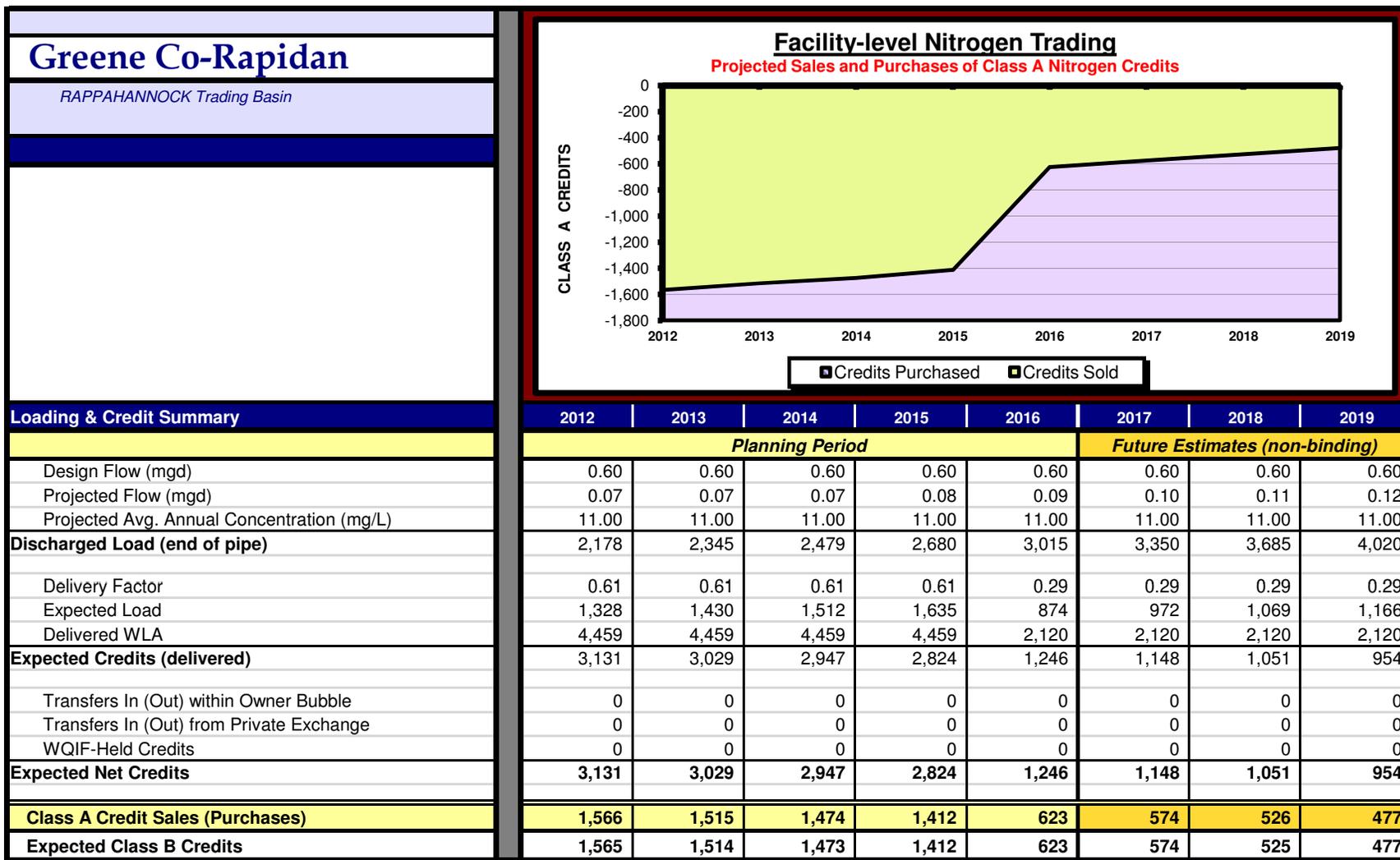


Loading & Credit Summary

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

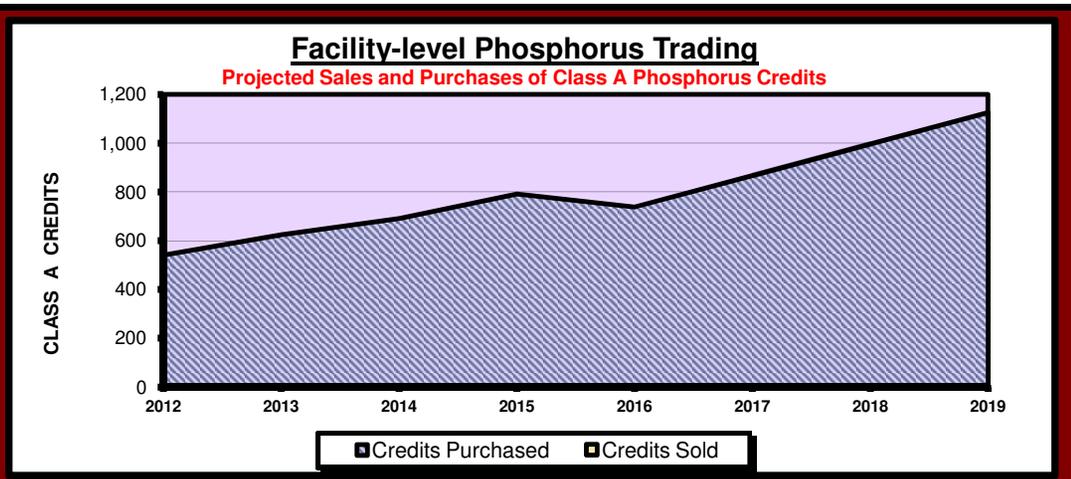
	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Projected Flow (mgd)	2.80	2.80	2.80	2.90	2.65	2.65	2.65	2.65
Projected Avg. Annual Concentration (mg/L)	0.45	0.45	0.45	0.43	0.43	0.43	0.43	0.43
Discharged Load (end of pipe)	3,837	3,837	3,837	3,798	3,470	3,470	3,470	3,470
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	3,837	3,837	3,837	3,798	3,470	3,470	3,470	3,470
Delivered WLA	4,112	4,112	4,112	4,112	4,112	4,112	4,112	4,112
Expected Credits (delivered)	275	275	275	314	642	642	642	642
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	275	275	275	314	642	642	642	642
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	275	275	275	314	642	642	642	642

NITROGEN FACILITY SUMMARY



PHOSPHORUS FACILITY SUMMARY

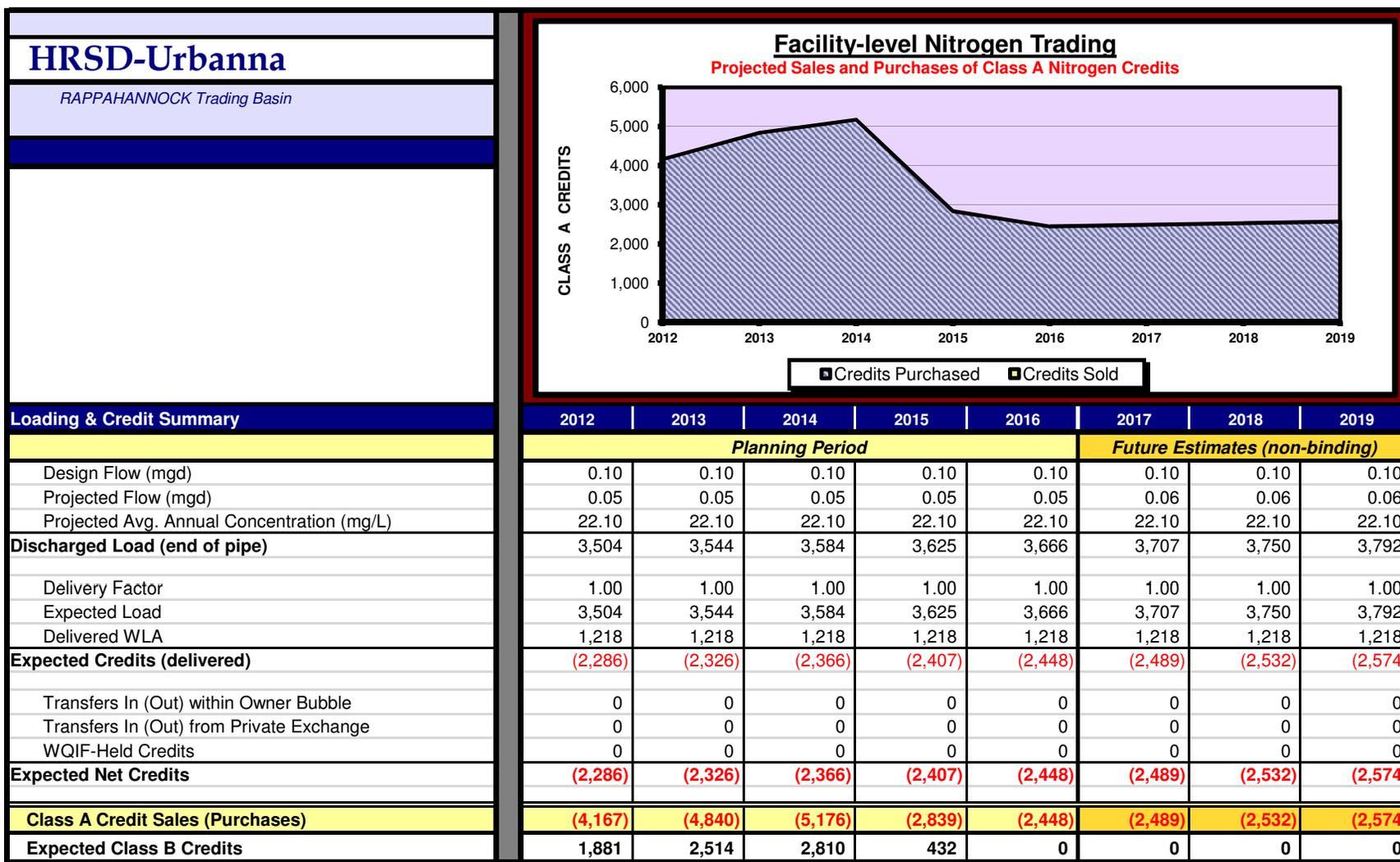
Greene Co-Rapidan
RAPPAHANNOCK Trading Basin



Loading & Credit Summary	
Design Flow (mgd)	0.60
Projected Flow (mgd)	0.07
Projected Avg. Annual Concentration (mg/L)	5.50
Discharged Load (end of pipe)	1,089
Delivery Factor	1.00
Expected Load	1,089
Delivered WLA	548
Expected Credits (delivered)	(541)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(541)
Class A Credit Sales (Purchases)	(541)
Expected Class B Credits	0

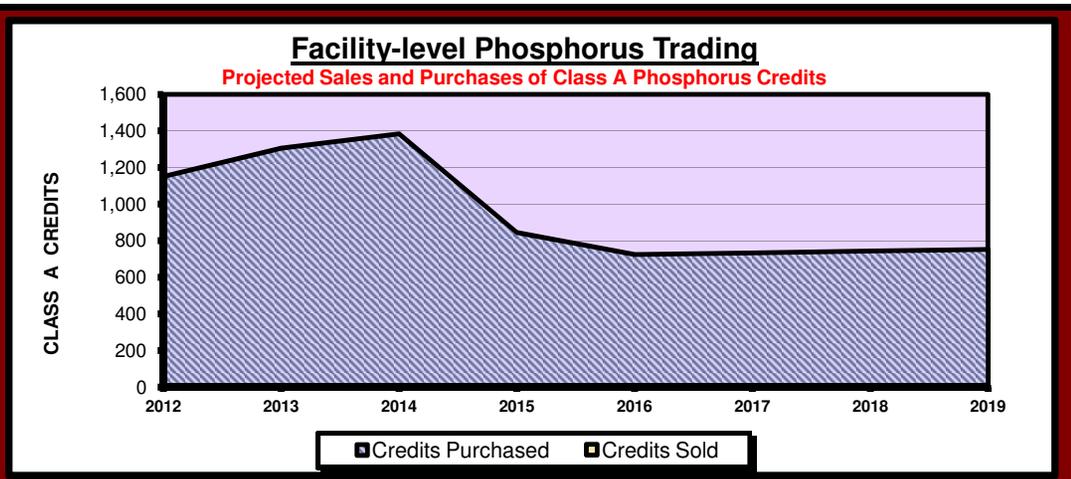
2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
0.07	0.07	0.07	0.08	0.09	0.10	0.11	0.12
5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50
1,089	1,173	1,240	1,340	1,508	1,675	1,843	2,010
1.00	1.00	1.00	1.00	0.77	0.77	0.77	0.77
1,089	1,173	1,240	1,340	1,161	1,290	1,419	1,548
548	548	548	548	422	422	422	422
(541)	(625)	(692)	(792)	(739)	(868)	(997)	(1,126)
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
(541)	(625)	(692)	(792)	(739)	(868)	(997)	(1,126)
(541)	(625)	(692)	(792)	(739)	(868)	(997)	(1,126)
0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY



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)	809
Delivery Factor	1.00
Expected Load	809
Delivered WLA	91
Expected Credits (delivered)	(718)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(718)
Class A Credit Sales (Purchases)	(1,152)
Expected Class B Credits	434

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06
Projected Avg. Annual Concentration (mg/L)	5.10	5.10	5.10	5.10	5.10	5.10	5.10	5.10
Discharged Load (end of pipe)	809	818	827	836	846	856	865	875
Delivery Factor	1.00	1.00	1.00	1.00	0.96	0.96	0.96	0.96
Expected Load	809	818	827	836	812	821	831	840
Delivered WLA	91	91	91	91	87	87	87	87
Expected Credits (delivered)	(718)	(727)	(736)	(745)	(725)	(734)	(744)	(753)
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	(718)	(727)	(736)	(745)	(725)	(734)	(744)	(753)
Class A Credit Sales (Purchases)	(1,152)	(1,307)	(1,385)	(845)	(725)	(734)	(744)	(753)
Expected Class B Credits	434	580	649	100	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.

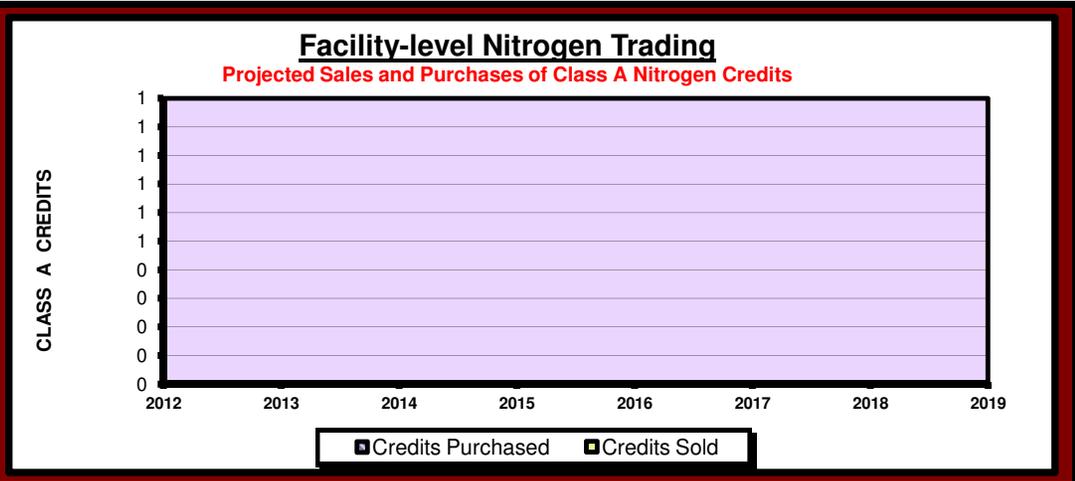
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply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

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
Hopyard Farms	(4,081)	(730)	-	-	-	-	-	-
Oakland Park	4,081	730	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Hopyard Farms	-	1,402	2,741	2,741	2,923	2,923	2,741	2,741
Oakland Park	(2,588)	-	31	31	335	335	183	183
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	(2,588)	1,402	2,772	2,772	3,258	3,258	2,924	2,924
Class A Sales (Purchases)	(2,588)	0	0	0	0	0	0	0
<i>Expected Class B Credits</i>	0	1,402	2,772	2,772	3,258	3,258	2,924	2,924
<i>WQIF-Held Credits</i>	0	1,523	1,523	1,523	1,523	1,523	1,523	1,523

PHOSPHORUS Credits	Exchange 5-year Planning Period					Future Projections		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
Hopyard Farms	(189)	(85)	(40)	(40)	(9)	(9)	(24)	(24)
Oakland Park	189	85	40	40	9	9	24	24
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Hopyard Farms	-	39	151	151	194	194	164	164
Oakland Park	(18)	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	(18)	39	151	151	194	194	164	164
Class A Sales (Purchases)	(18)	0	0	0	0	0	0	0
<i>Expected Class B Credits</i>	0	39	151	151	194	194	164	164
<i>WQIF-Held Credits</i>	0	114	114	114	113	113	113	113

NITROGEN FACILITY SUMMARY

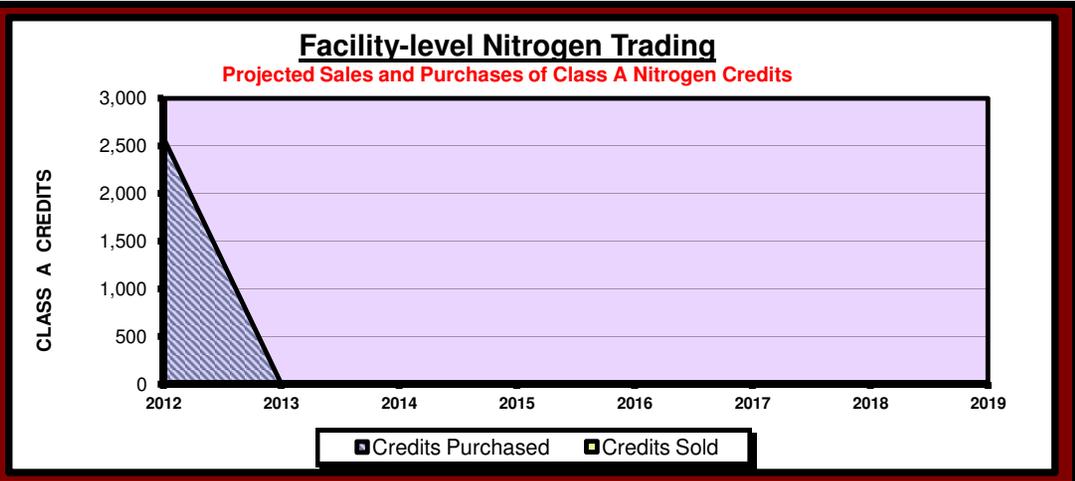
KGCSA-Hopyard Farms
RAPPAHANNOCK Trading Basin



	2012	2013	2014	2015	2016	2017	2018	2019
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Loading & Credit Summary								
Design Flow (mgd)	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Projected Flow (mgd)	0.07	0.08	0.10	0.10	0.09	0.09	0.10	0.10
Projected Avg. Annual Concentration (mg/L)	9.43	10.00	6.00	6.00	6.00	6.00	6.00	6.00
Discharged Load (end of pipe)	2,010	2,436	1,827	1,827	1,645	1,645	1,827	1,827
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	2,010	2,436	1,827	1,827	1,645	1,645	1,827	1,827
Delivered WLA	6,091	6,091	6,091	6,091	6,091	6,091	6,091	6,091
Expected Credits (delivered)	4,081	3,655	4,264	4,264	4,446	4,446	4,264	4,264
Transfers In (Out) within Owner Bubble	(4,081)	(730)	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	(1,523)	(1,523)	(1,523)	(1,523)	(1,523)	(1,523)	(1,523)
Expected Net Credits	0	1,402	2,741	2,741	2,923	2,923	2,741	2,741
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	1,402	2,741	2,741	2,923	2,923	2,741	2,741

NITROGEN FACILITY SUMMARY

KGCSA-Oakland Park
RAPPAHANNOCK Trading Basin

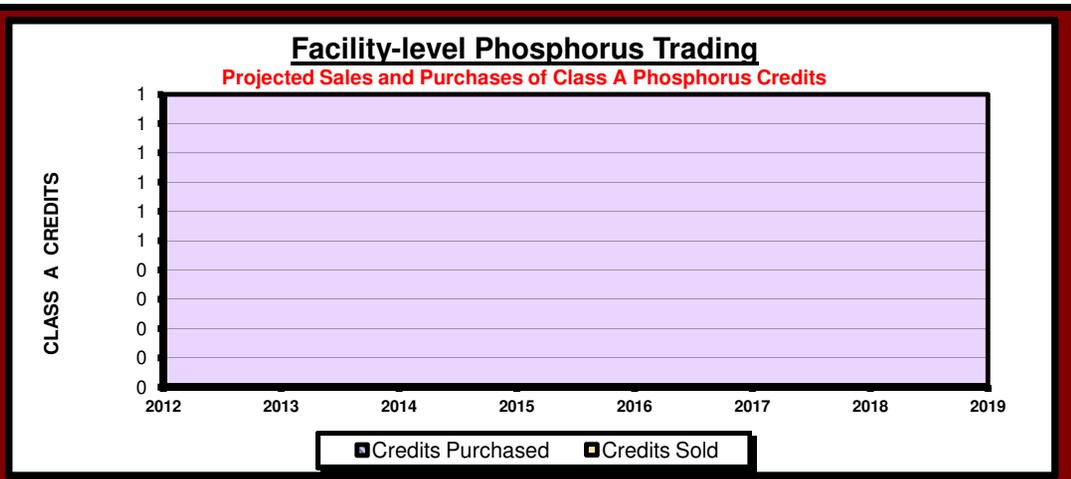


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Projected Flow (mgd)	0.11	0.10	0.11	0.11	0.09	0.09	0.10	0.10
Projected Avg. Annual Concentration (mg/L)	25.00	8.00	5.00	5.00	5.00	5.00	5.00	5.00
Discharged Load (end of pipe)	8,375	2,436	1,675	1,675	1,371	1,371	1,523	1,523
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	8,375	2,436	1,675	1,675	1,371	1,371	1,523	1,523
Delivered WLA	1,706	1,706	1,706	1,706	1,706	1,706	1,706	1,706
Expected Credits (delivered)	(6,669)	(730)	31	31	335	335	183	183
Transfers In (Out) within Owner Bubble	4,081	730	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	(2,588)	0	31	31	335	335	183	183
Class A Credit Sales (Purchases)	(2,588)	0	0	0	0	0	0	0
Expected Class B Credits	0	0	31	31	335	335	183	183

PHOSPHORUS FACILITY SUMMARY

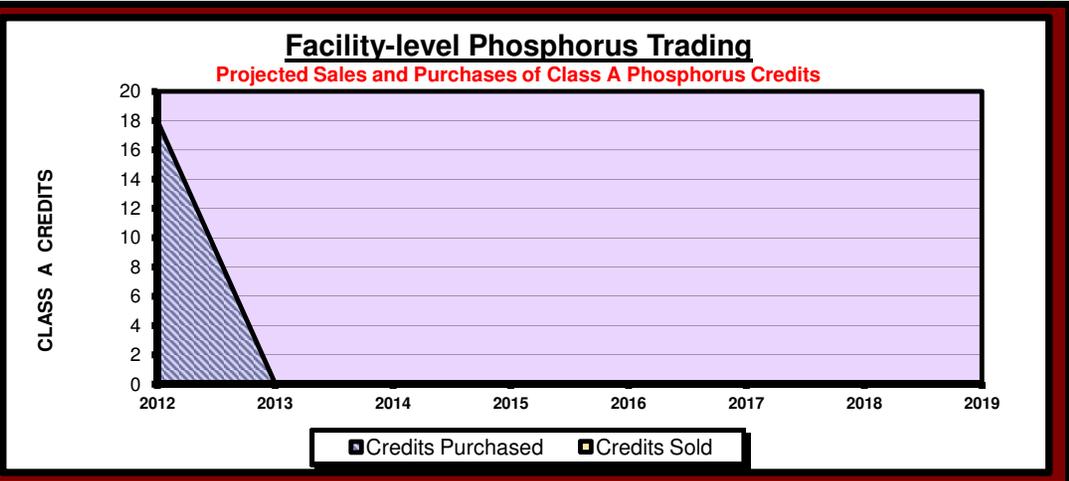
KGCSA-Hopyard Farms
RAPPAHANNOCK Trading Basin



	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Projected Flow (mgd)	0.07	0.08	0.10	0.10	0.09	0.09	0.10	0.10
Projected Avg. Annual Concentration (mg/L)	1.26	0.90	0.50	0.50	0.50	0.50	0.50	0.50
Discharged Load (end of pipe)	268	219	152	152	137	137	152	152
Delivery Factor	1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.99
Expected Load	268	219	152	152	136	136	151	151
Delivered WLA	457	457	457	457	452	452	452	452
Expected Credits (delivered)	189	238	305	305	316	316	301	301
Transfers In (Out) within Owner Bubble	(189)	(85)	(40)	(40)	(9)	(9)	(24)	(24)
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	0	(114)	(114)	(114)	(113)	(113)	(113)	(113)
Expected Net Credits	0	39	151	151	194	194	164	164
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	39	151	151	194	194	164	164

PHOSPHORUS FACILITY SUMMARY

KGCSA-Oakland Park
RAPPAHANNOCK Trading Basin



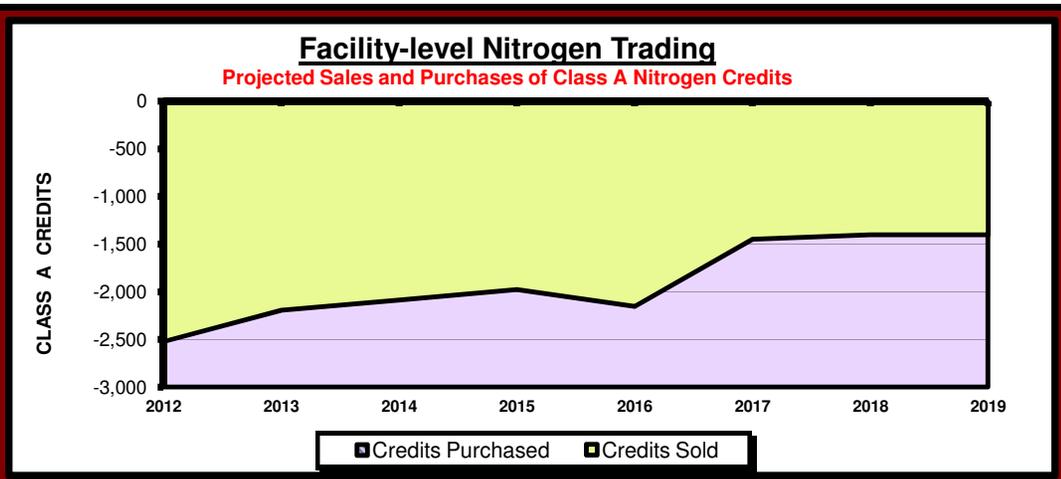
Loading & Credit Summary

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

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Projected Flow (mgd)	0.11	0.10	0.11	0.11	0.09	0.09	0.10	0.10
Projected Avg. Annual Concentration (mg/L)	1.00	0.70	0.50	0.50	0.50	0.50	0.50	0.50
Discharged Load (end of pipe)	335	213	168	168	137	137	152	152
Delivery Factor	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97
Expected Load	335	213	168	168	133	133	148	148
Delivered WLA	128	128	128	128	124	124	124	124
Expected Credits (delivered)	(207)	(85)	(40)	(40)	(9)	(9)	(24)	(24)
Transfers In (Out) within Owner Bubble	189	85	40	40	9	9	24	24
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	(18)	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	(18)	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

Kilmarnock
RAPPAHANNOCK Trading Basin

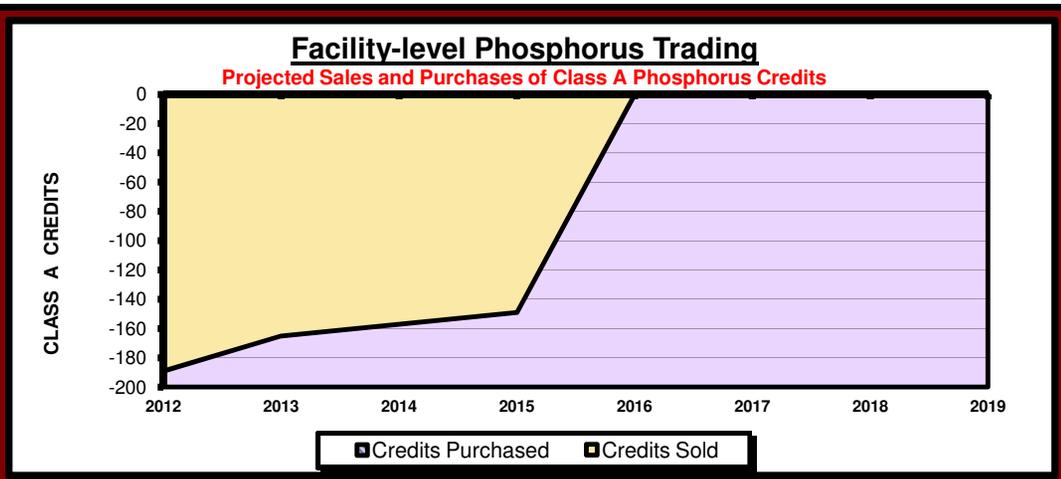


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	0.27	0.30	0.31	0.32	0.33	0.35	0.36	0.36
Projected Avg. Annual Concentration (mg/L)	4.00	4.00	4.00	4.00	3.00	3.00	3.00	3.00
Discharged Load (end of pipe)	3,289	3,655	3,776	3,898	3,015	3,198	3,289	3,289
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	3,289	3,655	3,776	3,898	3,015	3,198	3,289	3,289
Delivered WLA	6,091	6,091	6,091	6,091	6,091	6,091	6,091	6,091
Expected Credits (delivered)	2,802	2,436	2,315	2,193	3,076	2,893	2,802	2,802
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	2,802	2,436	2,315	2,193	3,076	2,893	2,802	2,802
Class A Credit Sales (Purchases)	2,522	2,192	2,084	1,974	2,153	1,447	1,401	1,401
Expected Class B Credits	280	244	231	219	923	1,446	1,401	1,401

PHOSPHORUS FACILITY SUMMARY

Kilmarnock
RAPPAHANNOCK Trading Basin

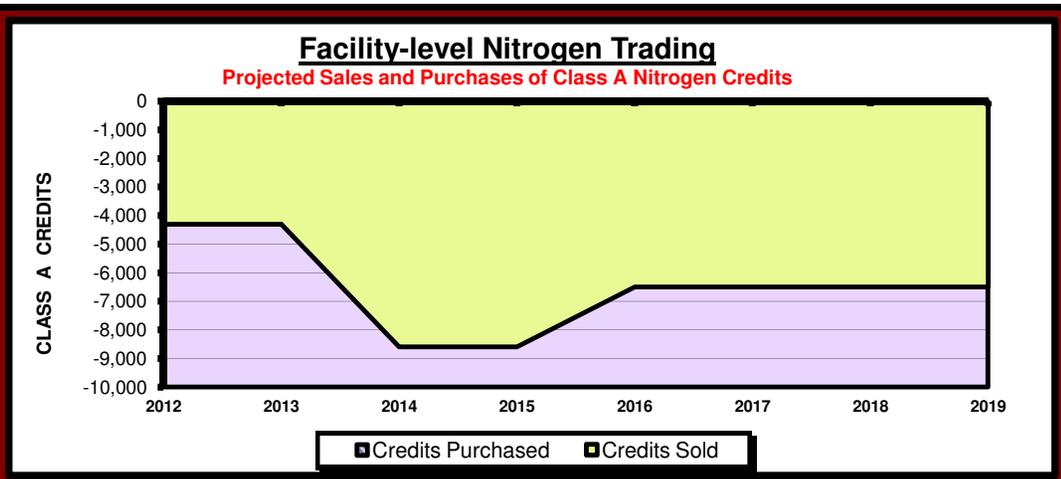


Loading & Credit Summary	
Design Flow (mgd)	0.50
Projected Flow (mgd)	0.27
Projected Avg. Annual Concentration (mg/L)	0.30
Discharged Load (end of pipe)	247
Delivery Factor	1.00
Expected Load	247
Delivered WLA	457
Expected Credits (delivered)	210
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	210
Class A Credit Sales (Purchases)	189
Expected Class B Credits	21

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
0.27	0.30	0.31	0.32	0.33	0.35	0.36	0.36
0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
247	274	283	292	302	320	329	329
1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.99
247	274	283	292	298	317	326	326
457	457	457	457	452	452	452	452
210	183	174	165	154	135	126	126
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
210	183	174	165	154	135	126	126
189	165	157	149	0	0	0	0
21	18	17	16	154	135	126	126

NITROGEN FACILITY SUMMARY

Omega Protein
RAPPAHANNOCK Trading Basin

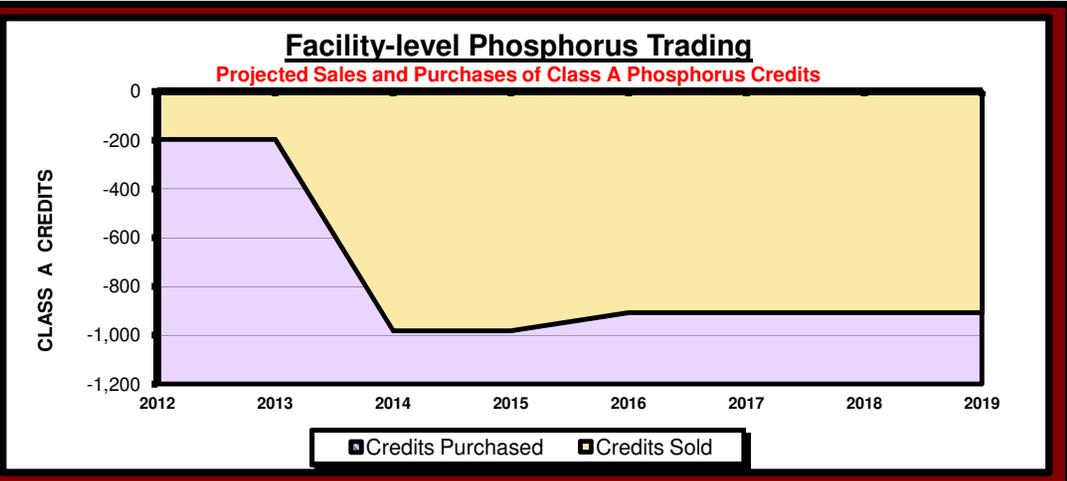


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21
Projected Flow (mgd)	0.08	0.08	0.08	0.08	0.10	0.10	0.10	0.10
Projected Avg. Annual Concentration (mg/L)	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00
Discharged Load (end of pipe)	10,477	10,477	10,477	10,477	13,096	13,096	13,096	13,096
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	10,477	10,477	10,477	10,477	13,096	13,096	13,096	13,096
Delivered WLA	21,213	21,213	21,213	21,213	21,213	21,213	21,213	21,213
Expected Credits (delivered)	10,736	10,736	10,736	10,736	8,117	8,117	8,117	8,117
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	10,736	10,736	10,736	10,736	8,117	8,117	8,117	8,117
Class A Credit Sales (Purchases)	4,294	4,294	8,589	8,589	6,494	6,494	6,494	6,494
Expected Class B Credits	6,442	6,442	2,147	2,147	1,623	1,623	1,623	1,623

PHOSPHORUS FACILITY SUMMARY

Omega Protein
RAPPAHANNOCK Trading Basin



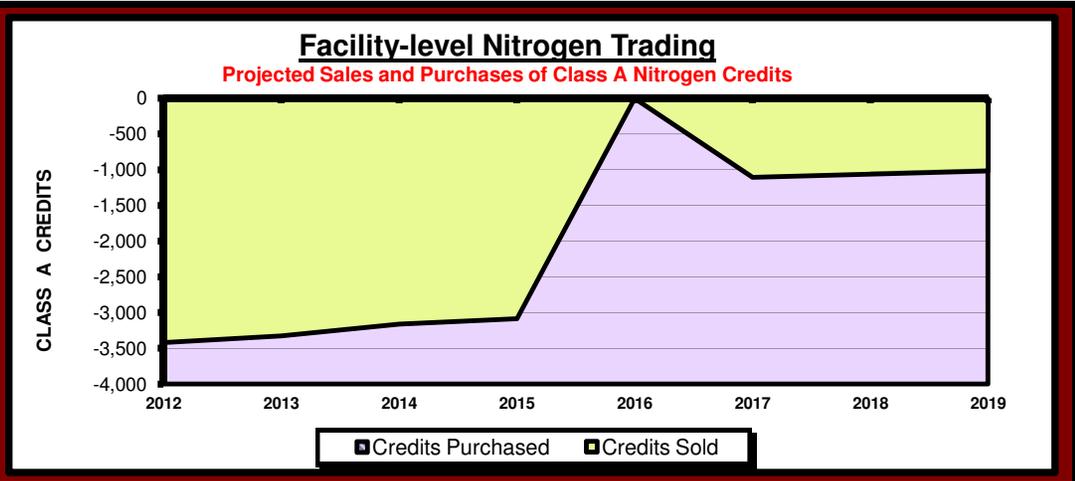
Loading & Credit Summary

Design Flow (mgd)	3.21
Projected Flow (mgd)	0.08
Projected Avg. Annual Concentration (mg/L)	1.50
Discharged Load (end of pipe)	365
Delivery Factor	1.00
Expected Load	365
Delivered WLA	1,591
Expected Credits (delivered)	1,226
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	1,226
Class A Credit Sales (Purchases)	196
Expected Class B Credits	1,030

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21
0.08	0.08	0.08	0.08	0.10	0.10	0.10	0.10
1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
365	365	365	365	457	457	457	457
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
365	365	365	365	457	457	457	457
1,591	1,591	1,591	1,591	1,591	1,591	1,591	1,591
1,226	1,226	1,226	1,226	1,134	1,134	1,134	1,134
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
1,226	1,226	1,226	1,226	1,134	1,134	1,134	1,134
196	196	981	981	907	907	907	907
1,030	1,030	245	245	227	227	227	227

NITROGEN FACILITY SUMMARY

Orange (Town)
RAPPAHANNOCK Trading Basin



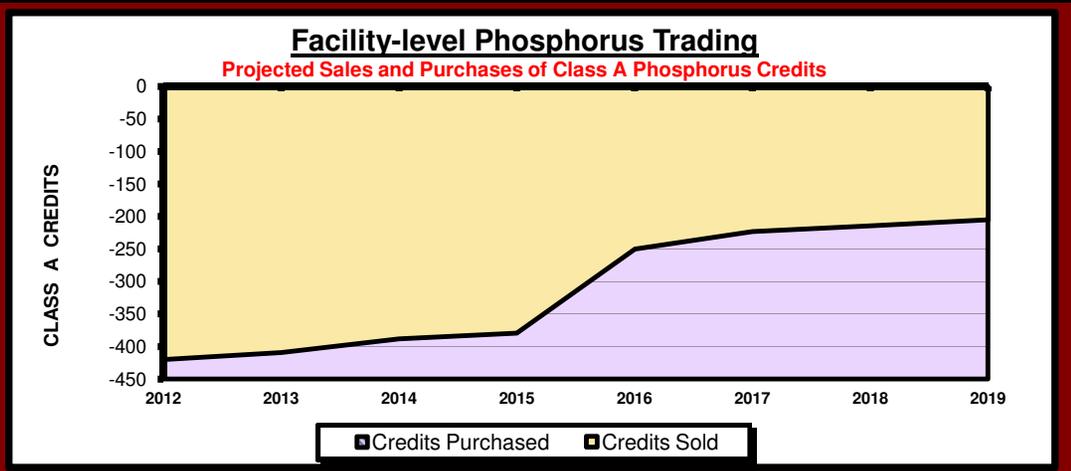
Loading & Credit Summary

Design Flow (mgd)	3.00
Projected Flow (mgd)	1.16
Projected Avg. Annual Concentration (mg/L)	4.00
Discharged Load (end of pipe)	14,131
Delivery Factor	0.61
Expected Load	8,620
Delivered WLA	22,293
Expected Credits (delivered)	13,673
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	13,673
Class A Credit Sales (Purchases)	3,418
Expected Class B Credits	10,255

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	1.16	1.21	1.30	1.34	1.60	1.75	1.80	1.85
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)	14,131	14,741	15,837	16,324	19,492	21,319	21,928	22,537
Delivery Factor	0.61	0.61	0.61	0.61	0.29	0.29	0.29	0.29
Expected Load	8,620	8,992	9,661	9,958	5,653	6,182	6,359	6,536
Delivered WLA	22,293	22,293	22,293	22,293	10,599	10,599	10,599	10,599
Expected Credits (delivered)	13,673	13,301	12,632	12,335	4,946	4,417	4,240	4,063
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	13,673	13,301	12,632	12,335	4,946	4,417	4,240	4,063
Class A Credit Sales (Purchases)	3,418	3,325	3,158	3,084	0	1,104	1,060	1,016
Expected Class B Credits	10,255	9,976	9,474	9,251	4,946	3,313	3,180	3,047

PHOSPHORUS FACILITY SUMMARY

Orange (Town)
RAPPAHANNOCK Trading Basin



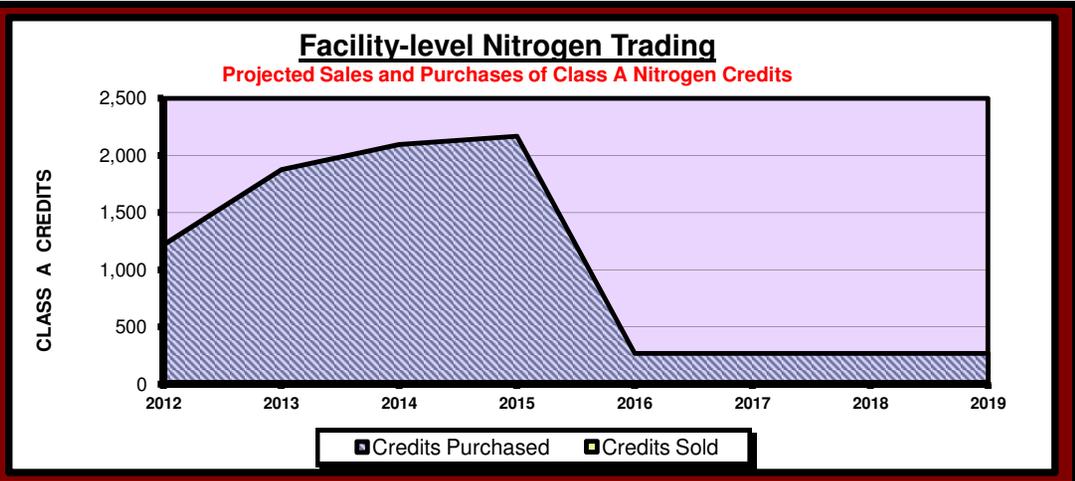
Loading & Credit Summary

Design Flow (mgd)	3.00
Projected Flow (mgd)	1.16
Projected Avg. Annual Concentration (mg/L)	0.30
Discharged Load (end of pipe)	1,060
Delivery Factor	1.00
Expected Load	1,060
Delivered WLA	2,741
Expected Credits (delivered)	1,681
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	1,681
Class A Credit Sales (Purchases)	420
Expected Class B Credits	1,261

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	1.16	1.21	1.30	1.34	1.60	1.75	1.80	1.85
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)	1,060	1,106	1,188	1,224	1,462	1,599	1,645	1,690
Delivery Factor	1.00	1.00	1.00	1.00	0.78	0.78	0.78	0.78
Expected Load	1,060	1,106	1,188	1,224	1,140	1,247	1,283	1,318
Delivered WLA	2,741	2,741	2,741	2,741	2,138	2,138	2,138	2,138
Expected Credits (delivered)	1,681	1,635	1,553	1,517	998	891	855	820
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	1,681	1,635	1,553	1,517	998	891	855	820
Class A Credit Sales (Purchases)	420	409	388	379	250	223	214	205
Expected Class B Credits	1,261	1,226	1,165	1,138	748	668	641	615

NITROGEN FACILITY SUMMARY

Reedville S.D.
RAPPAHANNOCK Trading Basin



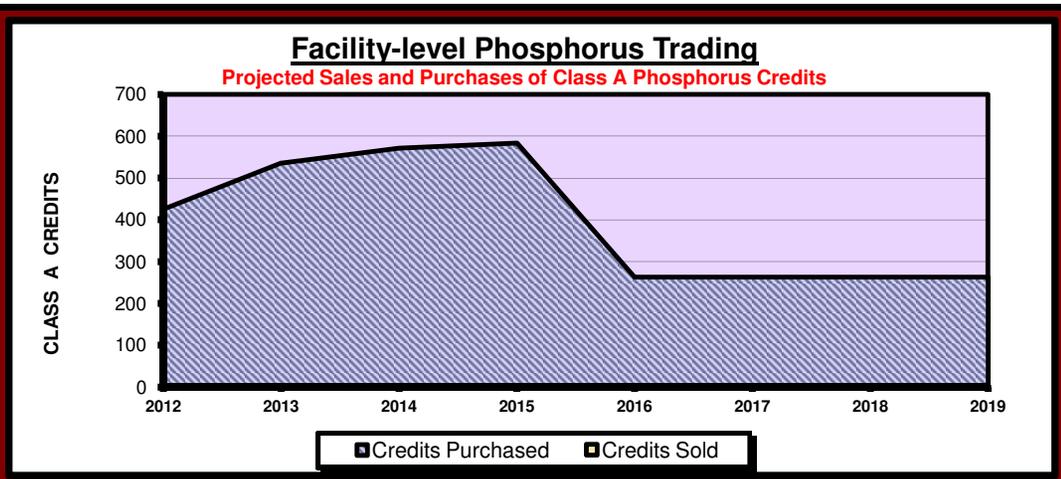
Loading & Credit Summary

Design Flow (mgd)	0.20
Projected Flow (mgd)	0.10
Projected Avg. Annual Concentration (mg/L)	12.00
Discharged Load (end of pipe)	3,655
Delivery Factor	1.00
Expected Load	3,655
Delivered WLA	2,436
Expected Credits (delivered)	(1,219)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(1,219)
Class A Credit Sales (Purchases)	(1,219)
Expected Class B Credits	0

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Projected Flow (mgd)	0.10	0.12	0.12	0.13	0.07	0.07	0.07	0.07
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)	3,655	4,313	4,532	4,605	2,704	2,704	2,704	2,704
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	3,655	4,313	4,532	4,605	2,704	2,704	2,704	2,704
Delivered WLA	2,436	2,436	2,436	2,436	2,436	2,436	2,436	2,436
Expected Credits (delivered)	(1,219)	(1,877)	(2,096)	(2,169)	(268)	(268)	(268)	(268)
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)	(1,877)	(2,096)	(2,169)	(268)	(268)	(268)	(268)
Class A Credit Sales (Purchases)	(1,219)	(1,877)	(2,096)	(2,169)	(268)	(268)	(268)	(268)
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Reedville S.D.
RAPPAHANNOCK Trading Basin

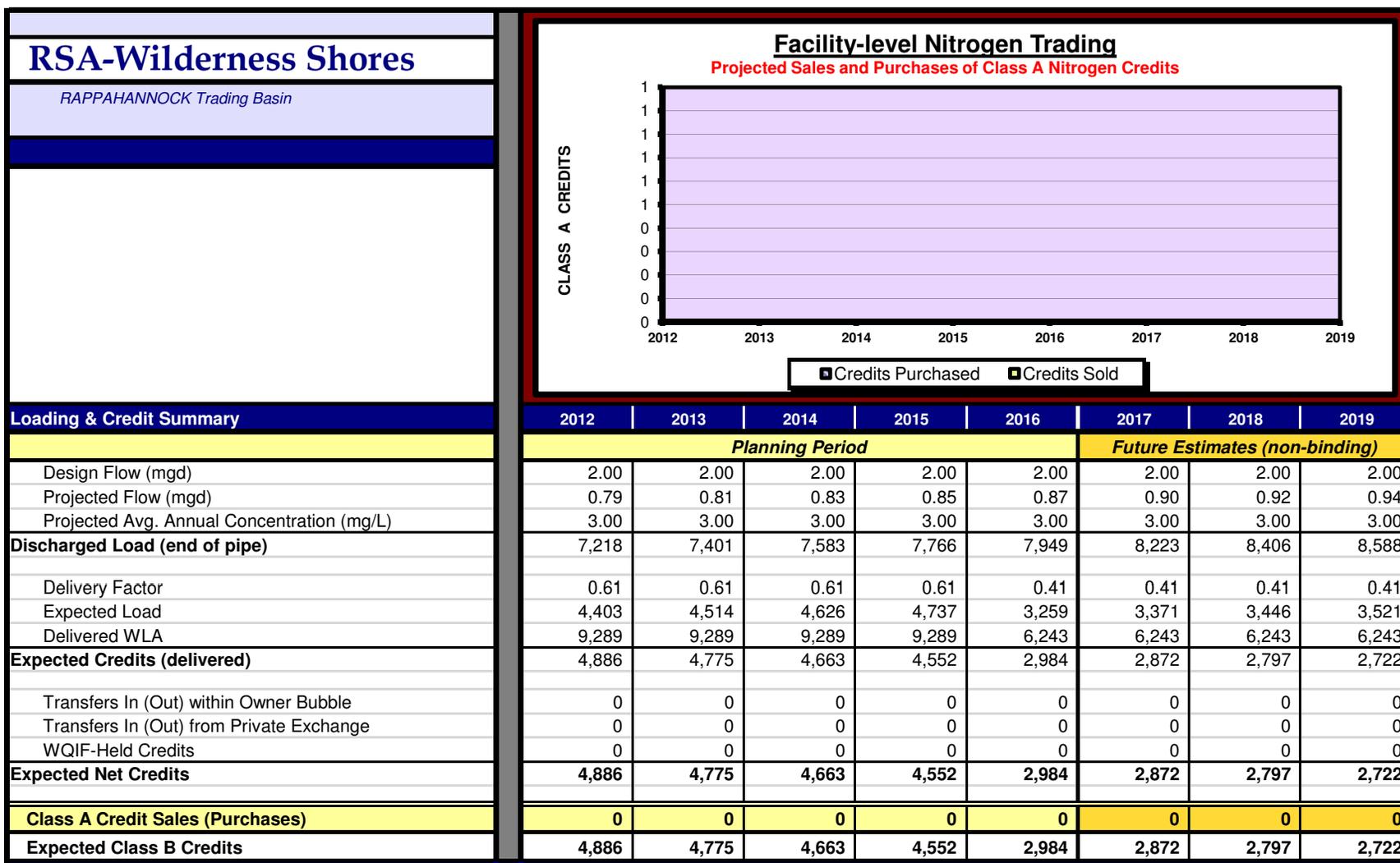


Loading & Credit Summary

Design Flow (mgd)	0.20
Projected Flow (mgd)	0.10
Projected Avg. Annual Concentration (mg/L)	2.00
Discharged Load (end of pipe)	609
Delivery Factor	1.00
Expected Load	609
Delivered WLA	183
Expected Credits (delivered)	(426)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(426)
Class A Credit Sales (Purchases)	(426)
Expected Class B Credits	0

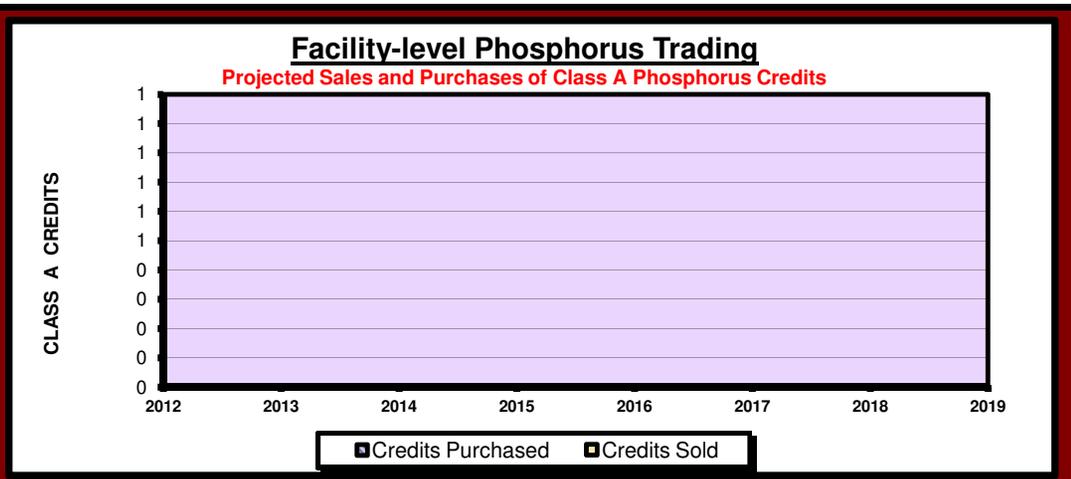
	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Projected Flow (mgd)	0.10	0.12	0.12	0.13	0.07	0.07	0.07	0.07
Projected Avg. Annual Concentration (mg/L)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Discharged Load (end of pipe)	609	719	755	767	451	451	451	451
Delivery Factor	1.00	1.00	1.00	1.00	0.98	0.98	0.98	0.98
Expected Load	609	719	755	767	442	442	442	442
Delivered WLA	183	183	183	183	179	179	179	179
Expected Credits (delivered)	(426)	(536)	(572)	(584)	(263)	(263)	(263)	(263)
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)	(536)	(572)	(584)	(263)	(263)	(263)	(263)
Class A Credit Sales (Purchases)	(426)	(536)	(572)	(584)	(263)	(263)	(263)	(263)
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY



PHOSPHORUS FACILITY SUMMARY

RSA-Wilderness Shores
RAPPAHANNOCK Trading Basin



Loading & Credit Summary

Design Flow (mgd)	2.00
Projected Flow (mgd)	0.79
Projected Avg. Annual Concentration (mg/L)	0.30
Discharged Load (end of pipe)	722
Delivery Factor	1.00
Expected Load	722
Delivered WLA	1,142
Expected Credits (delivered)	420
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	420
Class A Credit Sales (Purchases)	0
Expected Class B Credits	420

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	0.79	0.81	0.83	0.85	0.87	0.90	0.92	0.94
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)	722	740	758	777	795	822	841	859
Delivery Factor	1.00	1.00	1.00	1.00	0.77	0.77	0.77	0.77
Expected Load	722	740	758	777	612	633	647	661
Delivered WLA	1,142	1,142	1,142	1,142	879	879	879	879
Expected Credits (delivered)	420	402	384	365	267	246	232	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	420	402	384	365	267	246	232	218
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	420	402	384	365	267	246	232	218

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.

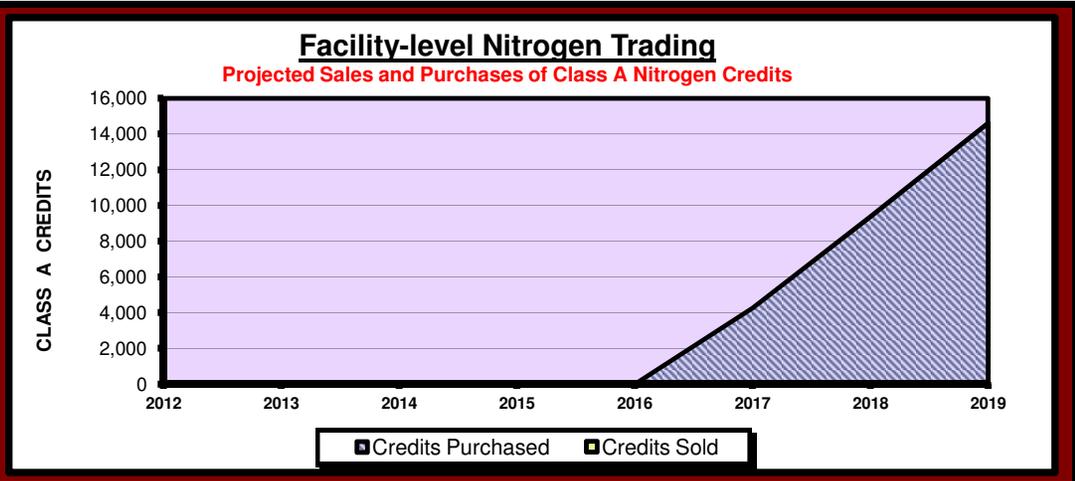
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply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

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
FMC	31,871	7,910	22,895	25,087	27,280	25,209	22,529	19,727
Massaponax	(31,871)	(7,910)	(22,895)	(25,087)	(27,280)	(25,209)	(22,529)	(19,727)
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
FMC	-	-	-	-	-	(4,264)	(9,380)	(14,619)
Massaponax	5,656	31,918	9,867	5,239	487	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	5,656	31,918	9,867	5,239	487	(4,264)	(9,380)	(14,619)
Class A Sales (Purchases)	0	13,289	4,934	2,620	122	(4,264)	(9,380)	(14,619)
<i>Expected Class B Credits</i>	<i>5,656</i>	<i>18,629</i>	<i>4,933</i>	<i>2,619</i>	<i>365</i>	<i>0</i>	<i>0</i>	<i>0</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		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
FMC	-	-	-	-	-	-	-	-
Massaponax	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
FMC	431	1,389	969	887	804	722	631	539
Massaponax	2,632	2,804	2,274	2,092	1,900	1,708	1,507	1,297
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Credits	3,063	4,193	3,243	2,979	2,704	2,430	2,138	1,836
Private Exchanges	-	-	(183)	(183)	(183)	(183)	(183)	(183)
Expected Net Credits	3,063	4,193	3,060	2,796	2,521	2,247	1,955	1,653
Class A Sales (Purchases)	0	2,188	1,622	1,490	1,261	1,124	978	827
<i>Expected Class B Credits</i>	<i>3,063</i>	<i>2,005</i>	<i>1,438</i>	<i>1,306</i>	<i>1,260</i>	<i>1,123</i>	<i>977</i>	<i>826</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

Spotsy Co-FMC
RAPPAHANNOCK Trading Basin



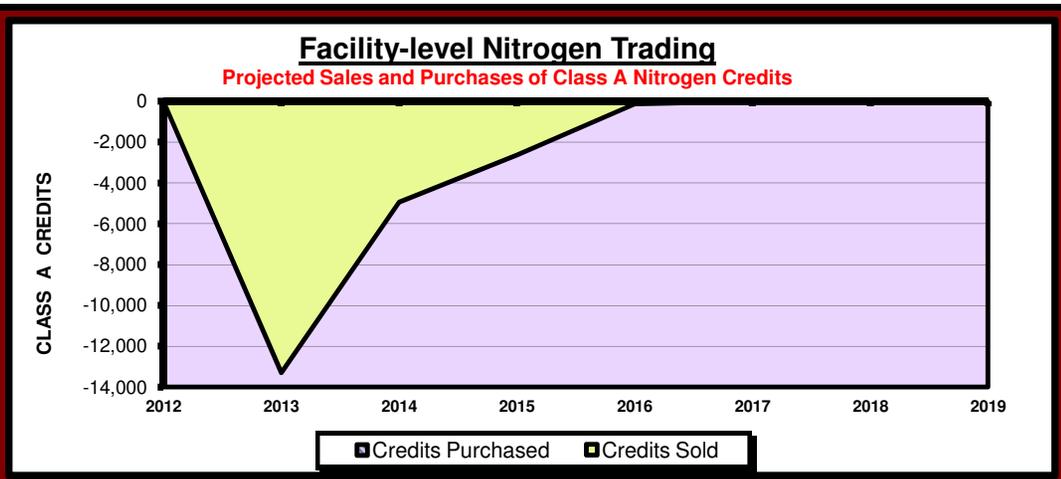
Loading & Credit Summary

Design Flow (mgd)	4.00
Projected Flow (mgd)	3.53
Projected Avg. Annual Concentration (mg/L)	7.50
Discharged Load (end of pipe)	80,608
Delivery Factor	1.00
Expected Load	80,608
Delivered WLA	48,737
Expected Credits (delivered)	(31,871)
Transfers In (Out) within Owner Bubble	31,871
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

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Projected Flow (mgd)	3.53	2.48	2.94	3.03	3.12	3.21	3.31	3.41
Projected Avg. Annual Concentration (mg/L)	7.50	7.50	8.00	8.00	8.00	8.00	8.00	8.00
Discharged Load (end of pipe)	80,608	56,647	71,632	73,824	76,017	78,210	80,646	83,083
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	80,608	56,647	71,632	73,824	76,017	78,210	80,646	83,083
Delivered WLA	48,737	48,737	48,737	48,737	48,737	48,737	48,737	48,737
Expected Credits (delivered)	(31,871)	(7,910)	(22,895)	(25,087)	(27,280)	(29,473)	(31,909)	(34,346)
Transfers In (Out) within Owner Bubble	31,871	7,910	22,895	25,087	27,280	25,209	22,529	19,727
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	(4,264)	(9,380)	(14,619)
Class A Credit Sales (Purchases)	0	0	0	0	0	(4,264)	(9,380)	(14,619)
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

Spotsy Co-Massaponax
RAPPAHANNOCK Trading Basin

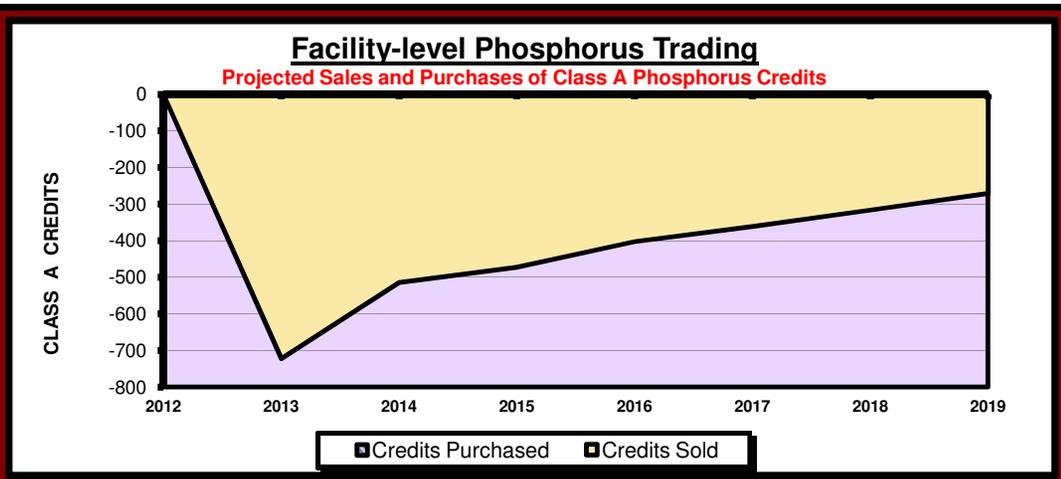


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Projected Flow (mgd)	6.32	6.13	6.71	6.91	7.12	7.33	7.55	7.78
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)	76,978	74,677	81,743	84,179	86,738	89,296	91,976	94,778
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	76,978	74,677	81,743	84,179	86,738	89,296	91,976	94,778
Delivered WLA	114,505	114,505	114,505	114,505	114,505	114,505	114,505	114,505
Expected Credits (delivered)	37,527	39,828	32,762	30,326	27,767	25,209	22,529	19,727
Transfers In (Out) within Owner Bubble	(31,871)	(7,910)	(22,895)	(25,087)	(27,280)	(25,209)	(22,529)	(19,727)
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	5,656	31,918	9,867	5,239	487	0	0	0
Class A Credit Sales (Purchases)	0	13,289	4,934	2,620	122	0	0	0
Expected Class B Credits	5,656	18,629	4,933	2,619	365	0	0	0

PHOSPHORUS FACILITY SUMMARY

Spotsy Co-FMC
RAPPAHANNOCK Trading Basin

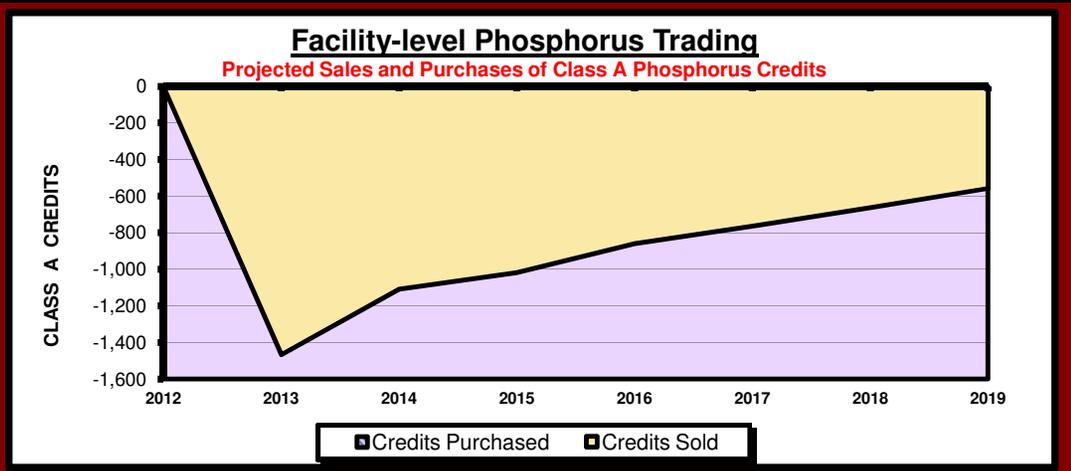


Loading & Credit Summary	
Design Flow (mgd)	4.00
Projected Flow (mgd)	3.53
Projected Avg. Annual Concentration (mg/L)	0.30
Discharged Load (end of pipe)	3,224
Delivery Factor	1.00
Expected Load	3,224
Delivered WLA	3,655
Expected Credits (delivered)	431
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	431
Class A Credit Sales (Purchases)	0
Expected Class B Credits	431

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
3.53	2.48	2.94	3.03	3.12	3.21	3.31	3.41
0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
3,224	2,266	2,686	2,768	2,851	2,933	3,024	3,116
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3,224	2,266	2,686	2,768	2,851	2,933	3,024	3,116
3,655	3,655	3,655	3,655	3,655	3,655	3,655	3,655
431	1,389	969	887	804	722	631	539
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
431	1,389	969	887	804	722	631	539
0	722	514	472	402	361	316	270
431	667	455	415	402	361	315	269

PHOSPHORUS FACILITY SUMMARY

Spotsy Co-Massaponax
RAPPAHANNOCK Trading Basin

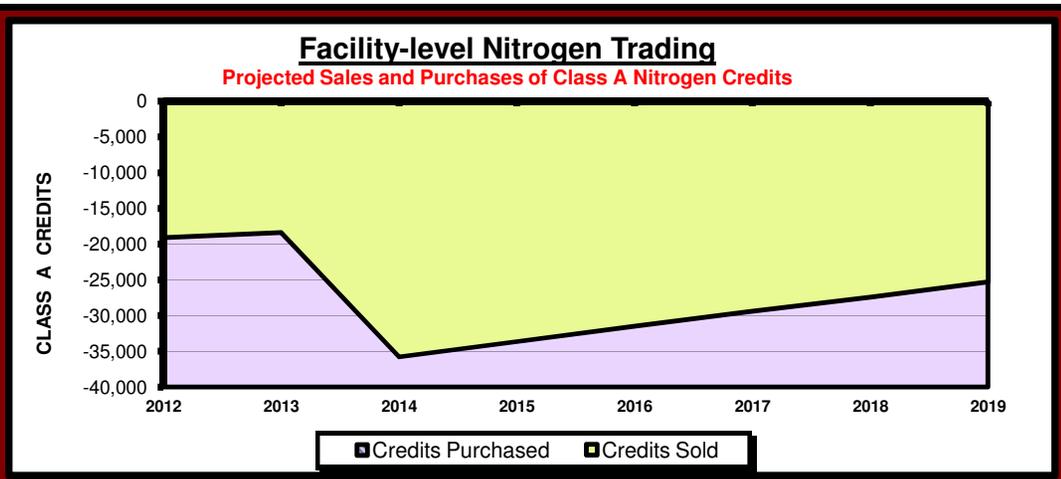


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Projected Flow (mgd)	6.32	6.13	6.71	6.91	7.12	7.33	7.55	7.78
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)	5,773	5,601	6,131	6,313	6,505	6,697	6,898	7,108
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	5,773	5,601	6,131	6,313	6,505	6,697	6,898	7,108
Delivered WLA	8,405	8,405	8,405	8,405	8,405	8,405	8,405	8,405
Expected Credits (delivered)	2,632	2,804	2,274	2,092	1,900	1,708	1,507	1,297
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	0	0	(183)	(183)	(183)	(183)	(183)	(183)
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	2,632	2,804	2,091	1,909	1,717	1,525	1,324	1,114
Class A Credit Sales (Purchases)	0	1,466	1,108	1,018	859	763	662	557
Expected Class B Credits	2,632	1,338	983	891	858	762	662	557

NITROGEN FACILITY SUMMARY

Stafford Co-L. Falls Run
RAPPAHANNOCK Trading Basin

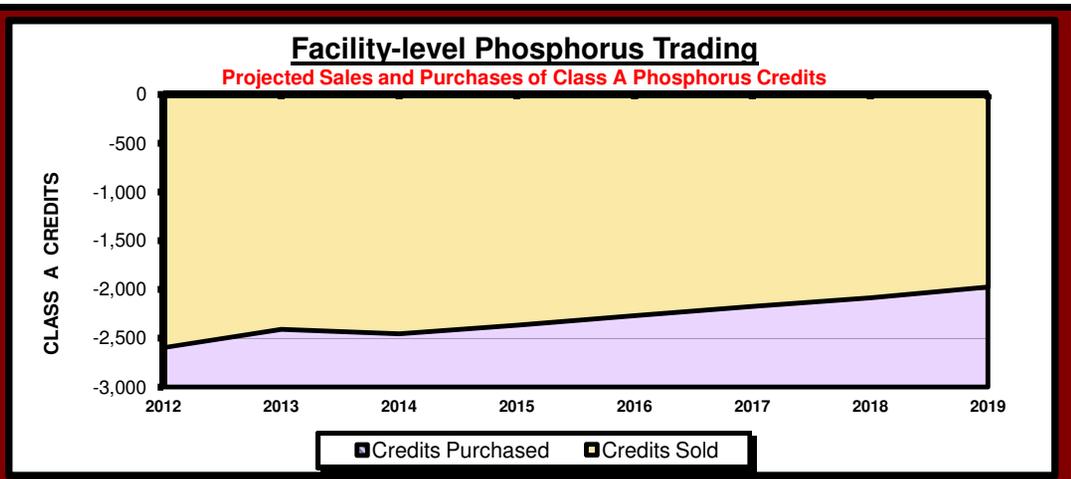


Loading & Credit Summary	
Design Flow (mgd)	8.00
Projected Flow (mgd)	5.01
Projected Avg. Annual Concentration (mg/L)	5.00
Discharged Load (end of pipe)	76,291
Delivery Factor	1.00
Expected Load	76,291
Delivered WLA	97,458
Expected Credits (delivered)	21,167
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	21,167
Class A Credit Sales (Purchases)	19,050
Expected Class B Credits	2,117

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
5.01	4.39	4.42	4.55	4.69	4.83	4.96	5.12
5.00	5.00	4.00	4.00	4.00	4.00	4.00	4.00
76,291	66,850	53,846	55,429	57,135	58,840	60,424	62,373
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
76,291	66,850	53,846	55,429	57,135	58,840	60,424	62,373
97,458	97,458	97,458	97,458	97,458	97,458	97,458	97,458
21,167	30,608	43,612	42,029	40,323	38,618	37,034	35,085
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
21,167	30,608	43,612	42,029	40,323	38,618	37,034	35,085
19,050	18,365	35,762	33,623	31,452	29,350	27,405	25,261
2,117	12,243	7,850	8,406	8,871	9,268	9,629	9,824

PHOSPHORUS FACILITY SUMMARY

Stafford Co-L. Falls Run
RAPPAHANNOCK Trading Basin

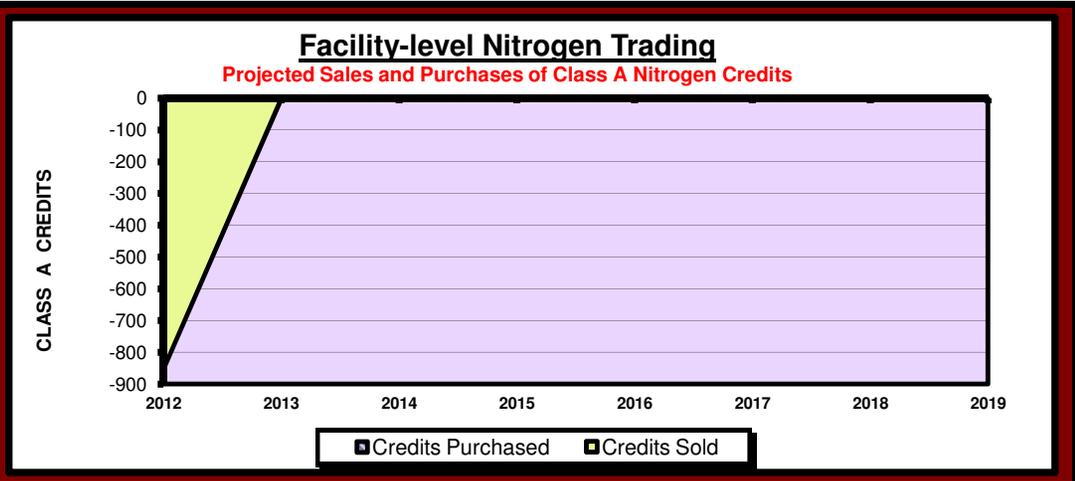


Loading & Credit Summary	
Design Flow (mgd)	8.00
Projected Flow (mgd)	5.01
Projected Avg. Annual Concentration (mg/L)	0.30
Discharged Load (end of pipe)	4,577
Delivery Factor	1.00
Expected Load	4,577
Delivered WLA	7,309
Expected Credits (delivered)	2,732
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	2,732
Class A Credit Sales (Purchases)	2,595
Expected Class B Credits	137

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
5.01	4.39	4.42	4.55	4.69	4.83	4.96	5.12
0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
4,577	4,011	4,038	4,157	4,285	4,413	4,532	4,678
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4,577	4,011	4,038	4,157	4,285	4,413	4,532	4,678
7,309	7,309	7,309	7,309	7,309	7,309	7,309	7,309
2,732	3,298	3,271	3,152	3,024	2,896	2,777	2,631
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
2,732	3,298	3,271	3,152	3,024	2,896	2,777	2,631
2,595	2,408	2,453	2,364	2,268	2,172	2,083	1,973
137	890	818	788	756	724	694	658

NITROGEN FACILITY SUMMARY

Tappahannock
RAPPAHANNOCK Trading Basin



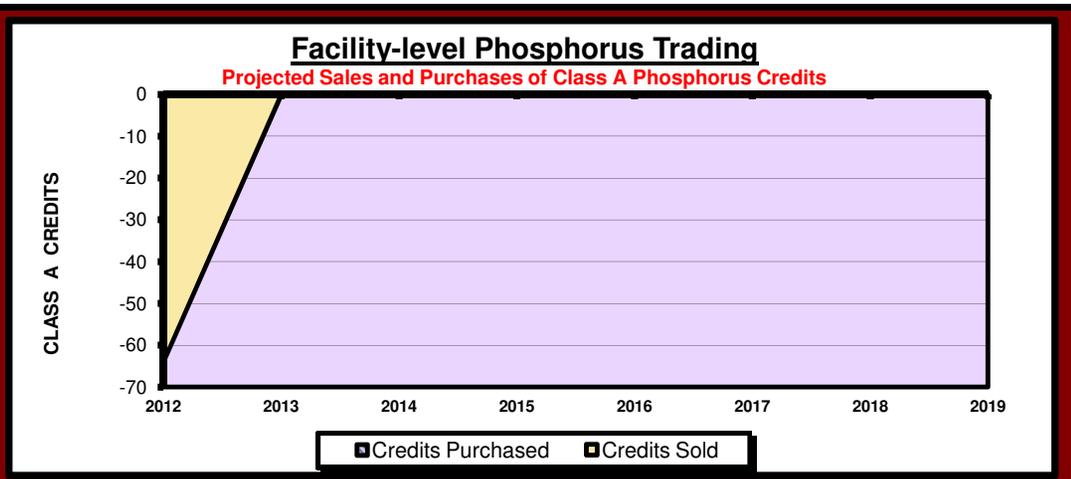
Loading & Credit Summary

Design Flow (mgd)	0.80
Projected Flow (mgd)	0.52
Projected Avg. Annual Concentration (mg/L)	4.00
Discharged Load (end of pipe)	6,335
Delivery Factor	1.00
Expected Load	6,335
Delivered WLA	9,746
Expected Credits (delivered)	3,411
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	3,411
Class A Credit Sales (Purchases)	853
Expected Class B Credits	2,558

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Projected Flow (mgd)	0.52	0.55	0.58	0.60	0.62	0.63	0.64	0.65
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)	6,335	6,700	7,066	7,309	7,553	7,675	7,797	7,918
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	6,335	6,700	7,066	7,309	7,553	7,675	7,797	7,918
Delivered WLA	9,746	9,746	9,746	9,746	9,746	9,746	9,746	9,746
Expected Credits (delivered)	3,411	3,046	2,680	2,437	2,193	2,071	1,949	1,828
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	3,411	3,046	2,680	2,437	2,193	2,071	1,949	1,828
Class A Credit Sales (Purchases)	853	0	0	0	0	0	0	0
Expected Class B Credits	2,558	3,046	2,680	2,437	2,193	2,071	1,949	1,828

PHOSPHORUS FACILITY SUMMARY

Tappahannock
RAPPAHANNOCK Trading Basin

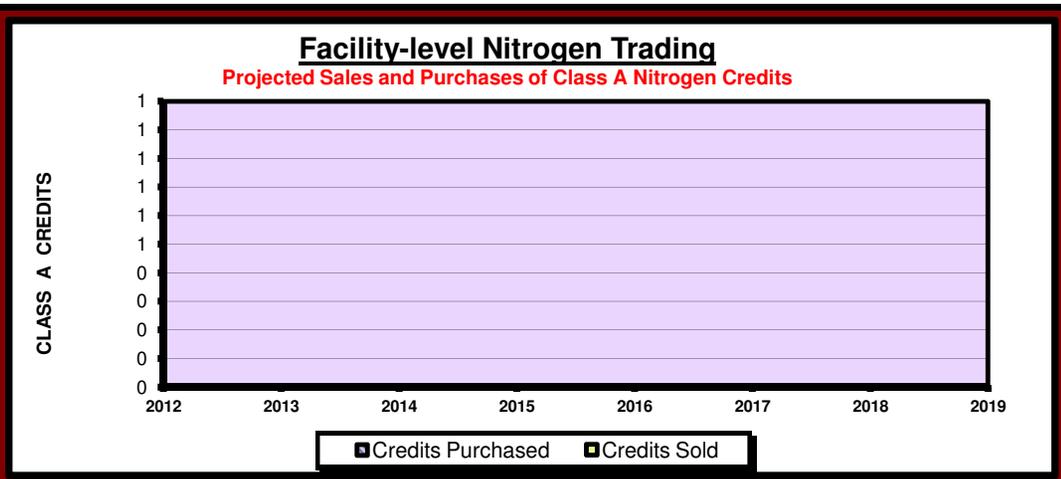


	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Projected Flow (mgd)	0.52	0.55	0.58	0.60	0.62	0.63	0.64	0.65
Projected Avg. Annual Concentration (mg/L)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	475	503	530	548	566	576	585	594
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	475	503	530	548	566	576	585	594
Delivered WLA	731	731	731	731	731	731	731	731
Expected Credits (delivered)	256	228	201	183	165	155	146	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	256	228	201	183	165	155	146	137
Class A Credit Sales (Purchases)	64	0	0	0	0	0	0	0
Expected Class B Credits	192	228	201	183	165	155	146	137

NITROGEN FACILITY SUMMARY

Warsaw

RAPPAHANNOCK Trading Basin

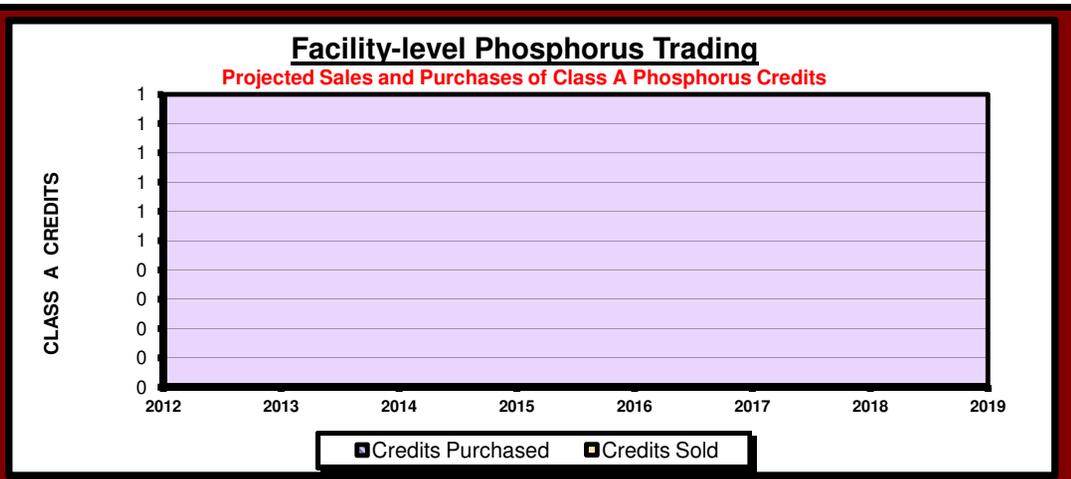


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Projected Flow (mgd)	0.20	0.23	0.24	0.25	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)	2,436	2,802	2,924	3,046	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	2,436	2,802	2,924	3,046	3,046	3,046	3,046	3,046
Delivered WLA	3,655	3,655	3,655	3,655	3,655	3,655	3,655	3,655
Expected Credits (delivered)	1,219	853	731	609	609	609	609	609
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	853	731	609	609	609	609	609
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	1,219	853	731	609	609	609	609	609

PHOSPHORUS FACILITY SUMMARY

Warsaw
RAPPAHANNOCK Trading Basin



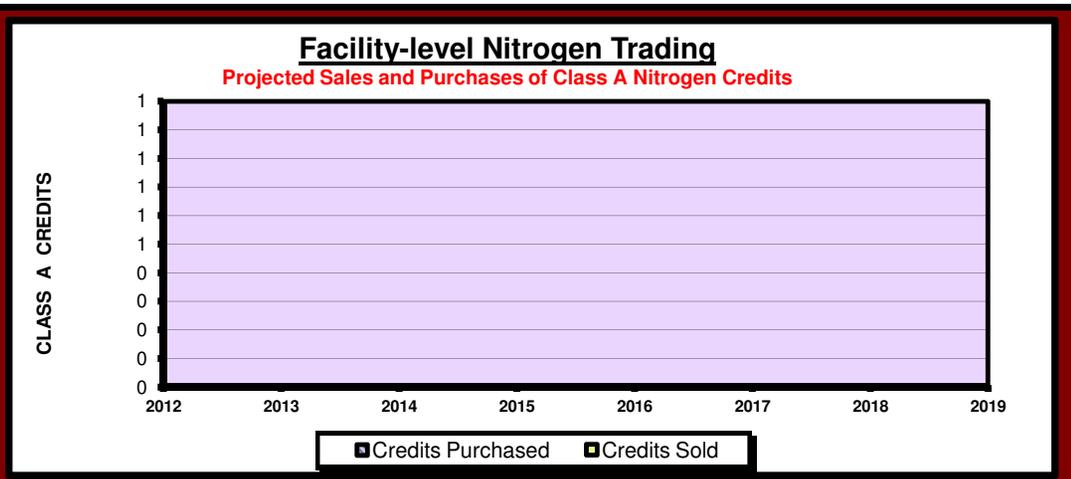
Loading & Credit Summary

Design Flow (mgd)	0.30
Projected Flow (mgd)	0.20
Projected Avg. Annual Concentration (mg/L)	0.40
Discharged Load (end of pipe)	244
Delivery Factor	1.00
Expected Load	244
Delivered WLA	274
Expected Credits (delivered)	30
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	30
Class A Credit Sales (Purchases)	0
Expected Class B Credits	30

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Projected Flow (mgd)	0.20	0.23	0.24	0.25	0.25	0.25	0.25	0.25
Projected Avg. Annual Concentration (mg/L)	0.40	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	244	210	219	228	228	228	228	228
Delivery Factor	1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.99
Expected Load	244	210	219	228	226	226	226	226
Delivered WLA	274	274	274	274	271	271	271	271
Expected Credits (delivered)	30	64	55	46	45	45	45	45
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	30	64	55	46	45	45	45	45
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	30	64	55	46	45	45	45	45

NITROGEN FACILITY SUMMARY

Westmoreland Co-Montross
RAPPAHANNOCK Trading Basin

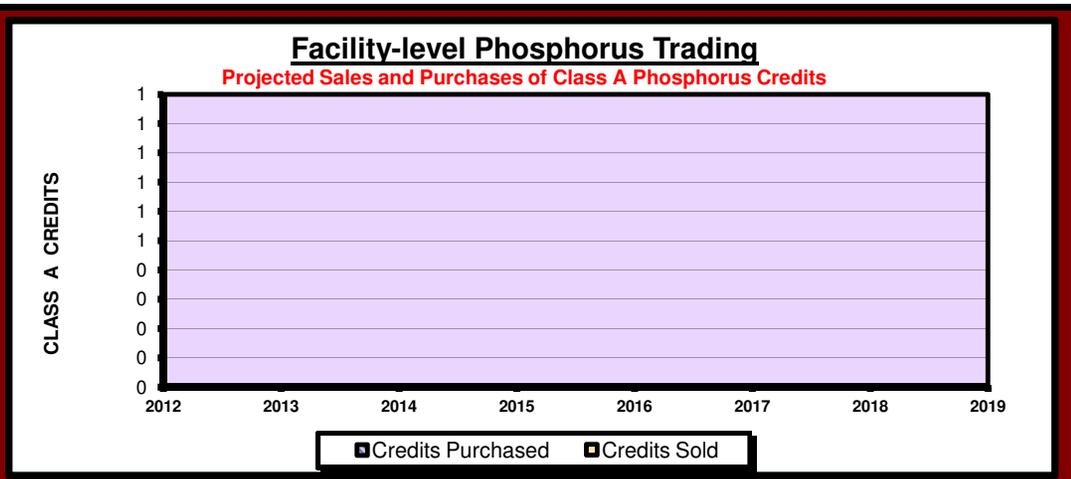


Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
670	670	731	731	731	731	731	731
1.00	1.00	1.00	1.00	0.74	0.74	0.74	0.74
670	670	731	731	541	541	541	541
1,584	1,584	1,584	1,584	1,172	1,172	1,172	1,172
914	914	853	853	631	631	631	631
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
914	914	853	853	631	631	631	631
0	0	0	0	0	0	0	0
914	914	853	853	631	631	631	631

PHOSPHORUS FACILITY SUMMARY

Westmoreland Co-Montross
RAPPAHANNOCK Trading Basin



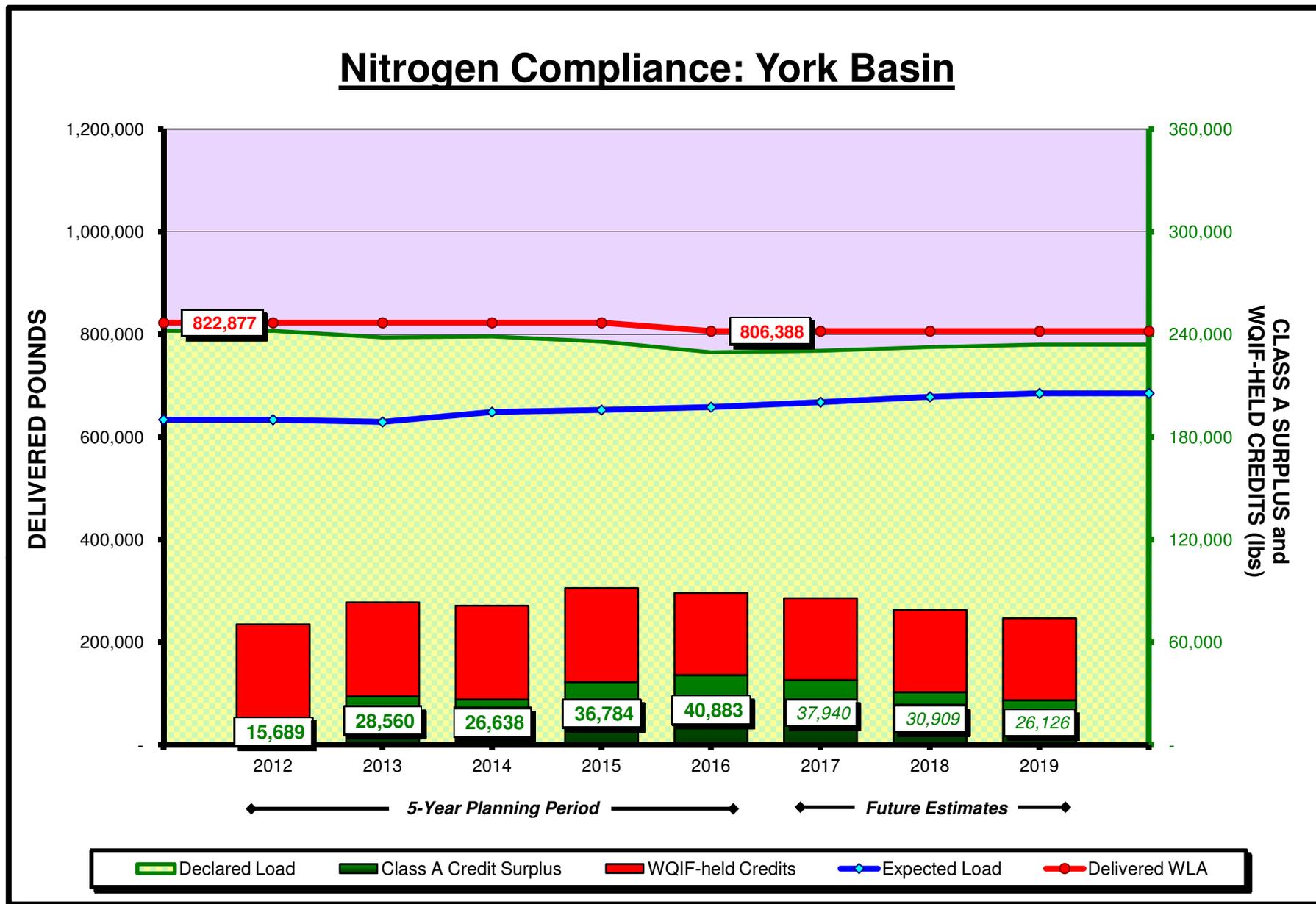
Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

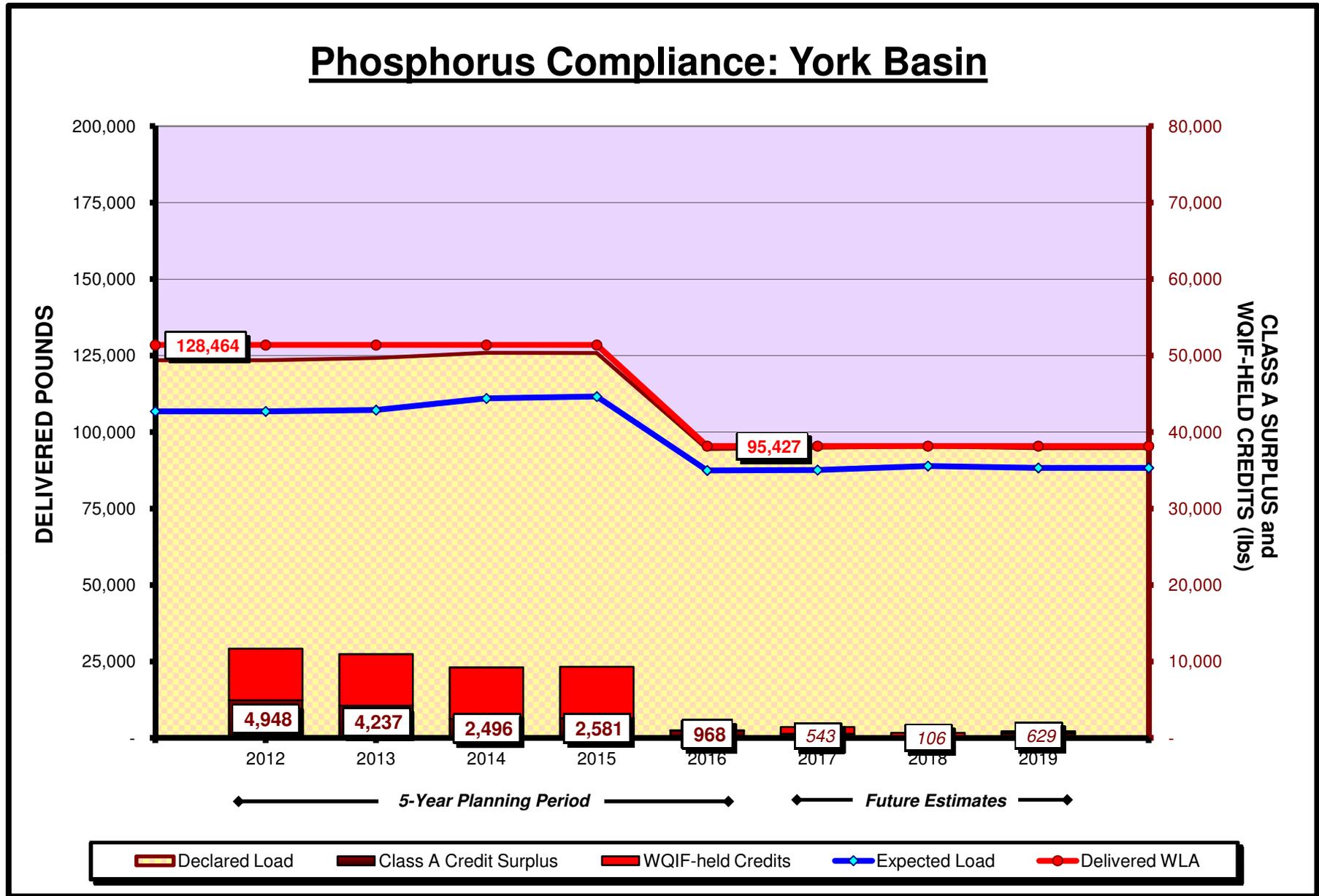
	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Projected Flow (mgd)	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Projected Avg. Annual Concentration (mg/L)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Discharged Load (end of pipe)	84	84	91	91	91	91	91	91
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	84	84	91	91	91	91	91	91
Delivered WLA	119	119	119	119	119	119	119	119
Expected Credits (delivered)	35	35	28	28	28	28	28	28
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	35	35	28	28	28	28	28	28
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	35	35	28	28	28	28	28	28

SECTION 4

York River Basin Exchange Compliance Plan







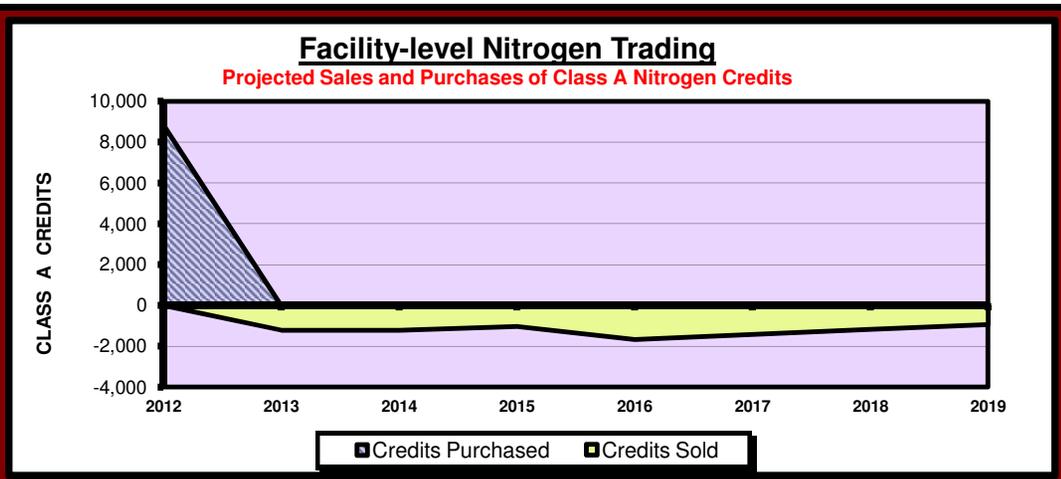
York River Basin

Supplemental Information for Individual Facilities



NITROGEN FACILITY SUMMARY

Caroline Co.
 YORK Trading Basin

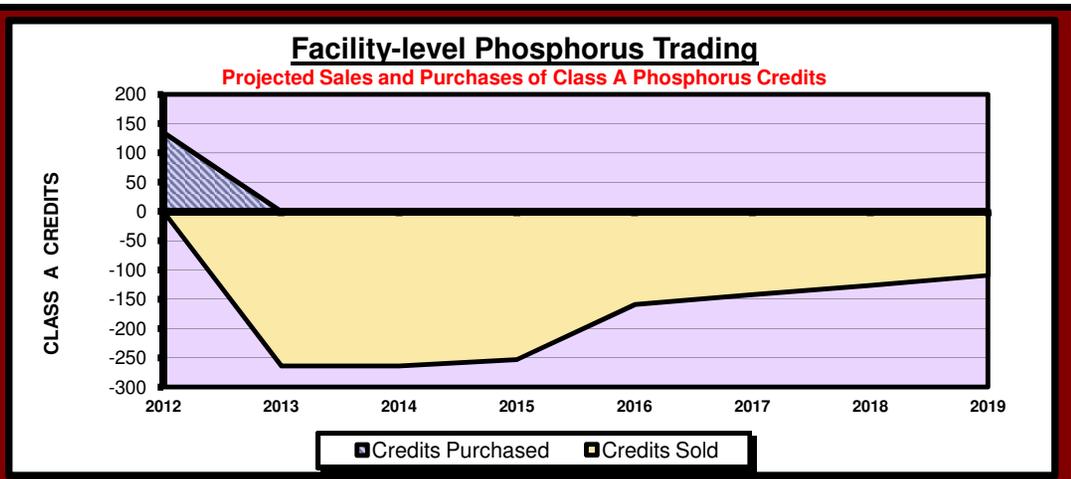


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Projected Flow (mgd)	0.45	0.52	0.52	0.57	0.52	0.57	0.62	0.67
Projected Avg. Annual Concentration (mg/L)	22.00	3.50	3.50	3.50	3.50	3.50	3.50	3.50
Discharged Load (end of pipe)	30,185	5,543	5,543	6,076	5,543	6,076	6,609	7,142
Delivery Factor	0.42	0.42	0.42	0.42	0.58	0.58	0.58	0.58
Expected Load	12,678	2,328	2,328	2,552	3,215	3,524	3,833	4,142
Delivered WLA	3,837	3,837	3,837	3,837	5,299	5,299	5,299	5,299
Expected Credits (delivered)	(8,841)	1,509	1,509	1,285	2,084	1,775	1,466	1,157
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	(8,841)	1,509	1,509	1,285	2,084	1,775	1,466	1,157
Class A Credit Sales (Purchases)	(8,841)	1,207	1,207	1,028	1,667	1,420	1,173	926
Expected Class B Credits	0	302	302	257	417	355	293	231

PHOSPHORUS FACILITY SUMMARY

Caroline Co.
 YORK Trading Basin



Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Projected Flow (mgd)	0.45	0.52	0.52	0.57	0.52	0.57	0.62	0.67
Projected Avg. Annual Concentration (mg/L)	1.00	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Discharged Load (end of pipe)	1,372	317	317	347	317	347	378	408
Delivery Factor	0.44	0.44	0.44	0.44	0.68	0.68	0.68	0.68
Expected Load	604	139	139	153	215	236	257	278
Delivered WLA	469	469	469	469	414	414	414	414
Expected Credits (delivered)	(135)	330	330	316	199	178	157	136
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	(135)	330	330	316	199	178	157	136
Class A Credit Sales (Purchases)	(135)	264	264	253	159	142	126	109
Expected Class B Credits	0	66	66	63	40	36	31	27

FACILITY (OR OWNER BUBBLE) NAME: Caroline County Regional STP

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

Check One:

- James River TN Compliance
 York River TP Compliance

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 under II.B.)

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

Additional capital project(s) is need to ensure continued compliance.

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	<u>Completed</u>
PER/CER to DEQ	<u>Completed</u>
Plans & Specifications to DEQ	<u>Completed</u>
Commence construction	<u>Under Construction</u>
Complete construction	<u>Sept. 28, 2013</u>
CTO Request to DEQ (POTWs only)	<u>Approved 7/27/11 CTC PTL #25326</u>

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.

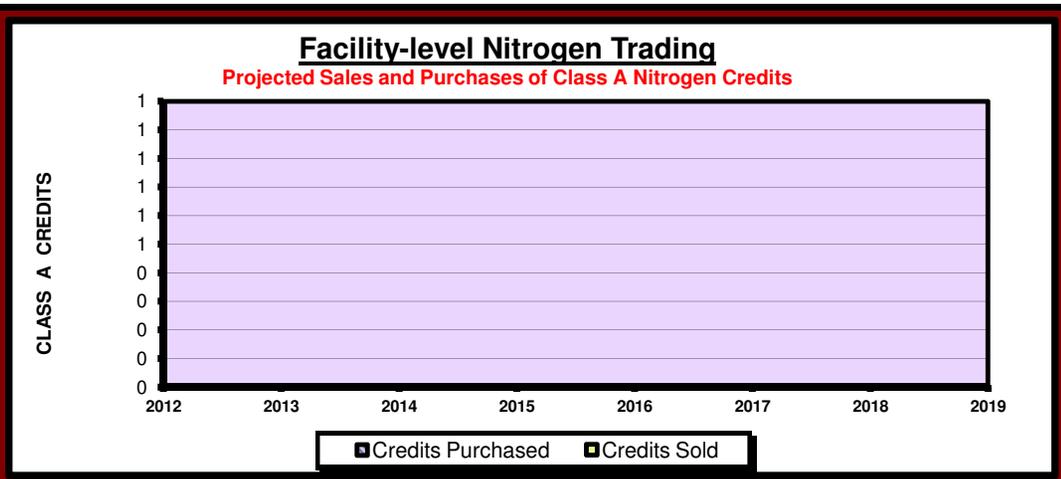
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply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

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
Ashland	7,642	8,518	9,219	10,095	13,337	14,417	15,529	16,675
Doswell	2,621	2,972	3,322	3,726	4,602	5,052	5,516	5,994
Totopotomoy	(10,263)	(11,490)	(12,541)	(13,821)	(17,939)	(19,469)	(21,045)	(22,669)
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Ashland	-	-	-	-	-	-	-	-
Doswell	-	-	-	-	-	-	-	-
Totopotomoy	47,481	44,305	41,061	37,589	24,667	21,077	17,379	13,569
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	47,481	44,305	41,061	37,589	24,667	21,077	17,379	13,569
Class A Sales (Purchases)	18,545	13,587	13,462	22,964	20,000	20,000	16,000	12,000
<i>Expected Class B Credits</i>	<i>28,936</i>	<i>30,718</i>	<i>27,599</i>	<i>14,625</i>	<i>4,667</i>	<i>1,077</i>	<i>1,379</i>	<i>1,569</i>
<i>WQIF-Held Credits</i>	<i>54,820</i>	<i>54,820</i>	<i>54,820</i>	<i>54,820</i>	<i>47,694</i>	<i>47,694</i>	<i>47,694</i>	<i>47,694</i>

PHOSPHORUS Credits	Exchange 5-year Planning Period					Future Projections		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
Ashland	4,130	4,353	4,531	4,754	3,472	3,617	3,766	3,919
Doswell	(114)	(80)	(46)	(6)	532	568	605	643
Totopotomoy	(4,016)	(4,273)	(4,485)	(4,748)	(4,004)	(4,185)	(4,371)	(4,562)
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Ashland	-	-	-	-	-	-	-	-
Doswell	-	-	-	-	-	-	-	-
Totopotomoy	2,136	1,635	1,149	612	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	2,136	1,635	1,149	612	-	-	-	-
Class A Sales (Purchases)	1,373	305	0	0	0	0	0	0
<i>Expected Class B Credits</i>	<i>763</i>	<i>1,330</i>	<i>1,149</i>	<i>612</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>WQIF-Held Credits</i>	<i>6,396</i>	<i>6,396</i>	<i>6,396</i>	<i>6,396</i>	<i>57</i>	<i>891</i>	<i>576</i>	<i>252</i>

NITROGEN FACILITY SUMMARY

Hanover Co-Ashland
 YORK Trading Basin

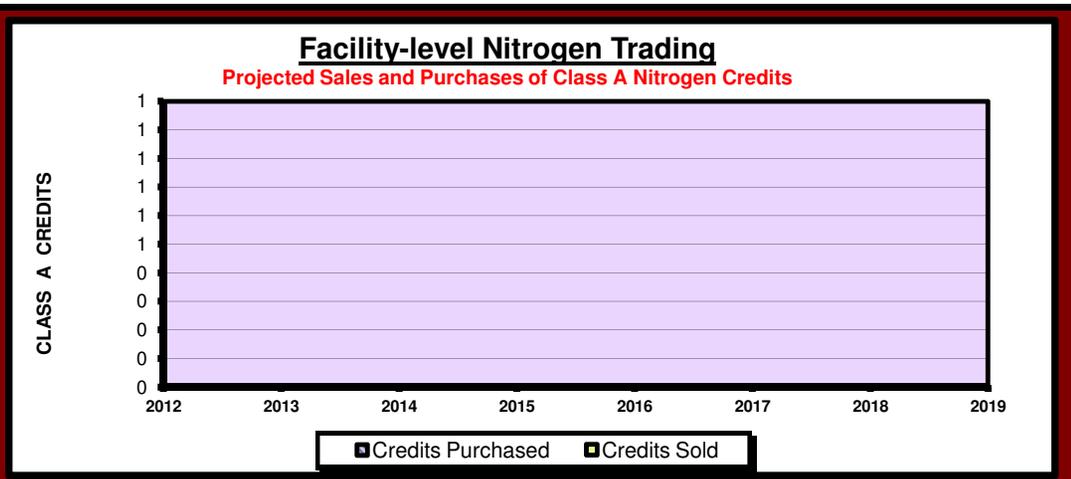


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	1.50	1.55	1.59	1.64	1.69	1.74	1.79	1.85
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)	51,531	53,249	54,623	56,340	58,058	59,800	61,594	63,442
Delivery Factor	0.51	0.51	0.51	0.51	0.62	0.62	0.62	0.62
Expected Load	26,281	27,157	27,858	28,734	35,996	37,076	38,188	39,334
Delivered WLA	18,639	18,639	18,639	18,639	22,659	22,659	22,659	22,659
Expected Credits (delivered)	(7,642)	(8,518)	(9,219)	(10,095)	(13,337)	(14,417)	(15,529)	(16,675)
Transfers In (Out) within Owner Bubble	7,642	8,518	9,219	10,095	13,337	14,417	15,529	16,675
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

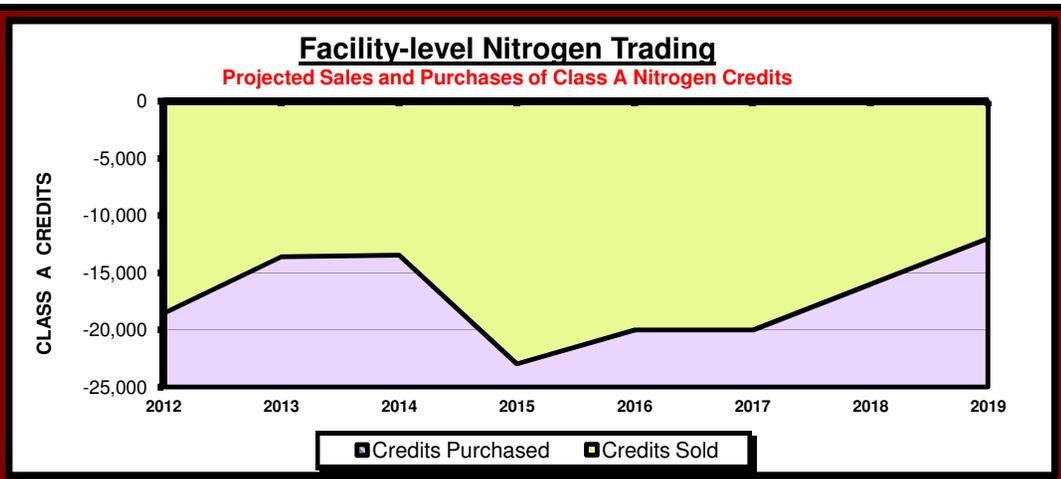


Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
0.38	0.39	0.40	0.41	0.42	0.43	0.45	0.46
20.50	20.50	20.50	20.50	20.50	20.50	20.50	20.50
23,413	24,100	24,786	25,579	26,347	27,138	27,952	28,790
0.51	0.51	0.51	0.51	0.57	0.57	0.57	0.57
11,940	12,291	12,641	13,045	15,018	15,468	15,932	16,410
9,319	9,319	9,319	9,319	10,416	10,416	10,416	10,416
(2,621)	(2,972)	(3,322)	(3,726)	(4,602)	(5,052)	(5,516)	(5,994)
2,621	2,972	3,322	3,726	4,602	5,052	5,516	5,994
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

Hanover Co-Totopotomoy
 YORK Trading Basin

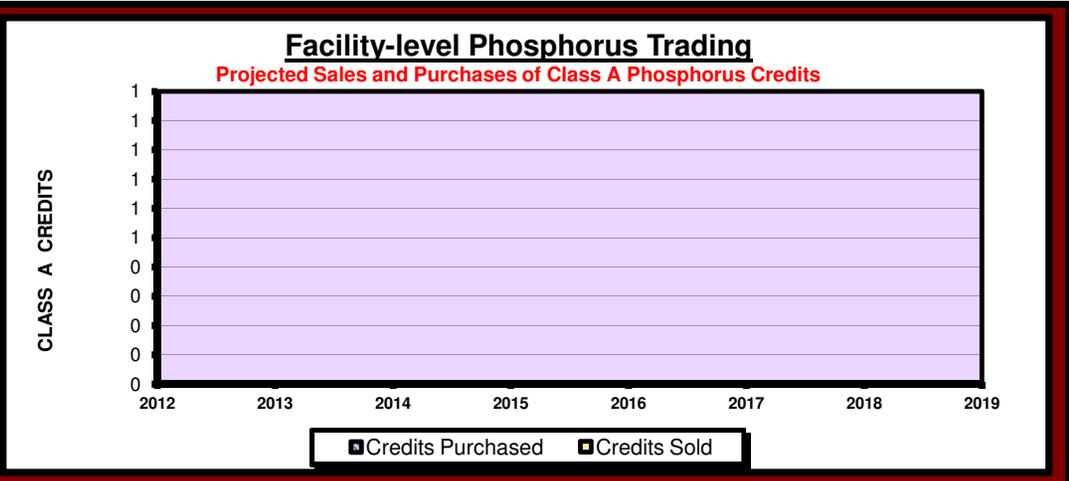


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Projected Flow (mgd)	2.88	2.96	3.05	3.14	3.24	3.34	3.44	3.54
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)	70,170	72,119	74,312	76,504	78,941	81,309	83,748	86,261
Delivery Factor	1.00	1.00	1.00	1.00	0.87	0.87	0.87	0.87
Expected Load	70,170	72,119	74,312	76,504	68,679	70,739	72,861	75,047
Delivered WLA	182,734	182,734	182,734	182,734	158,979	158,979	158,979	158,979
Expected Credits (delivered)	112,564	110,615	108,422	106,230	90,300	88,240	86,118	83,932
Transfers In (Out) within Owner Bubble	(10,263)	(11,490)	(12,541)	(13,821)	(17,939)	(19,469)	(21,045)	(22,669)
Transfers In (Out) from Private Exchange	0	0	0	0	0	0	0	0
WQIF-Held Credits	(54,820)	(54,820)	(54,820)	(54,820)	(47,694)	(47,694)	(47,694)	(47,694)
Expected Net Credits	47,481	44,305	41,061	37,589	24,667	21,077	17,379	13,569
Class A Credit Sales (Purchases)	18,545	13,587	13,462	22,964	20,000	20,000	16,000	12,000
Expected Class B Credits	28,936	30,718	27,599	14,625	4,667	1,077	1,379	1,569

PHOSPHORUS FACILITY SUMMARY

Hanover Co-Ashland
 YORK Trading Basin



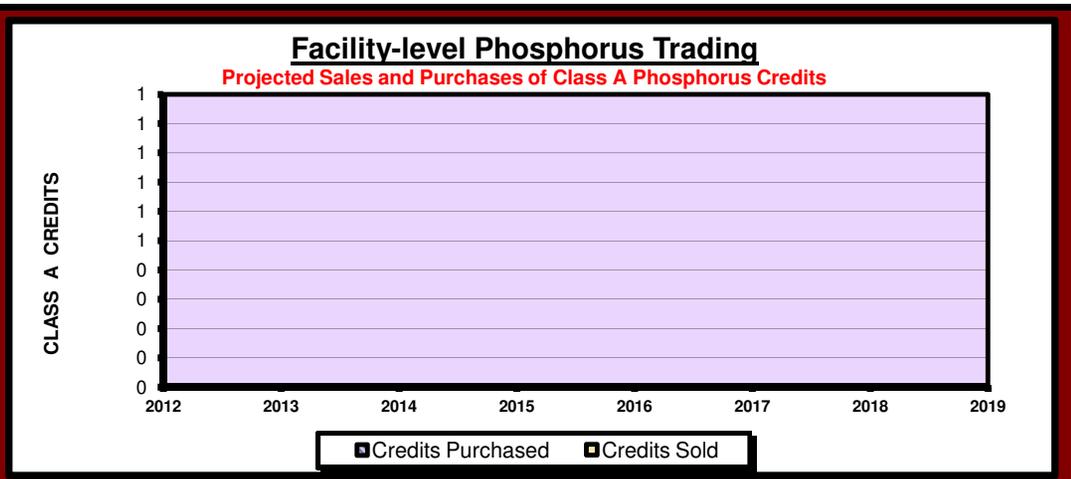
Loading & Credit Summary

Design Flow (mgd)	2.00
Projected Flow (mgd)	1.50
Projected Avg. Annual Concentration (mg/L)	2.44
Discharged Load (end of pipe)	11,147
Delivery Factor	0.60
Expected Load	6,688
Delivered WLA	2,558
Expected Credits (delivered)	(4,130)
Transfers In (Out) within Owner Bubble	4,130
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

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	1.50	1.55	1.59	1.64	1.69	1.74	1.79	1.85
Projected Avg. Annual Concentration (mg/L)	2.44	2.44	2.44	2.44	1.70	1.70	1.70	1.70
Discharged Load (end of pipe)	11,147	11,518	11,816	12,187	8,750	9,012	9,283	9,561
Delivery Factor	0.60	0.60	0.60	0.60	0.55	0.55	0.55	0.55
Expected Load	6,688	6,911	7,089	7,312	4,812	4,957	5,106	5,259
Delivered WLA	2,558	2,558	2,558	2,558	1,340	1,340	1,340	1,340
Expected Credits (delivered)	(4,130)	(4,353)	(4,531)	(4,754)	(3,472)	(3,617)	(3,766)	(3,919)
Transfers In (Out) within Owner Bubble	4,130	4,353	4,531	4,754	3,472	3,617	3,766	3,919
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



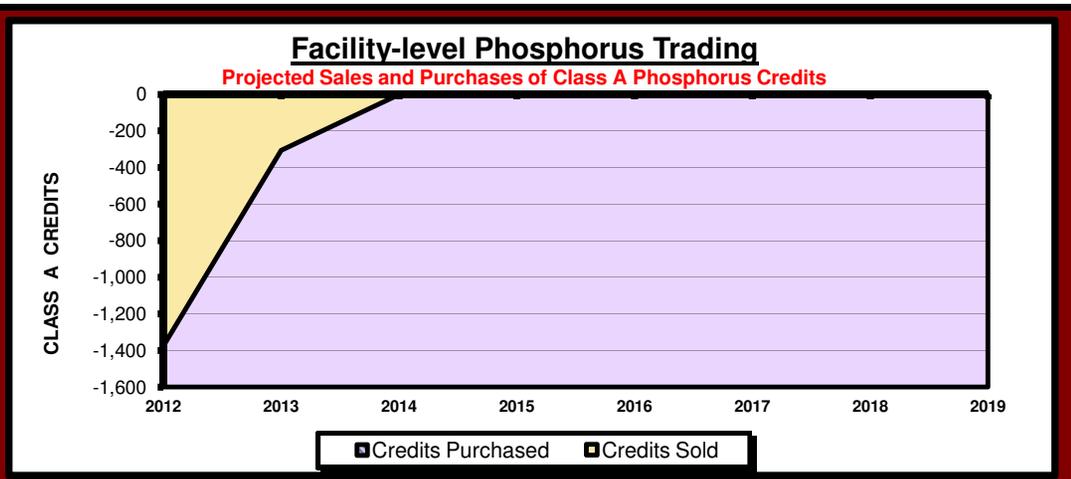
Loading & Credit Summary

Design Flow (mgd)	1.00
Projected Flow (mgd)	0.38
Projected Avg. Annual Concentration (mg/L)	1.70
Discharged Load (end of pipe)	1,942
Delivery Factor	0.60
Expected Load	1,165
Delivered WLA	1,279
Expected Credits (delivered)	114
Transfers In (Out) within Owner Bubble	(114)
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

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	0.38	0.39	0.40	0.41	0.42	0.43	0.45	0.46
Projected Avg. Annual Concentration (mg/L)	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70
Discharged Load (end of pipe)	1,942	1,998	2,055	2,121	2,185	2,250	2,318	2,387
Delivery Factor	0.60	0.60	0.60	0.60	0.55	0.55	0.55	0.55
Expected Load	1,165	1,199	1,233	1,273	1,202	1,238	1,275	1,313
Delivered WLA	1,279	1,279	1,279	1,279	670	670	670	670
Expected Credits (delivered)	114	80	46	6	(532)	(568)	(605)	(643)
Transfers In (Out) within Owner Bubble	(114)	(80)	(46)	(6)	532	568	605	643
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	
Design Flow (mgd)	7.00
Projected Flow (mgd)	2.88
Projected Avg. Annual Concentration (mg/L)	1.00
Discharged Load (end of pipe)	8,771
Delivery Factor	1.00
Expected Load	8,771
Delivered WLA	21,319
Expected Credits (delivered)	12,548
Transfers In (Out) within Owner Bubble	(4,016)
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	(6,396)
Expected Net Credits	2,136
Class A Credit Sales (Purchases)	1,373
Expected Class B Credits	763

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
2.88	2.96	3.05	3.14	3.24	3.34	3.44	3.54
1.00	1.00	1.00	1.00	0.70	0.55	0.55	0.55
8,771	9,015	9,289	9,563	6,907	5,590	5,758	5,930
1.00	1.00	1.00	1.00	0.77	0.77	0.77	0.77
8,771	9,015	9,289	9,563	5,319	4,304	4,433	4,566
21,319	21,319	21,319	21,319	9,380	9,380	9,380	9,380
12,548	12,304	12,030	11,756	4,061	5,076	4,947	4,814
(4,016)	(4,273)	(4,485)	(4,748)	(4,004)	(4,185)	(4,371)	(4,562)
0	0	0	0	0	0	0	0
(6,396)	(6,396)	(6,396)	(6,396)	(57)	(891)	(576)	(252)
2,136	1,635	1,149	612	0	0	0	0
1,373	305	0	0	0	0	0	0
763	1,330	1,149	612	0	0	0	0

FACILITY (OR OWNER BUBBLE) NAME: Hanover County, Virginia

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

Check One:

- James River TN Compliance
 York River TP Compliance

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 under II.B.)

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

See Attached Description

Implementation Schedule

- Does permittee anticipate using credit purchase to comply?
 NO YES
- 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.)
- 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	<i>See Attached description</i>
PER/CER to DEQ	_____
Plans & Specifications to DEQ	_____
Commence construction	_____
Complete construction	_____
CTO Request to DEQ (POTWs only)	_____

Attachment

It is possible that Hanover County will need to make capital improvements prior to 2016 to meet the newly established 2016 total phosphorus limits. The basis for developing load allocations was 0.7 ppm for total phosphorus but, as part of the WIP I plan, was reduce to 0.4 ppm. In addition, several delivery factors have recently been altered as part of the reissued General Nutrient Permit. Clearly, those discharging to the York River drainage have had significant changes made to their allocation within the last six months. Hanover will not commit to a course of action at this time as we must thoroughly evaluate our options and how best to operate within our bubble. Hanover County has not ruled out purchasing credits if needed. Our analysis also indicates that we will be able to operate within our bubble prior to 2016 without any capital upgrades or credit purchases. Total nitrogen does not appear to be a compliance concern through 2016 but will be evaluated along with phosphorus.

Owner Bubble: Hampton Roads Sanitation District (York 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.

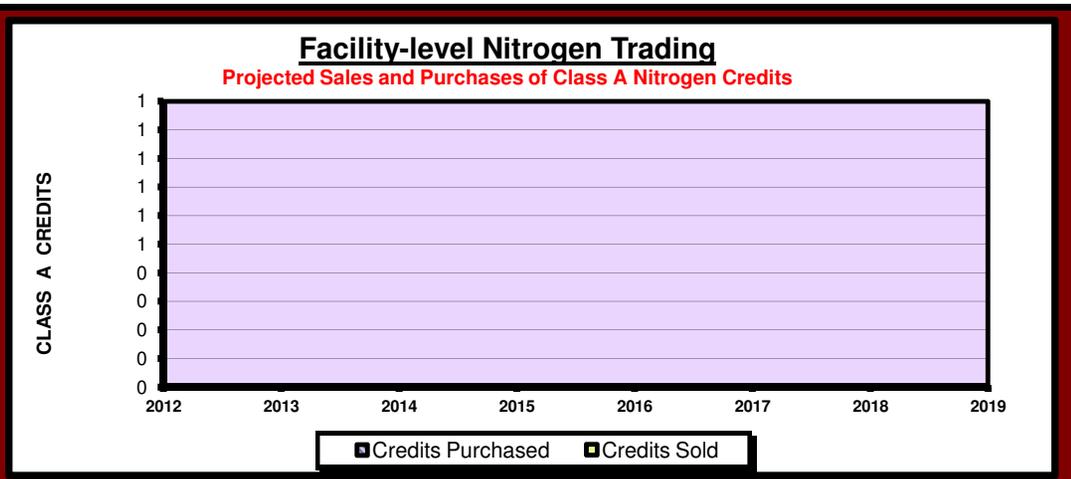
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply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

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
King William	-	-	-	-	-	-	-	-
Mathews	(1,827)	(1,827)	(1,827)	(1,827)	(1,827)	(1,827)	(1,827)	(1,827)
West Point	8,896	9,200	9,509	9,823	10,142	10,466	10,794	11,128
York	(7,069)	(7,373)	(7,682)	(7,996)	(8,315)	(8,639)	(8,967)	(9,301)
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
King William	1,104	1,099	1,094	1,089	1,084	1,079	1,074	1,068
Mathews	-	-	-	-	-	-	-	-
West Point	-	-	-	-	-	-	-	-
York	46,059	44,079	42,081	40,066	38,032	35,981	33,913	31,825
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	47,163	45,178	43,175	41,155	39,116	37,060	34,987	32,893
Class A Sales (Purchases)	(7,172)	0	0	0	0	0	0	0
<i>Expected Class B Credits</i>	<i>54,335</i>	<i>45,178</i>	<i>43,175</i>	<i>41,155</i>	<i>39,116</i>	<i>37,060</i>	<i>34,987</i>	<i>32,893</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		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
King William	-	-	-	-	-	-	-	-
Mathews	(213)	(213)	(213)	(213)	(121)	(121)	(121)	(121)
West Point	1,405	1,446	1,488	1,530	2,121	2,165	2,209	2,254
York	(1,192)	(1,233)	(1,275)	(1,317)	(2,000)	(2,044)	(2,088)	(2,133)
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
King William	166	166	165	165	165	164	164	163
Mathews	-	-	-	-	-	-	-	-
West Point	-	-	-	-	-	-	-	-
York	5,006	4,769	4,530	4,290	4,885	4,755	4,624	4,491
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	5,172	4,935	4,695	4,455	5,050	4,919	4,788	4,654
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
<i>Expected Class B Credits</i>	<i>5,172</i>	<i>4,935</i>	<i>4,695</i>	<i>4,455</i>	<i>5,050</i>	<i>4,919</i>	<i>4,788</i>	<i>4,654</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

HRSD-King William
 YORK Trading Basin

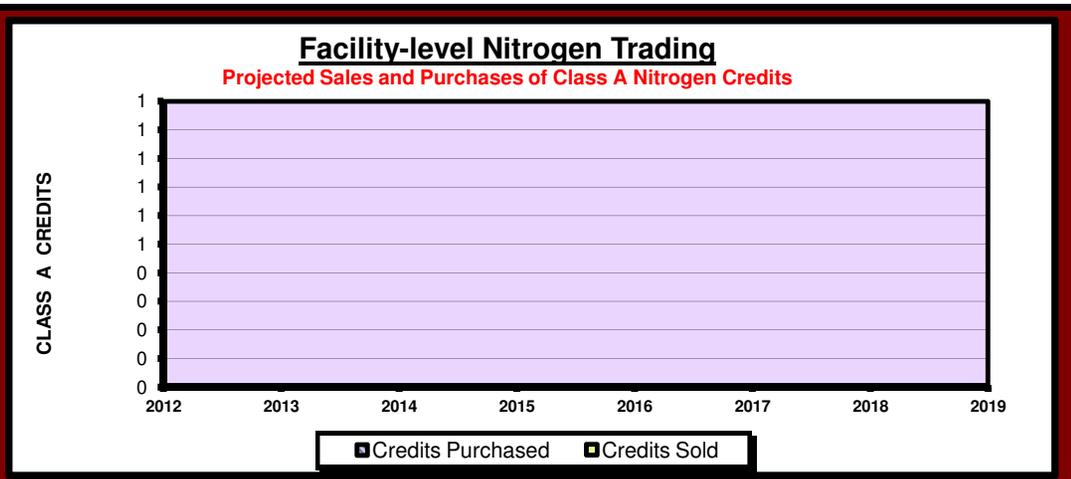


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
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)	320	325	330	335	340	345	350	356
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	320	325	330	335	340	345	350	356
Delivered WLA	1,424	1,424	1,424	1,424	1,424	1,424	1,424	1,424
Expected Credits (delivered)	1,104	1,099	1,094	1,089	1,084	1,079	1,074	1,068
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	1,104	1,099	1,094	1,089	1,084	1,079	1,074	1,068
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	1,104	1,099	1,094	1,089	1,084	1,079	1,074	1,068

NITROGEN FACILITY SUMMARY

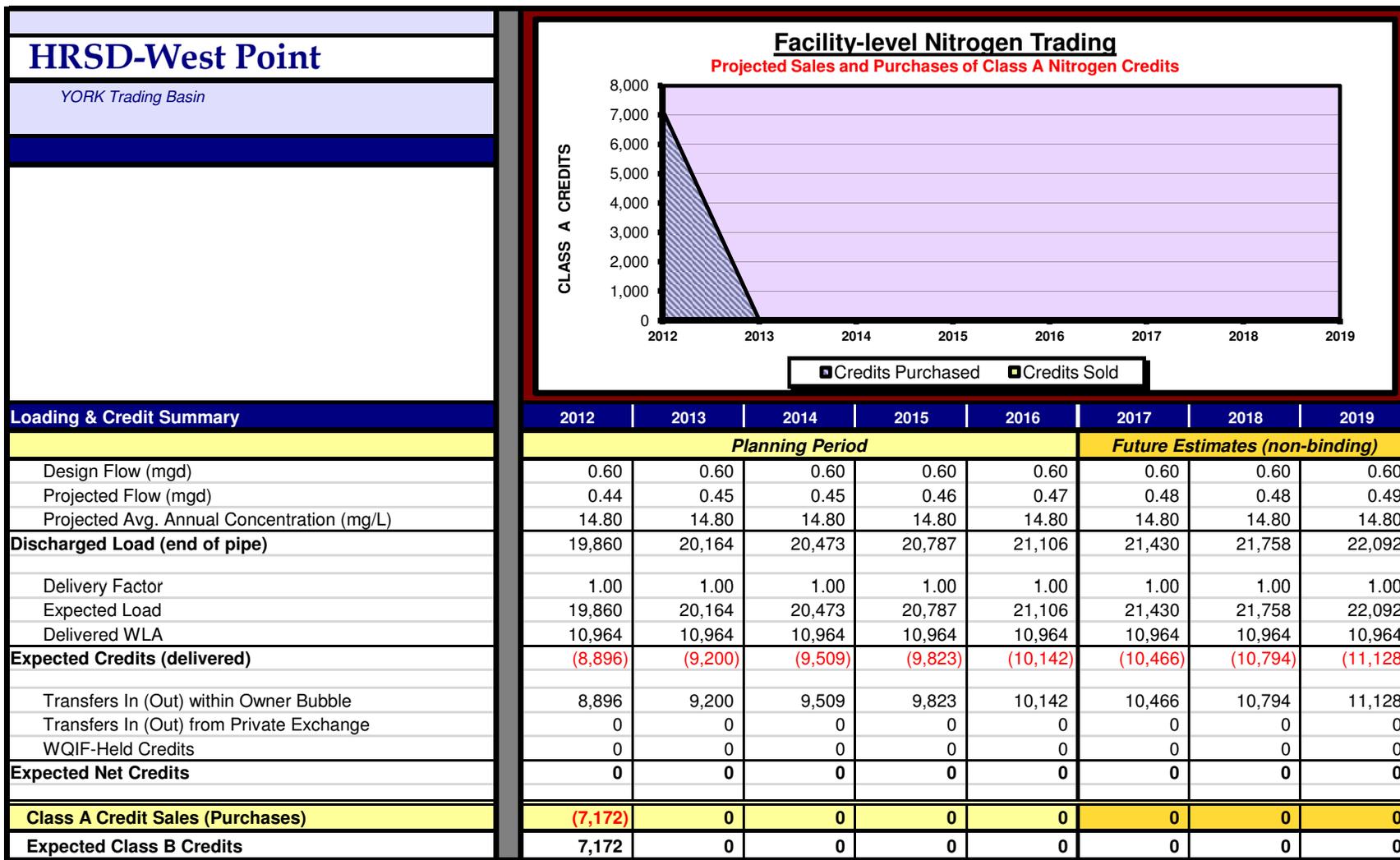
HRSD-Mathews
 YORK Trading Basin



Loading & Credit Summary	
Design Flow (mgd)	0.10
Projected Flow (mgd)	-
Projected Avg. Annual Concentration (mg/L)	-
Discharged Load (end of pipe)	0
Delivery Factor	1.00
Expected Load	0
Delivered WLA	1,827
Expected Credits (delivered)	1,827
Transfers In (Out) within Owner Bubble	(1,827)
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

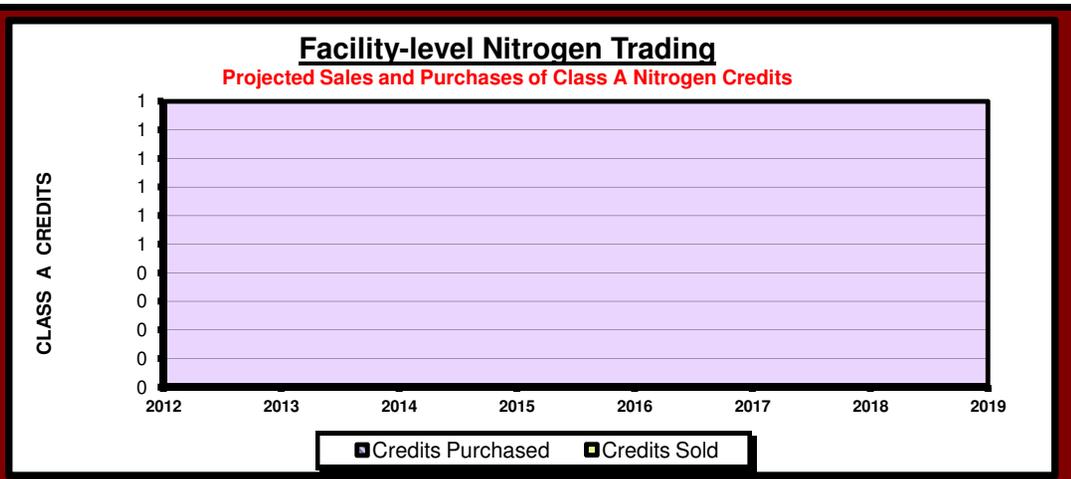
2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
0	0	0	0	0	0	0	0
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
0	0	0	0	0	0	0	0
1,827	1,827	1,827	1,827	1,827	1,827	1,827	1,827
1,827	1,827	1,827	1,827	1,827	1,827	1,827	1,827
(1,827)	(1,827)	(1,827)	(1,827)	(1,827)	(1,827)	(1,827)	(1,827)
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



NITROGEN FACILITY SUMMARY

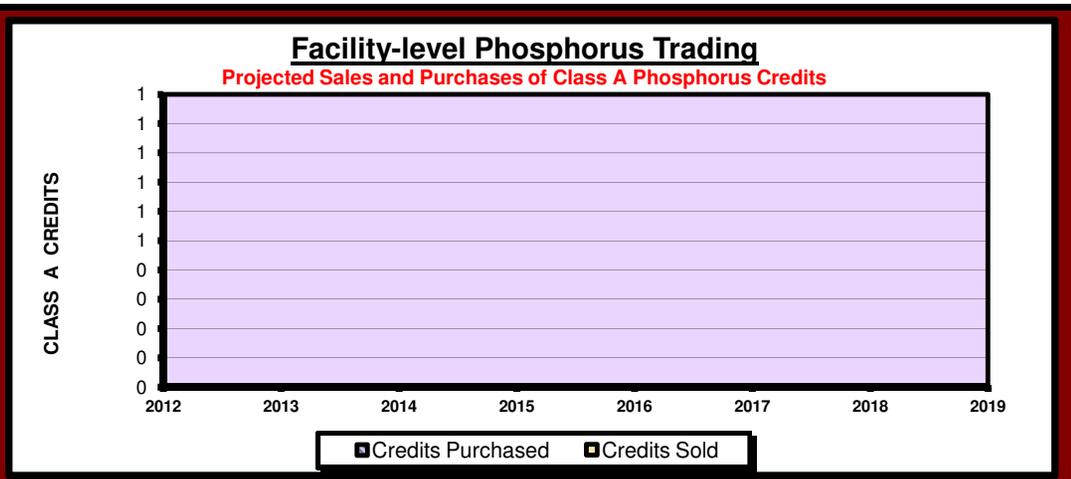
HRSD-York
 YORK Trading Basin



Loading & Credit Summary	2012	2013	2014	2015	2016	2017	2018	2019
	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)	12.09	12.18	12.28	12.37	12.46	12.56	12.65	12.75
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)	220,972	222,648	224,337	226,038	227,753	229,480	231,220	232,974
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	220,972	222,648	224,337	226,038	227,753	229,480	231,220	232,974
Delivered WLA	274,100	274,100	274,100	274,100	274,100	274,100	274,100	274,100
Expected Credits (delivered)	53,128	51,452	49,763	48,062	46,347	44,620	42,880	41,126
Transfers In (Out) within Owner Bubble	(7,069)	(7,373)	(7,682)	(7,996)	(8,315)	(8,639)	(8,967)	(9,301)
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	46,059	44,079	42,081	40,066	38,032	35,981	33,913	31,825
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	46,059	44,079	42,081	40,066	38,032	35,981	33,913	31,825

PHOSPHORUS FACILITY SUMMARY

HRSD-King William
 YORK Trading Basin



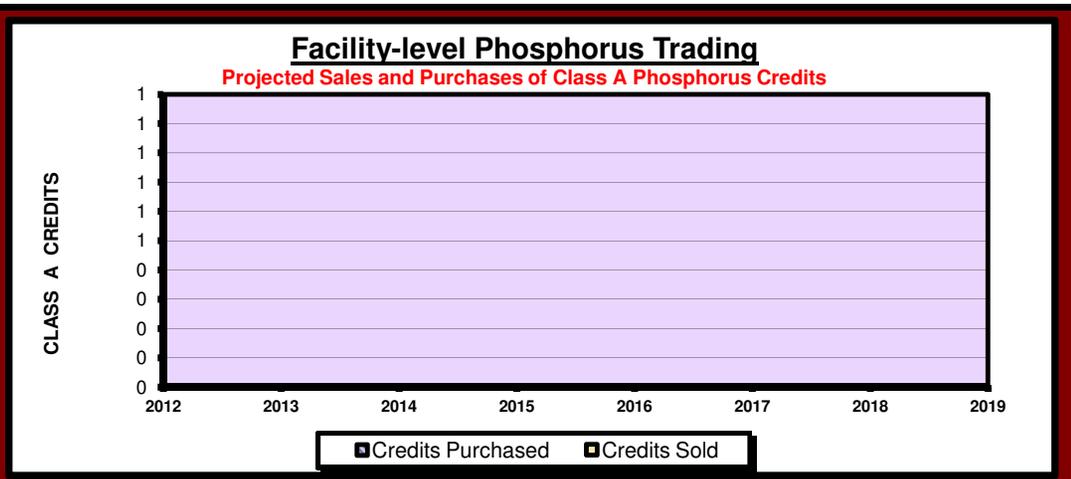
Loading & Credit Summary

Design Flow (mgd)	0.10
Projected Flow (mgd)	0.03
Projected Avg. Annual Concentration (mg/L)	0.30
Discharged Load (end of pipe)	24
Delivery Factor	1.00
Expected Load	24
Delivered WLA	190
Expected Credits (delivered)	166
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	166
Class A Credit Sales (Purchases)	0
Expected Class B Credits	166

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
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)	24	24	25	25	25	26	26	27
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	24	24	25	25	25	26	26	27
Delivered WLA	190	190	190	190	190	190	190	190
Expected Credits (delivered)	166	166	165	165	165	164	164	163
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	166	166	165	165	165	164	164	163
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	166	166	165	165	165	164	164	163

PHOSPHORUS FACILITY SUMMARY

HRSD-Mathews
 YORK Trading Basin

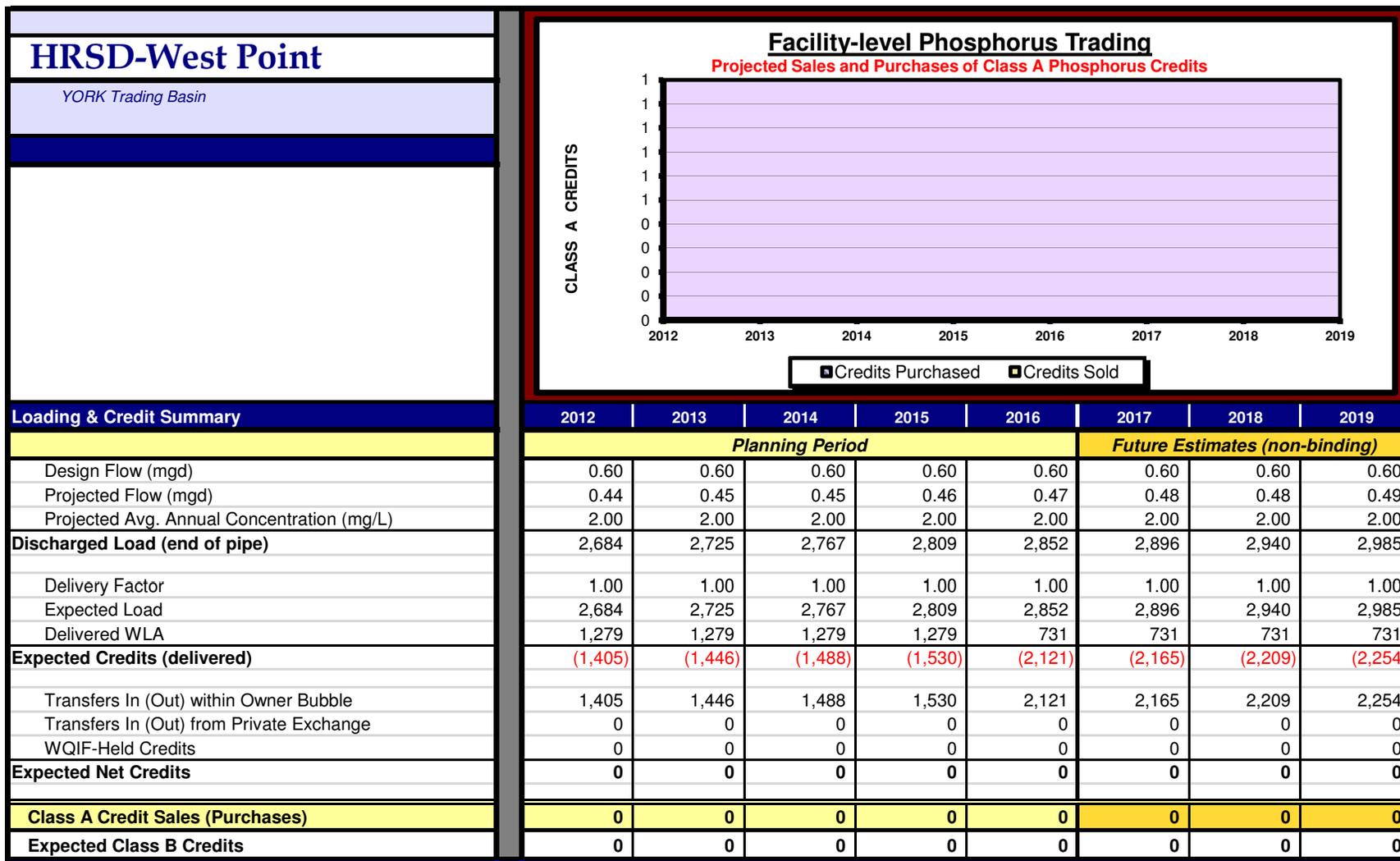


Loading & Credit Summary

Design Flow (mgd)	0.10
Projected Flow (mgd)	-
Projected Avg. Annual Concentration (mg/L)	-
Discharged Load (end of pipe)	0
Delivery Factor	1.00
Expected Load	0
Delivered WLA	213
Expected Credits (delivered)	213
Transfers In (Out) within Owner Bubble	(213)
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

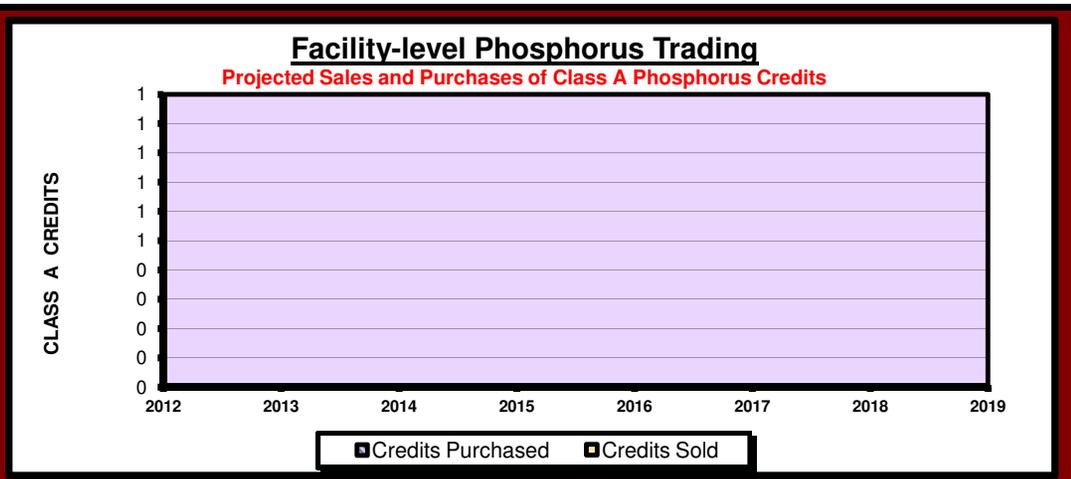
	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Projected Flow (mgd)	-	-	-	-	-	-	-	-
Projected Avg. Annual Concentration (mg/L)	-	-	-	-	-	-	-	-
Discharged Load (end of pipe)	0	0	0	0	0	0	0	0
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	0	0	0	0	0	0	0	0
Delivered WLA	213	213	213	213	121	121	121	121
Expected Credits (delivered)	213	213	213	213	121	121	121	121
Transfers In (Out) within Owner Bubble	(213)	(213)	(213)	(213)	(121)	(121)	(121)	(121)
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



PHOSPHORUS FACILITY SUMMARY

HRSD-York
 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	

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	12.09	12.18	12.28	12.37	12.46	12.56	12.65	12.75
Projected Avg. Annual Concentration (mg/L)	0.70	0.70	0.70	0.70	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	25,780	25,976	26,173	26,371	11,388	11,474	11,561	11,649
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	25,780	25,976	26,173	26,371	11,388	11,474	11,561	11,649
Delivered WLA	31,978	31,978	31,978	31,978	18,273	18,273	18,273	18,273
Expected Credits (delivered)	6,198	6,002	5,805	5,607	6,885	6,799	6,712	6,624
Transfers In (Out) within Owner Bubble	(1,192)	(1,233)	(1,275)	(1,317)	(2,000)	(2,044)	(2,088)	(2,133)
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	5,006	4,769	4,530	4,290	4,885	4,755	4,624	4,491
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	5,006	4,769	4,530	4,290	4,885	4,755	4,624	4,491

FACILITY (OR OWNER BUBBLE) NAME: VAN030052 HRSD York River Aggregate

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

Check One:

- James River TN Compliance
 York River TP Compliance

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 under II.B.)

If Option 2 is checked, briefly describe need for additional projects: York River STP project was developed to meet the current nutrient general permit requirements. The project was divided into three phases. Contract A is substantially completed. Contract B is for solids management. Contract C will include the construction of additional aeration tanks, modifications to the existing aeration tanks, construction of one or two additional secondary clarifiers and a new chemical feed facility. Contract C needs to be completed in order to meet the reduced phosphorus load allocation.

Implementation Schedule

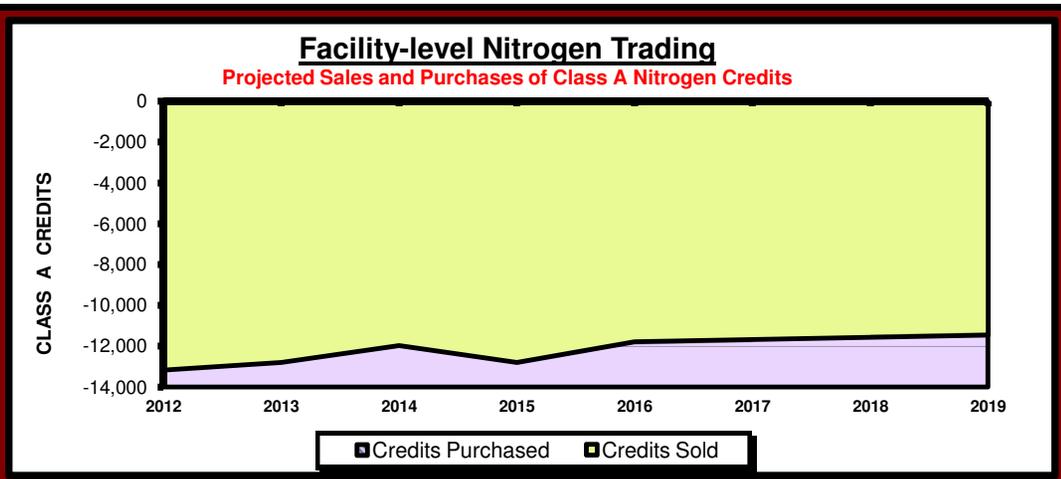
1. Does permittee anticipate using credit purchase to comply?
 NO YES
2. Is permittee implementing a capital project to comply?
 NO YES
(If YES, compliance is required as soon as possible but no later than the applicable tributary compliance schedule deadline.)
3. Capital Project Milestone Schedule (Specify estimated date for each milestone. For bubbles, specify facility name(s) and list multiple facility schedules if applicable.)

York River STP – Contract C

Engineer selection	<u>8/26/2006</u>
PER/CER to DEQ	<u>12/7/2011</u>
Plans & Specifications to DEQ	<u>8/1/2012</u>
Commence construction	<u>10/1/2012</u>
Complete construction	<u>3/1/2015</u>
CTO Request to DEQ (POTWs only)	<u>5/1/2015</u>

NITROGEN FACILITY SUMMARY

New Kent Co-Parham
 YORK Trading Basin

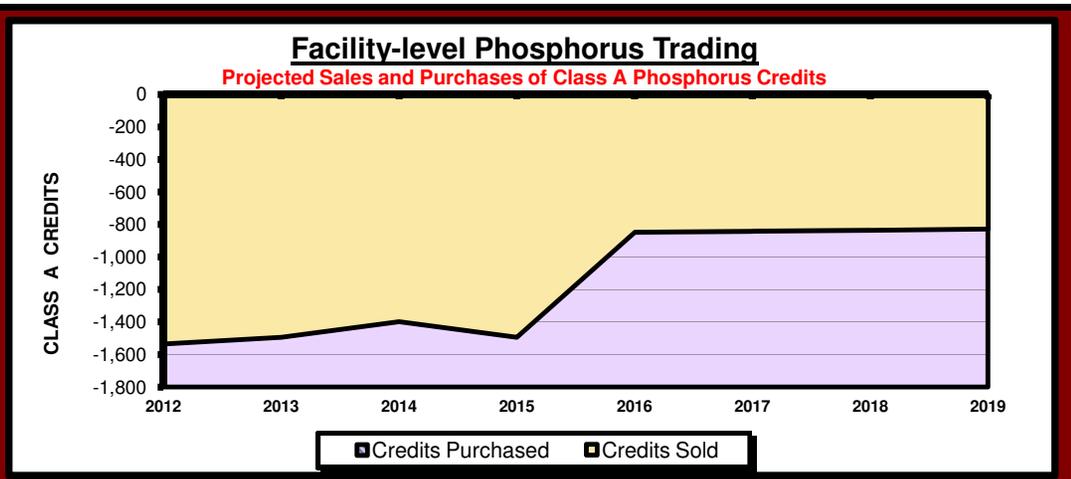


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	0.56	0.60	0.69	0.60	0.61	0.62	0.63	0.64
Projected Avg. Annual Concentration (mg/L)	6.00	6.00	6.00	6.00	7.00	7.00	7.00	7.00
Discharged Load (end of pipe)	10,233	10,964	12,609	10,964	13,005	13,218	13,431	13,644
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	10,233	10,964	12,609	10,964	13,005	13,218	13,431	13,644
Delivered WLA	36,547	36,547	36,547	36,547	36,547	36,547	36,547	36,547
Expected Credits (delivered)	26,314	25,583	23,938	25,583	23,542	23,329	23,116	22,903
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	26,314	25,583	23,938	25,583	23,542	23,329	23,116	22,903
Class A Credit Sales (Purchases)	13,157	12,792	11,969	12,792	11,771	11,665	11,558	11,452
Expected Class B Credits	13,157	12,791	11,969	12,791	11,771	11,664	11,558	11,451

PHOSPHORUS FACILITY SUMMARY

New Kent Co-Parham
 YORK Trading Basin



Loading & Credit Summary	
Design Flow (mgd)	2.00
Projected Flow (mgd)	0.56
Projected Avg. Annual Concentration (mg/L)	0.70
Discharged Load (end of pipe)	1,194
Delivery Factor	1.00
Expected Load	1,194
Delivered WLA	4,264
Expected Credits (delivered)	3,070
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	3,070
Class A Credit Sales (Purchases)	1,535
Expected Class B Credits	1,535

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
0.56	0.60	0.69	0.60	0.61	0.62	0.63	0.64
0.70	0.70	0.70	0.70	0.40	0.40	0.40	0.40
1,194	1,279	1,471	1,279	743	755	767	780
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1,194	1,279	1,471	1,279	743	755	767	780
4,264	4,264	4,264	4,264	2,436	2,436	2,436	2,436
3,070	2,985	2,793	2,985	1,693	1,681	1,669	1,656
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
3,070	2,985	2,793	2,985	1,693	1,681	1,669	1,656
1,535	1,493	1,397	1,493	847	841	835	828
1,535	1,492	1,396	1,492	846	840	834	828

FACILITY (OR OWNER BUBBLE) NAME: New Kent County - Parham Landing WWTP

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

Check One:

- James River TN Compliance
 York River TP Compliance

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 under II.B.)

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

Enhancement to alum feed to optimize chemical feed rates to offset additional chemical cost associated w/ new limit

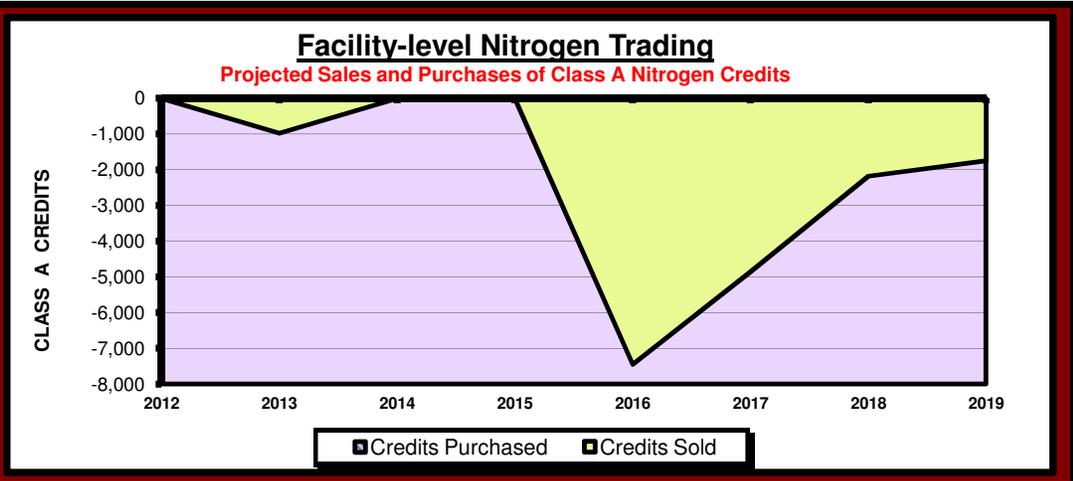
Implementation Schedule

- Does permittee anticipate using credit purchase to comply?
 NO YES
- 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.)
- 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>N/A</u>
PER/CER to DEQ	<u>N/A</u>
Plans & Specifications to DEQ	<u>March, 2015</u>
Commence construction	<u>July, 2015</u>
Complete construction	<u>December, 2015</u>
CTO Request to DEQ (POTWs only)	<u>N/A</u>

NITROGEN FACILITY SUMMARY

RockTenn
 YORK Trading Basin



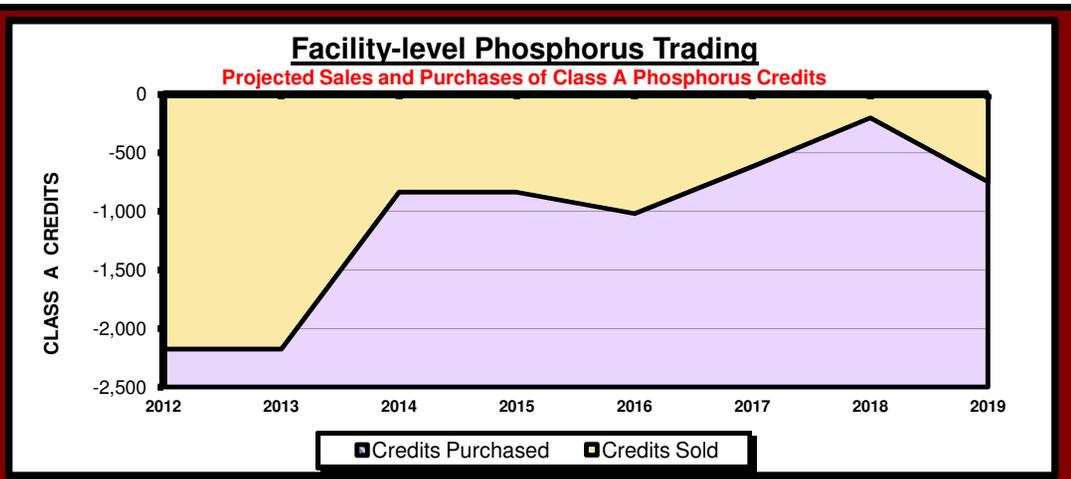
Loading & Credit Summary

Design Flow (mgd)	23.00
Projected Flow (mgd)	19.00
Projected Avg. Annual Concentration (mg/L)	4.10
Discharged Load (end of pipe)	237,249
Delivery Factor	1.00
Expected Load	237,249
Delivered WLA	259,177
Expected Credits (delivered)	21,928
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	21,928
Class A Credit Sales (Purchases)	0
Expected Class B Credits	21,928

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	19.00	19.00	20.00	20.00	20.15	20.45	20.76	21.07
Projected Avg. Annual Concentration (mg/L)	4.10	4.10	4.10	4.10	4.05	4.05	4.05	4.00
Discharged Load (end of pipe)	237,249	237,249	249,736	249,736	248,541	252,241	256,065	256,680
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	237,249	237,249	249,736	249,736	248,541	252,241	256,065	256,680
Delivered WLA	259,177	259,177	259,177	259,177	259,177	259,177	259,177	259,177
Expected Credits (delivered)	21,928	21,928	9,441	9,441	10,636	6,936	3,112	2,497
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	21,928	21,928	9,441	9,441	10,636	6,936	3,112	2,497
Class A Credit Sales (Purchases)	0	974	0	0	7,445	4,855	2,178	1,748
Expected Class B Credits	21,928	20,954	9,441	9,441	3,191	2,081	934	749

PHOSPHORUS FACILITY SUMMARY

RockTenn
 YORK Trading Basin



Loading & Credit Summary	
Design Flow (mgd)	23.00
Projected Flow (mgd)	19.00
Projected Avg. Annual Concentration (mg/L)	0.88
Discharged Load (end of pipe)	50,922
Delivery Factor	1.00
Expected Load	50,922
Delivered WLA	56,038
Expected Credits (delivered)	5,116
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	(767)
WQIF-Held Credits	0
Expected Net Credits	4,349
Class A Credit Sales (Purchases)	2,175
Expected Class B Credits	2,174

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	19.00	19.00	20.00	20.00	20.15	20.45	20.76	21.07
Projected Avg. Annual Concentration (mg/L)	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.85
Discharged Load (end of pipe)	50,922	50,922	53,602	53,602	54,004	54,808	55,639	54,544
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	50,922	50,922	53,602	53,602	54,004	54,808	55,639	54,544
Delivered WLA	56,038	56,038	56,038	56,038	56,038	56,038	56,038	56,038
Expected Credits (delivered)	5,116	5,116	2,436	2,436	2,034	1,230	399	1,494
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	(767)	(767)	(767)	(767)	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	4,349	4,349	1,669	1,669	2,034	1,230	399	1,494
Class A Credit Sales (Purchases)	2,175	2,175	835	835	1,017	615	200	747
Expected Class B Credits	2,174	2,174	834	834	1,017	615	199	747

FACILITY (OR OWNER BUBBLE) NAME: RockTenn West Point Mill

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

Check One:

- James River TN Compliance
 York River TP Compliance

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 under II.B.)

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

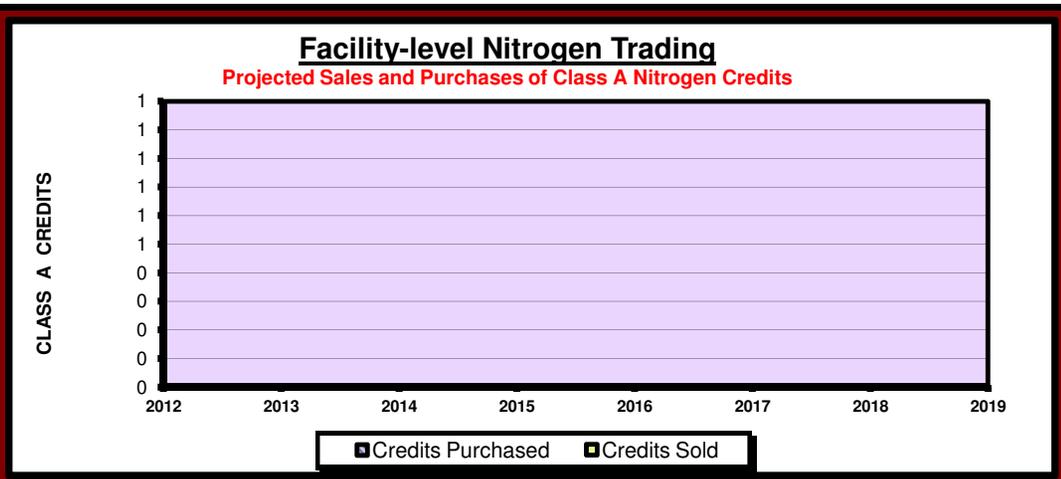
Implementation Schedule

- Does permittee anticipate using credit purchase to comply?
 NO only if needed, episodically YES
- 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.)
- 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) _____

NITROGEN FACILITY SUMMARY

RSA-Gordonsville
 YORK Trading Basin

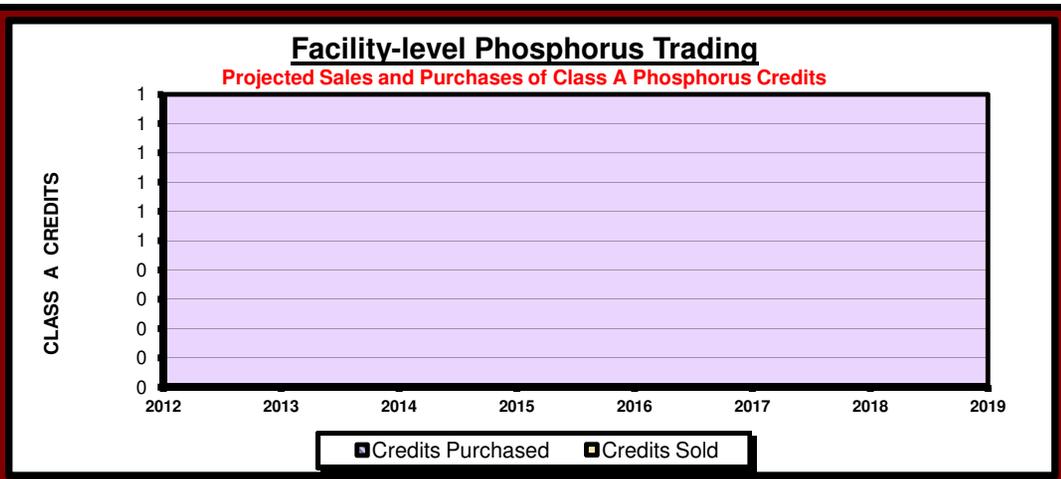


Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
0.39	0.43	0.47	0.47	0.47	0.47	0.47	0.47
6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
7,127	7,858	8,588	8,588	8,588	8,588	8,588	8,588
0.01	0.01	0.01	0.01	0.05	0.05	0.05	0.05
71	79	86	86	429	429	429	429
172	172	172	172	859	859	859	859
101	93	86	86	430	430	430	430
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
(49)	(49)	(49)	(49)	(247)	(247)	(247)	(247)
52	44	37	37	183	183	183	183
0	0	0	0	0	0	0	0
52	44	37	37	183	183	183	183

PHOSPHORUS FACILITY SUMMARY

RSA-Gordonsville
 YORK Trading Basin



Loading & Credit Summary

Design Flow (mgd)	0.67
Projected Flow (mgd)	0.39
Projected Avg. Annual Concentration (mg/L)	0.70
Discharged Load (end of pipe)	831
Delivery Factor	0.60
Expected Load	499
Delivered WLA	1,202
Expected Credits (delivered)	703
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	(345)
Expected Net Credits	358
Class A Credit Sales (Purchases)	0
Expected Class B Credits	358

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Projected Flow (mgd)	0.39	0.43	0.47	0.47	0.47	0.47	0.47	0.47
Projected Avg. Annual Concentration (mg/L)	0.70	0.70	0.90	0.90	0.90	0.90	0.90	0.90
Discharged Load (end of pipe)	831	917	1,288	1,288	1,288	1,288	1,288	1,288
Delivery Factor	0.60	0.60	0.60	0.60	0.18	0.18	0.18	0.18
Expected Load	499	550	773	773	232	232	232	232
Delivered WLA	1,202	1,202	1,202	1,202	206	206	206	206
Expected Credits (delivered)	703	652	429	429	(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	(345)	(345)	(345)	(345)	0	0	0	0
Expected Net Credits	358	307	84	84	(26)	(26)	(26)	(26)
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	358	307	84	84	(26)	(26)	(26)	(26)

FACILITY (OR OWNER BUBBLE) NAME: Gordonsville STP

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

Check One:

- James River TN Compliance
- York River TP Compliance

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 under II.B.)

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

This facility is located in the York River Basin. The basin had its TP nutrient limit reduced from .7 mg/l to .4 mg/l and a likewise reduction in its allocation by the regulatory agencies. This facility will therefore find it difficult to maintain compliance.____

Implementation Schedule

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

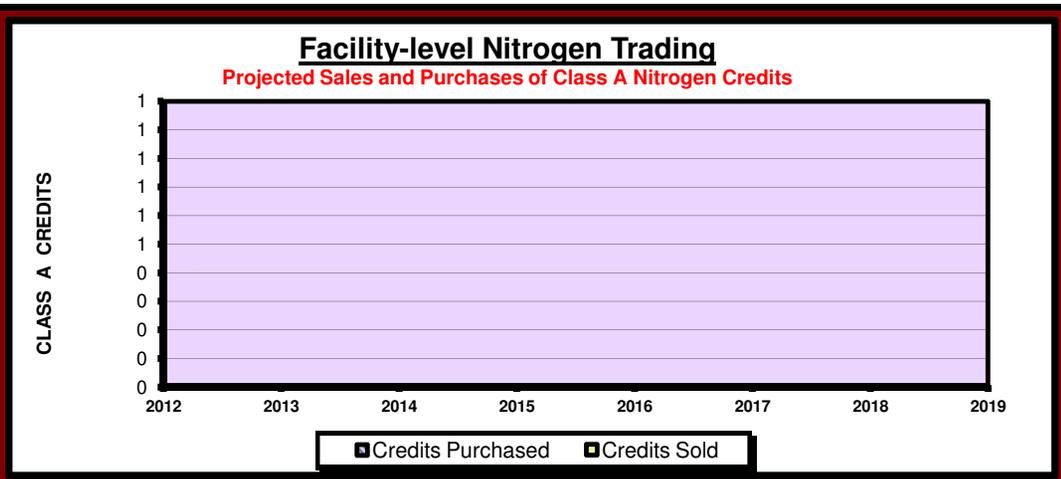
2. Is permittee implementing a capital project to comply?
 NO YES
(If YES, compliance is required as soon as possible but no later than the applicable tributary compliance schedule deadline.)

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)	_____

NITROGEN FACILITY SUMMARY

White Birch-Bear Island
YORK Trading Basin

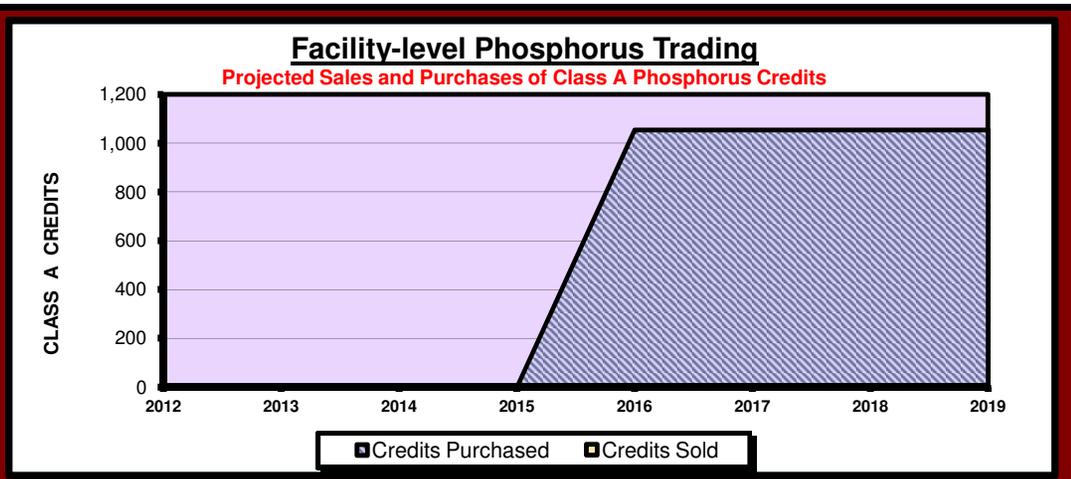


Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20
Projected Flow (mgd)	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20
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)	47,328	47,328	47,328	47,328	47,328	47,328	47,328	47,328
Delivery Factor	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51
Expected Load	24,137	24,137	24,137	24,137	24,137	24,137	24,137	24,137
Delivered WLA	24,137	24,137	24,137	24,137	24,137	24,137	24,137	24,137
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

White Birch-Bear Island
 YORK Trading Basin



Loading & Credit Summary	
Design Flow (mgd)	4.20
Projected Flow (mgd)	4.20
Projected Avg. Annual Concentration (mg/L)	1.10
Discharged Load (end of pipe)	14,070
Delivery Factor	0.60
Expected Load	8,442
Delivered WLA	7,675
Expected Credits (delivered)	(767)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	767
WQIF-Held Credits	0
Expected Net Credits	0
Class A Credit Sales (Purchases)	0
Expected Class B Credits	0

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20
4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20
1.10	1.10	1.10	1.10	0.95	0.95	0.95	0.95
14,070	14,070	14,070	14,070	12,152	12,152	12,152	12,152
0.60	0.60	0.60	0.60	0.55	0.55	0.55	0.55
8,442	8,442	8,442	8,442	6,683	6,683	6,683	6,683
7,675	7,675	7,675	7,675	5,628	5,628	5,628	5,628
(767)	(767)	(767)	(767)	(1,055)	(1,055)	(1,055)	(1,055)
0	0	0	0	0	0	0	0
767	767	767	767	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	(1,055)	(1,055)	(1,055)	(1,055)
0	0	0	0	(1,055)	(1,055)	(1,055)	(1,055)
0	0	0	0	0	0	0	0

FACILITY (OR OWNER BUBBLE) NAME: White Birch Paper Bear Island LLC Division

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

Check One:

- James River TN Compliance
- York River TP Compliance

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 under II.B.)

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

Bear Island has hired a consulting firm to examine the treatment of phosphorus internally. This project is still in the early stages.

Implementation Schedule

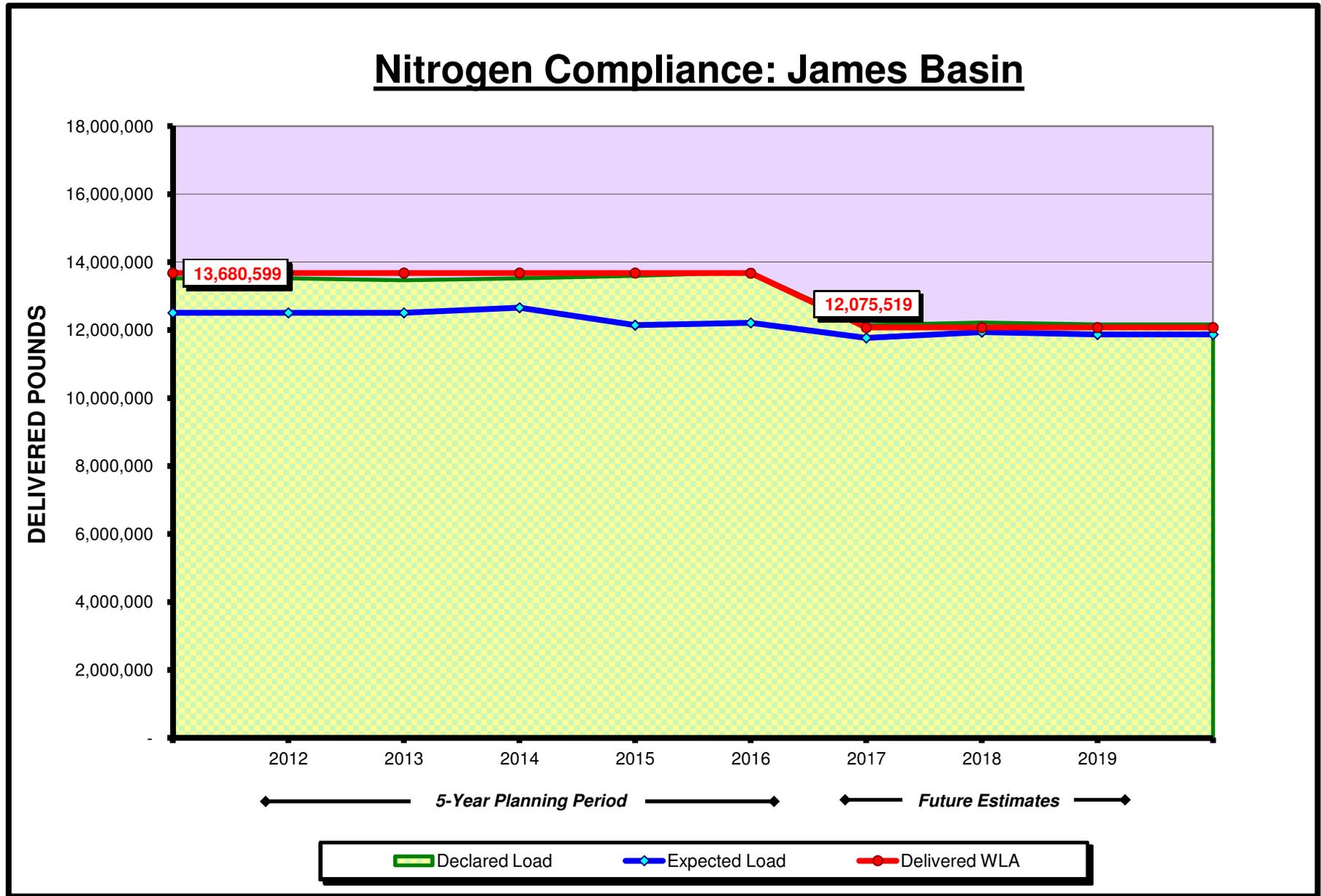
1. Does permittee anticipate using credit purchase to comply?
 NO YES
2. Is permittee implementing a capital project to comply?
 NO YES
(If YES, compliance is required as soon as possible but no later than the applicable tributary compliance schedule deadline.)
3. Capital Project Milestone Schedule (Specify estimated date for each milestone. For bubbles, specify facility name(s) and list multiple facility schedules if applicable.)

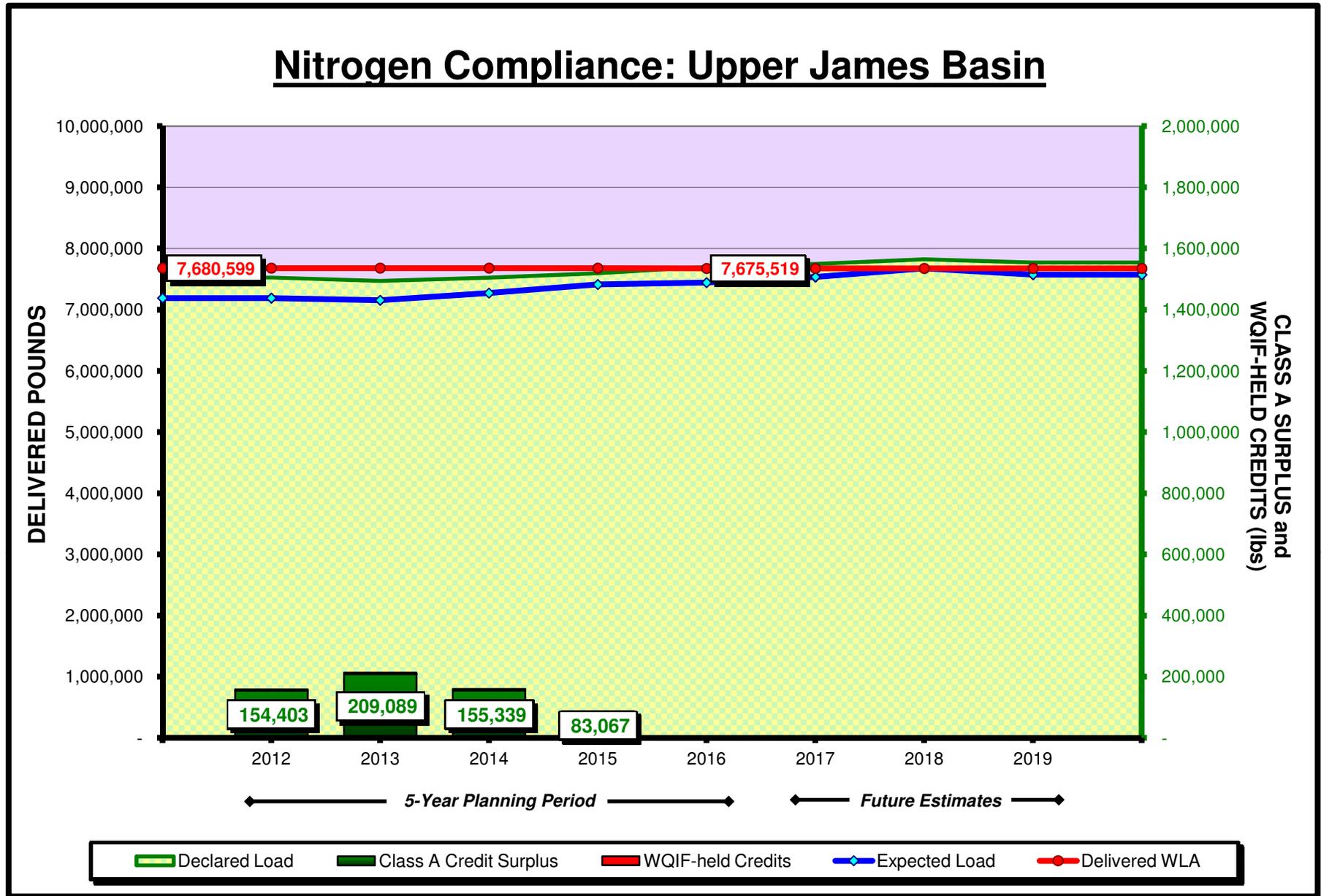
Engineer selection	Fiss Consulting- Aug 2011
PER/CER to DEQ	_____
Plans & Specifications to DEQ	_____
Commence construction	_____
Complete construction	_____
CTO Request to DEQ (POTWs only)	_____

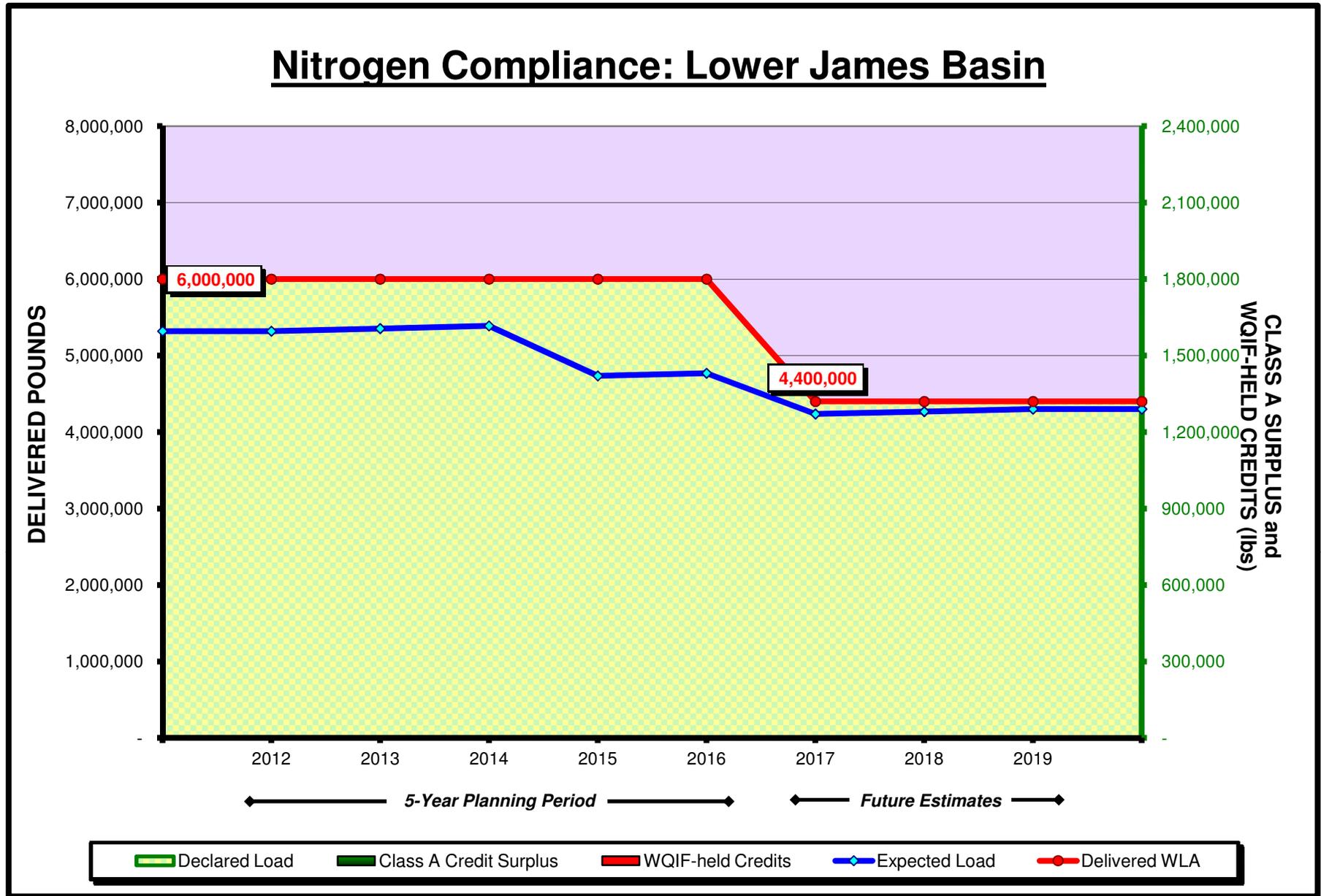
SECTION 5

James River Basin Exchange Compliance Plan









JAMES Basin: Nitrogen Credit Ledger

Compliance Year:	2012	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** (expected)	
								PRICE:	\$ 1.10	\$ 2.00	\$ 0.14
UPPER JAMES BASIN	7,680,599	7,190,376	490,223	-	-	(4,934)	485,289	399,663	(245,260)	330,886	
Alleghany Co-L. Jackson	19,187	10,644	8,543	-	-	(4,934)	3,609	-	-	3,609	
Alleghany Co-Low Moor	2,741	1,791	950	-	-	-	950	-	-	950	
Amherst (Town)	6,688	4,152	2,536	-	-	-	2,536	1,268	-	1,268	
Aqua Virginia-L. Monticello	11,091	38,456	(27,365)	-	-	-	(27,365)	-	(27,365)	-	
Babcock & Wilcox, N.O.G.	114,070	114,065	5	-	-	-	5	-	-	5	
Buena Vista	12,335	15,843	(3,508)	-	-	-	(3,508)	-	(3,508)	-	
Chesterfield-Falling Cr.	153,801	169,181	(15,380)	15,380	-	-	-	-	-	-	
Chesterfield-Proctors Cr.	411,151	357,914	53,237	(15,380)	-	-	37,857	-	-	37,857	
Covington	16,446	21,380	(4,934)	-	-	-	(4,934)	-	(4,934)	-	
Crewe	3,472	1,736	1,736	-	-	-	1,736	1,736	-	-	
Dominion-Chesterfield	352,036	344,955	7,081	-	-	-	7,081	-	-	7,081	
DuPont-Spruance	201,080	250,603	(49,523)	-	-	-	(49,523)	-	(49,523)	-	
Georgia-Pacific	36,747	27,849	8,898	-	-	-	8,898	4,449	-	4,449	
Greif Packaging	44,680	34,555	10,125	-	-	-	10,125	5,063	-	5,062	
Henrico Co	1,142,085	837,791	304,294	-	-	-	304,294	258,650	-	45,644	
Honeywell-Hopewell	1,090,798	837,529	253,269	-	(89,064)	-	164,205	-	-	164,205	
Hopewell RWTF	1,827,336	1,916,400	(89,064)	-	89,064	-	-	-	-	-	
Lynchburg	326,971	243,835	83,136	-	-	-	83,136	74,822	-	8,314	
MeadWestvaco	118,320	97,991	20,329	-	-	-	20,329	20,329	-	-	
MSA-Lexington	16,446	7,346	9,100	-	-	-	9,100	4,550	-	4,550	
Philip Morris	139,724	67,733	71,991	-	-	-	71,991	28,796	-	43,195	
Richmond	1,096,402	1,096,402	-	-	-	-	-	-	-	-	
RWSA-Moores Creek	167,201	163,783	3,418	-	-	-	3,418	-	-	3,418	
South Central WWA	350,239	510,169	(159,930)	-	-	-	(159,930)	-	(159,930)	-	
Tyson Foods-Glen Allen	19,552	18,273	1,279	-	-	-	1,279	-	-	1,279	
								PRICE:	No Sale	No Sale	No Sale
LOWER JAMES BASIN	6,000,000	5,319,653	680,347	-	-	-	680,347	-	-	680,347	
HRSD-Army Base	610,000	860,201	(250,201)	250,201	-	-	-	-	-	-	
HRSD-Boat Harbor	740,000	1,091,594	(351,594)	351,594	-	-	-	-	-	-	
HRSD-Ches/Eliz	1,100,000	1,199,713	(99,713)	99,713	-	-	-	-	-	-	
HRSD-James River	1,250,000	495,330	754,670	(754,670)	-	-	-	-	-	-	
HRSD-Nansemond	750,000	426,167	323,833	(36,417)	-	-	287,416	-	-	287,416	
HRSD-VIP	750,000	839,579	(89,579)	89,579	-	-	-	-	-	-	
HRSD-Williamsburg	800,000	407,069	392,931	-	-	-	392,931	-	-	392,931	

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

**** Expected Class B Credits are estimates only. Actual Class B Credits—and the resulting Class B sales price—will vary from estimates based on actual Delivered Loads in the Compliance Year.**

JAMES Basin: Nitrogen Credit Ledger

Compliance Year:	2013	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** (expected)
								PRICE:	\$ 1.07	\$ 2.15	\$ 0.18
UPPER JAMES BASIN	7,680,599	7,155,749	524,850	-	-	(4,934)	519,916		472,834	(263,745)	310,827
Alleghany Co-L. Jackson	19,187	10,599	8,588	-	-	(4,934)	3,654		-	-	3,654
Alleghany Co-Low Moor	2,741	1,894	847	-	-	-	847		-	-	847
Amherst (Town)	6,688	4,260	2,428	-	-	-	2,428		1,214	-	1,214
Aqua Virginia-L. Monticello	11,091	23,408	(12,317)	-	-	-	(12,317)		-	(12,317)	-
Babcock & Wilcox, N.O.G.	114,070	114,065	5	-	-	-	5		-	-	5
Buena Vista	12,335	15,843	(3,508)	-	-	-	(3,508)		-	(3,508)	-
Chesterfield-Falling Cr.	153,801	169,181	(15,380)	15,380	-	-	-		-	-	-
Chesterfield-Proctors Cr.	411,151	315,748	95,403	(15,380)	-	-	80,023		-	-	80,023
Covington	16,446	21,380	(4,934)	-	-	-	(4,934)		-	(4,934)	-
Crewe	3,472	1,736	1,736	-	-	-	1,736		1,736	-	-
Dominion-Chesterfield	352,036	344,955	7,081	-	-	-	7,081		-	-	7,081
DuPont-Spruance	201,080	259,809	(58,729)	-	-	-	(58,729)		-	(58,729)	-
Georgia-Pacific	36,747	29,164	7,583	-	-	-	7,583		4,550	-	3,033
Greif Packaging	44,680	41,661	3,019	-	-	-	3,019		1,510	-	1,509
Henrico Co	1,142,085	863,011	279,074	-	-	-	279,074		237,213	-	41,861
Honeywell-Hopewell	1,090,798	837,529	253,269	-	(137,708)	-	115,561		-	-	115,561
Hopewell RWTF	1,827,336	1,965,044	(137,708)	-	137,708	-	-		-	-	-
Lynchburg	326,971	211,324	115,647	-	-	-	115,647		104,082	-	11,565
MeadWestvaco	118,320	97,991	20,329	-	-	-	20,329		20,329	-	-
MSA-Lexington	16,446	6,578	9,868	-	-	-	9,868		9,868	-	-
Philip Morris	139,724	67,733	71,991	-	-	-	71,991		28,796	-	43,195
Richmond	1,096,402	1,096,402	-	-	-	-	-		-	-	-
RWSA-Moores Creek	167,201	103,665	63,536	-	-	-	63,536		63,536	-	-
South Central WWA	350,239	534,496	(184,257)	-	-	-	(184,257)		-	(184,257)	-
Tyson Foods-Glen Allen	19,552	18,273	1,279	-	-	-	1,279		-	-	1,279
								PRICE:	No Sale	No Sale	No Sale
LOWER JAMES BASIN	6,000,000	5,353,993	646,007	-	-	-	646,007		-	-	646,007
HRSD-Army Base	610,000	860,581	(250,581)	250,581	-	-	-		-	-	-
HRSD-Boat Harbor	740,000	1,095,927	(355,927)	355,927	-	-	-		-	-	-
HRSD-Ches/Eliz	1,100,000	1,207,762	(107,762)	107,762	-	-	-		-	-	-
HRSD-James River	1,250,000	498,541	751,459	(751,459)	-	-	-		-	-	-
HRSD-Nansemond	750,000	434,757	315,243	(54,328)	-	-	260,915		-	-	260,915
HRSD-VIP	750,000	841,517	(91,517)	91,517	-	-	-		-	-	-
HRSD-Williamsburg	800,000	414,908	385,092	-	-	-	385,092		-	-	385,092

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

** Expected Class B Credits are estimates only. Actual Class B Credits—and the resulting Class B sales price—will vary from estimates based on actual Delivered Loads in the Compliance Year.

JAMES Basin: Nitrogen Credit Ledger

Compliance Year:	2014	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** (expected)
UPPER JAMES BASIN	7,680,599	7,272,230	408,369	-	-	(4,934)	403,435	\$ 1.54	\$ 2.65	\$ 0.30	440,921 (285,582) 248,096
Alleghany Co-L. Jackson	19,187	10,553	8,634	-	-	(4,934)	3,700		-	-	3,700
Alleghany Co-Low Moor	2,741	1,974	767	-	-	-	767		-	-	767
Amherst (Town)	6,688	4,463	2,225	-	-	-	2,225		1,113	-	1,112
Aqua Virginia-L. Monticello	11,091	9,029	2,062	-	-	-	2,062		-	-	2,062
Babcock & Wilcox, N.O.G.	114,070	114,065	5	-	-	-	5		-	-	5
Buena Vista	12,335	15,843	(3,508)	-	-	-	(3,508)		-	(3,508)	-
Chesterfield-Falling Cr.	153,801	169,181	(15,380)	15,380	-	-	-		-	-	-
Chesterfield-Proctors Cr.	411,151	328,646	82,505	(15,380)	-	-	67,125		-	-	67,125
Covington	16,446	21,380	(4,934)	-	-	-	(4,934)		-	(4,934)	-
Crewe	3,472	1,042	2,430	-	-	-	2,430		2,430	-	-
Dominion-Chesterfield	352,036	344,955	7,081	-	-	-	7,081		-	-	7,081
DuPont-Spruance	201,080	269,637	(68,557)	-	-	-	(68,557)		-	(68,557)	-
Georgia-Pacific	36,747	29,457	7,290	-	-	-	7,290		3,645	-	3,645
Greif Packaging	44,680	40,453	4,227	-	-	-	4,227		2,114	-	2,113
Henrico Co	1,142,085	888,828	253,257	-	-	-	253,257		215,268	-	37,989
Honeywell-Hopewell	1,090,798	837,529	253,269	-	(185,998)	-	67,271		-	-	67,271
Hopewell RWTF	1,827,336	2,013,334	(185,998)	-	185,998	-	-		-	-	-
Lynchburg	326,971	219,452	107,519	-	-	-	107,519		96,767	-	10,752
MeadWestvaco	118,320	97,991	20,329	-	-	-	20,329		20,329	-	-
MSA-Lexington	16,446	8,223	8,223	-	-	-	8,223		8,223	-	-
Philip Morris	139,724	67,733	71,991	-	-	-	71,991		28,796	-	43,195
Richmond	1,096,402	1,096,402	-	-	-	-	-		-	-	-
RWSA-Moores Creek	167,201	104,965	62,236	-	-	-	62,236		62,236	-	-
South Central WWA	350,239	558,822	(208,583)	-	-	-	(208,583)		-	(208,583)	-
Tyson Foods-Glen Allen	19,552	18,273	1,279	-	-	-	1,279		-	-	1,279
LOWER JAMES BASIN	6,000,000	5,388,752	611,248	-	-	-	611,248	No Sale	No Sale	No Sale	611,248
HRSD-Army Base	610,000	860,961	(250,961)	250,961	-	-	-		-	-	-
HRSD-Boat Harbor	740,000	1,100,278	(360,278)	360,278	-	-	-		-	-	-
HRSD-Ches/Eliz	1,100,000	1,215,864	(115,864)	115,864	-	-	-		-	-	-
HRSD-James River	1,250,000	501,772	748,228	(748,228)	-	-	-		-	-	-
HRSD-Nansemond	750,000	443,521	306,479	(72,333)	-	-	234,146		-	-	234,146
HRSD-VIP	750,000	843,458	(93,458)	93,458	-	-	-		-	-	-
HRSD-Williamsburg	800,000	422,898	377,102	-	-	-	377,102		-	-	377,102

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

**** Expected Class B Credits are estimates only. Actual Class B Credits—and the resulting Class B sales price—will vary from estimates based on actual Delivered Loads in the Compliance Year.**

JAMES Basin: Nitrogen Credit Ledger

Compliance Year:	2015	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** (expected)		
								PRICE: \$	2.18	\$	3.05	\$	0.54
UPPER JAMES BASIN	7,680,599	7,413,075	267,524	-	-	(4,934)	262,590		406,593	(323,526)	179,523		
Alleghany Co-L. Jackson	19,187	10,507	8,680	-	-	(4,934)	3,746		-	-	3,746		
Alleghany Co-Low Moor	2,741	2,120	621	-	-	-	621		-	-	621		
Amherst (Town)	6,688	4,463	2,225	-	-	-	2,225		1,113	-	1,112		
Aqua Virginia-L. Monticello	11,091	9,252	1,839	-	-	-	1,839		-	-	1,839		
Babcock & Wilcox, N.O.G.	114,070	114,065	5	-	-	-	5		-	-	5		
Buena Vista	12,335	15,843	(3,508)	-	-	-	(3,508)		-	(3,508)	-		
Chesterfield-Falling Cr.	153,801	169,181	(15,380)	15,380	-	-	-		-	-	-		
Chesterfield-Proctors Cr.	411,151	341,544	69,607	(15,380)	-	-	54,227		-	-	54,227		
Covington	16,446	21,380	(4,934)	-	-	-	(4,934)		-	(4,934)	-		
Crewe	3,472	1,033	2,439	-	-	-	2,439		2,439	-	-		
Dominion-Chesterfield	352,036	344,955	7,081	-	-	-	7,081		-	-	7,081		
DuPont-Spruance	201,080	265,760	(64,680)	-	-	-	(64,680)		-	(64,680)	-		
Georgia-Pacific	36,747	30,493	6,254	-	-	-	6,254		3,127	-	3,127		
Greif Packaging	44,680	44,680	-	-	-	-	-		-	-	-		
Henrico Co	1,142,085	915,541	226,544	-	-	-	226,544		192,562	-	33,982		
Honeywell-Hopewell	1,090,798	837,529	253,269	-	(233,899)	-	19,370		-	-	19,370		
Hopewell RWTF	1,827,336	2,061,235	(233,899)	-	233,899	-	-		-	-	-		
Lynchburg	326,971	227,579	99,392	-	-	-	99,392		89,453	-	9,939		
MeadWestvaco	118,320	97,991	20,329	-	-	-	20,329		20,329	-	-		
MSA-Lexington	16,446	8,607	7,839	-	-	-	7,839		7,839	-	-		
Philip Morris	139,724	67,733	71,991	-	-	-	71,991		28,796	-	43,195		
Richmond	1,096,402	1,096,402	-	-	-	-	-		-	-	-		
RWSA-Moores Creek	167,201	106,266	60,935	-	-	-	60,935		60,935	-	-		
South Central WWA	350,239	600,643	(250,404)	-	-	-	(250,404)		-	(250,404)	-		
Tyson Foods-Glen Allen	19,552	18,273	1,279	-	-	-	1,279		-	-	1,279		
								PRICE:	No Sale	No Sale	No Sale		
LOWER JAMES BASIN	6,000,000	4,734,867	1,265,133	-	-	-	1,265,133		-	-	1,265,133		
HRSD-Army Base	610,000	172,268	437,732	-	-	-	437,732		-	-	437,732		
HRSD-Boat Harbor	740,000	1,104,646	(364,646)	364,646	-	-	-		-	-	-		
HRSD-Ches/Eliz	1,100,000	1,224,022	(124,022)	124,022	-	-	-		-	-	-		
HRSD-James River	1,250,000	505,024	744,976	(584,072)	-	-	160,904		-	-	160,904		
HRSD-Nansemond	750,000	452,462	297,538	-	-	-	297,538		-	-	297,538		
HRSD-VIP	750,000	845,404	(95,404)	95,404	-	-	-		-	-	-		
HRSD-Williamsburg	800,000	431,041	368,959	-	-	-	368,959		-	-	368,959		

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

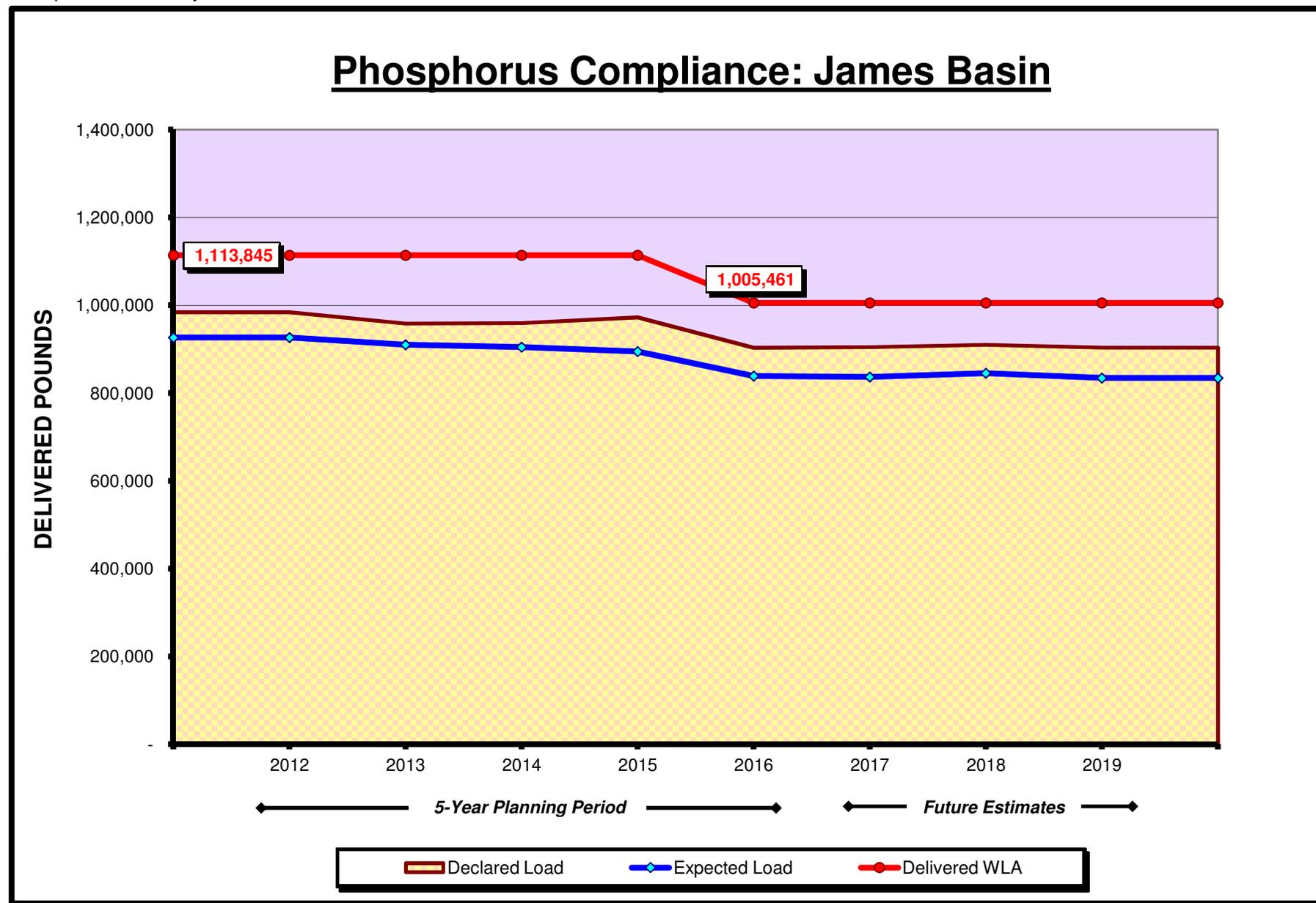
** Expected Class B Credits are estimates only. Actual Class B Credits—and the resulting Class B sales price—will vary from estimates based on actual Delivered Loads in the Compliance Year.

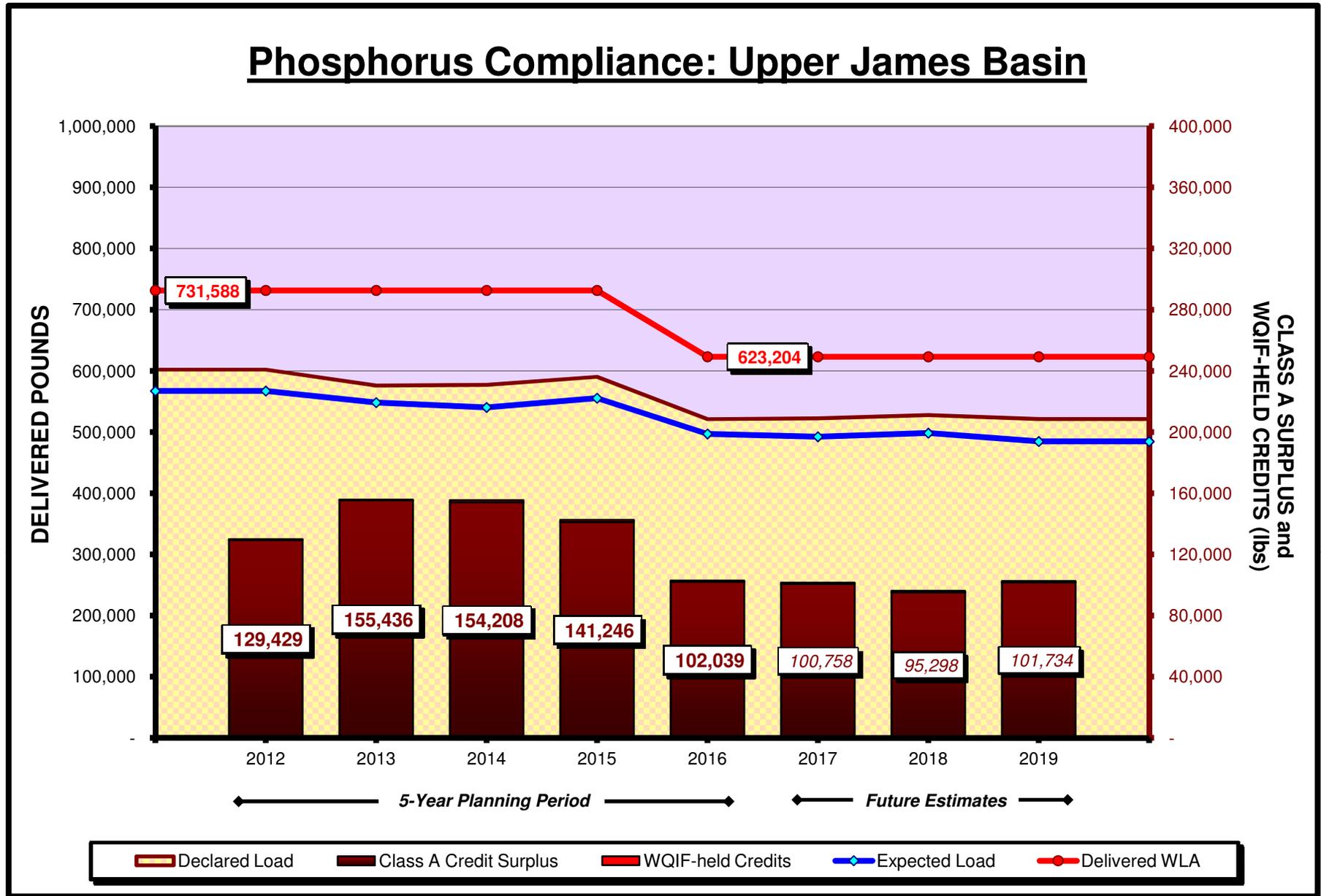
JAMES Basin: Nitrogen Credit Ledger

Compliance Year:	2016	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** (expected)
UPPER JAMES BASIN	7,675,519	7,443,634	231,885	-	-	(4,276)	227,609	\$ 3.36	\$ 3.50	\$ 0.54	
Alleghany Co-L. Jackson	16,629	9,265	7,364	-	-	(4,276)	3,088		-	-	3,088
Alleghany Co-Low Moor	2,376	1,964	412	-	-	-	412		-	-	412
Amherst (Town)	3,728	2,246	1,482	-	-	-	1,482		741	-	741
Aqua Virginia-L. Monticello	12,182	41,210	(29,028)	-	-	-	(29,028)		-	(29,028)	-
Babcock & Wilcox, N.O.G.	121,550	121,544	6	-	-	-	6		-	-	6
Buena Vista	23,024	29,574	(6,550)	-	-	-	(6,550)		-	(6,550)	-
Chesterfield-Falling Cr.	153,801	169,181	(15,380)	15,380	-	-	-		-	-	-
Chesterfield-Proctors Cr.	411,151	354,442	56,709	(15,380)	-	-	41,329		-	-	41,329
Covington	11,512	14,966	(3,454)	-	-	-	(3,454)		-	(3,454)	-
Crewe	2,650	755	1,895	-	-	-	1,895		1,895	-	-
Dominion-Chesterfield	352,036	344,955	7,081	-	-	-	7,081		-	-	7,081
DuPont-Spruance	201,080	271,824	(70,744)	-	-	-	(70,744)		-	(70,744)	-
Georgia-Pacific	73,493	61,585	11,908	-	-	-	11,908		5,954	-	5,954
Greif Packaging	47,610	47,610	-	-	-	-	-		-	-	-
Henrico Co	1,142,085	943,000	199,085	-	-	-	199,085		169,222	-	29,863
Honeywell-Hopewell	1,090,798	913,668	177,130	-	(69,500)	-	107,630		-	-	107,630
Hopewell RWTF	1,827,336	1,896,836	(69,500)	-	69,500	-	-		-	-	-
Lynchburg	348,412	251,164	97,248	-	-	-	97,248		87,523	-	9,725
MeadWestvaco	43,384	35,930	7,454	-	-	-	7,454		7,454	-	-
MSA-Lexington	17,542	9,648	7,894	-	-	-	7,894		3,947	-	3,947
Philip Morris	139,724	67,733	71,991	-	-	-	71,991		28,796	-	43,195
Richmond	1,096,402	1,096,402	-	-	-	-	-		-	-	-
RWSA-Moores Creek	183,647	121,411	62,236	-	-	-	62,236		62,236	-	-
South Central WWA	350,239	633,593	(283,354)	-	-	-	(283,354)		-	(283,354)	-
Tyson Foods-Glen Allen	3,128	3,128	-	-	-	-	-		-	-	-
								PRICE:	No Sale	No Sale	No Sale
LOWER JAMES BASIN	6,000,000	4,770,185	1,229,815	-	-	-	1,229,815				
HRSD-Army Base	610,000	172,344	437,656	-	-	-	437,656		-	-	437,656
HRSD-Boat Harbor	740,000	1,109,031	(369,031)	369,031	-	-	-		-	-	-
HRSD-Ches/Eliz	1,100,000	1,232,234	(132,234)	132,234	-	-	-		-	-	-
HRSD-James River	1,250,000	508,297	741,703	(598,620)	-	-	143,083		-	-	143,083
HRSD-Nansemond	750,000	461,582	288,418	-	-	-	288,418		-	-	288,418
HRSD-VIP	750,000	847,355	(97,355)	97,355	-	-	-		-	-	-
HRSD-Williamsburg	800,000	439,342	360,658	-	-	-	360,658		-	-	360,658

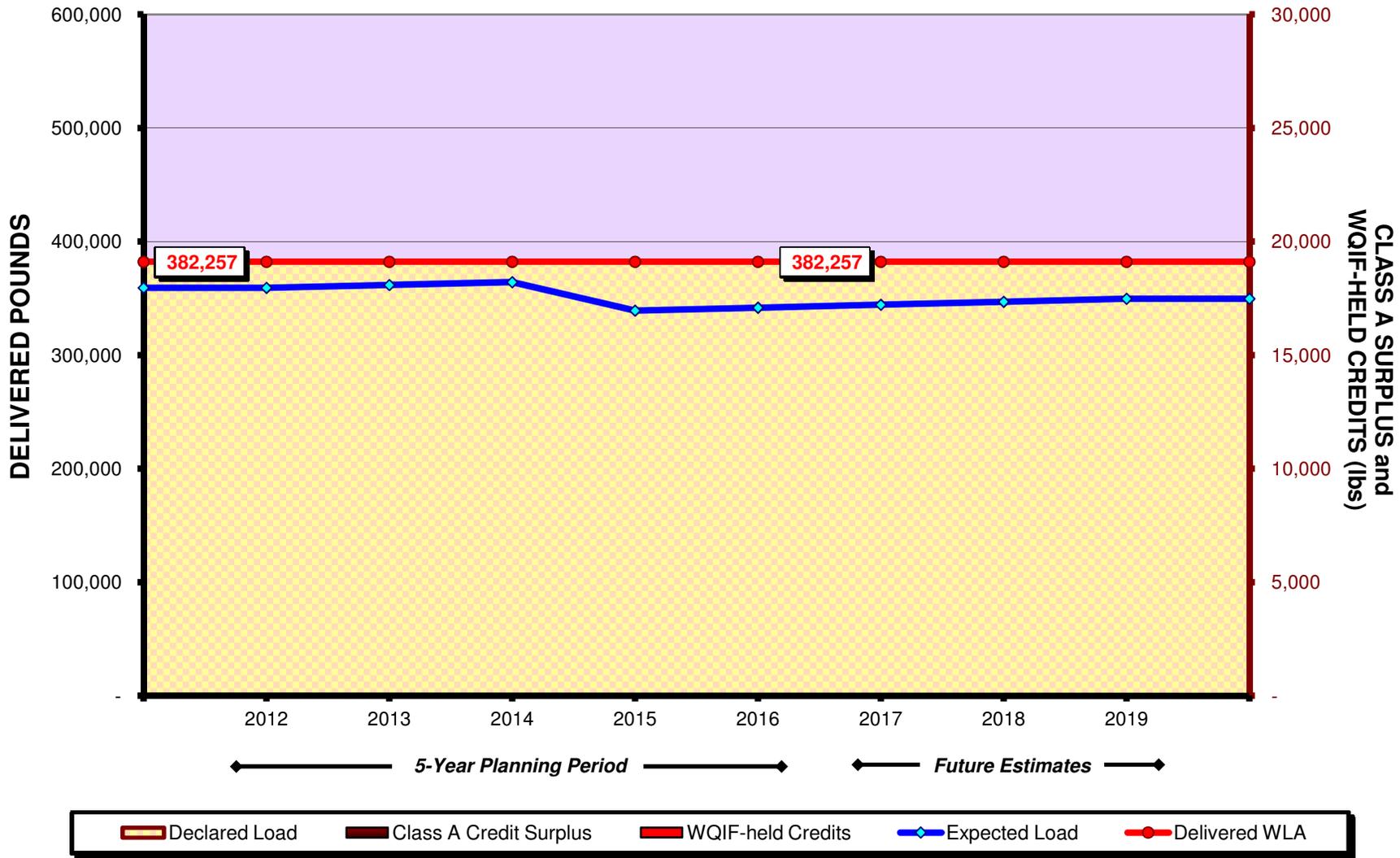
*** For this Compliance Year, 6% of all Class A Credit Purchases are expected to be satisfied using Class B Credits.**

**** Expected Class B Credits are estimates only. Actual Class B Credits—and the resulting Class B sales price—will vary from estimates based on actual Delivered Loads in the Compliance Year.**





Phosphorus Compliance: Lower James Basin



JAMES Basin: Phosphorus Credit Ledger

Compliance Year:	2012	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** (expected)
								PRICE:	\$ 0.87	\$ 4.00	\$ 0.48
UPPER JAMES BASIN	731,588	567,160	164,428	-	-	(604)	163,824		170,813	(41,384)	34,395
Alleghany Co-L. Jackson	5,330	2,129	3,201	(2,597)	-	(604)	-		-	-	-
Alleghany Co-Low Moor	761	3,358	(2,597)	2,597	-	-	-		-	-	-
Amherst (Town)	914	2,611	(1,697)	-	-	-	(1,697)		-	(1,697)	-
Aqua Virginia-L. Monticello	1,515	10,213	(8,698)	-	-	-	(8,698)		-	(8,698)	-
Babcock & Wilcox, N.O.G.	1,523	592	931	-	-	-	931		-	-	931
Buena Vista	3,426	14,000	(10,574)	-	-	-	(10,574)		-	(11,899)	1,325
Chesterfield-Falling Cr.	15,380	18,456	(3,076)	3,076	-	-	-		-	-	-
Chesterfield-Proctors Cr.	41,115	33,038	8,077	(3,076)	(3,580)	-	1,421		-	-	1,421
Covington	4,568	9,319	(4,751)	-	-	-	(4,751)		-	(4,751)	-
Crewe	327	10	317	-	-	-	317		317	-	-
Dominion-Chesterfield	210	3,790	(3,580)	-	3,580	-	-		-	-	-
DuPont-Spruance	7,816	12,284	(4,468)	-	-	-	(4,468)		-	(4,468)	-
Georgia-Pacific	49,658	34,811	14,847	-	-	-	14,847		7,424	-	7,423
Greif Packaging	29,694	13,218	16,476	-	-	-	16,476		16,476	-	-
Henrico Co	114,209	76,940	37,269	-	-	-	37,269		31,679	-	5,590
Honeywell-Hopewell	51,592	45,683	5,909	-	-	-	5,909		-	-	5,909
Hopewell RWTF	76,139	65,662	10,477	-	-	-	10,477		9,429	-	1,048
Lynchburg	33,501	32,359	1,142	-	-	-	1,142		1,028	-	114
MeadWestvaco	159,892	49,490	110,402	-	-	-	110,402		102,788	-	7,614
MSA-Lexington	4,568	1,224	3,344	-	-	-	3,344		1,672	-	1,672
Philip Morris	2,650	2,436	214	-	-	-	214		-	-	214
Richmond	68,525	68,525	-	-	-	-	-		-	-	-
RWSA-Moores Creek	22,842	21,815	1,027	-	-	-	1,027		-	-	1,027
South Central WWA	35,024	44,895	(9,871)	-	-	-	(9,871)		-	(9,871)	-
Tyson Foods-Glen Allen	409	302	107	-	-	-	107		-	-	107
								PRICE:	No Sale	No Sale	No Sale
LOWER JAMES BASIN	382,257	359,297	22,960	-	(9,011)	-	13,949		-	-	13,949
HRSD-Army Base	38,332	51,612	(13,280)	13,280	-	-	-		-	-	-
HRSD-Boat Harbor	53,239	66,832	(13,593)	13,593	-	-	-		-	-	-
HRSD-Ches/Eliz	51,110	67,908	(16,798)	16,798	-	-	-		-	-	-
HRSD-James River	42,591	41,278	1,313	(1,313)	-	-	-		-	-	-
HRSD-Nansemond	63,887	37,290	26,597	(23,519)	-	-	3,078		-	-	3,078
HRSD-VIP	85,183	65,301	19,882	-	(9,011)	-	10,871		-	-	10,871
HRSD-Williamsburg	47,915	29,076	18,839	(18,839)	-	-	-		-	-	-

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

**** Expected Class B Credits are estimates only. Actual Class B Credits—and the resulting Class B sales price—will vary from estimates based on actual Delivered Loads in the Compliance Year.**

JAMES Basin: Phosphorus Credit Ledger

Compliance Year:	2013	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** (expected)		
UPPER JAMES BASIN	731,588	548,206	183,382	-	-	(419)	182,963	\$ 0.76	\$ 4.30	\$ 0.59	193,563	(38,127)	27,527
Alleghany Co-L. Jackson	5,330	2,120	3,210	(2,791)	-	(419)	-		-	-	-	-	-
Alleghany Co-Low Moor	761	3,552	(2,791)	2,791	-	-	-		-	-	-	-	-
Amherst (Town)	914	2,673	(1,759)	-	-	-	(1,759)		-	(1,759)	-	-	-
Aqua Virginia-L. Monticello	1,515	5,713	(4,198)	-	-	-	(4,198)		-	(4,198)	-	-	-
Babcock & Wilcox, N.O.G.	1,523	592	931	-	-	-	931		-	-	-	-	931
Buena Vista	3,426	14,000	(10,574)	-	-	-	(10,574)		-	(10,574)	-	-	-
Chesterfield-Falling Cr.	15,380	18,456	(3,076)	3,076	-	-	-		-	-	-	-	-
Chesterfield-Proctors Cr.	41,115	34,445	6,670	(3,076)	-	-	3,594		-	-	-	-	3,594
Covington	4,568	9,319	(4,751)	-	-	-	(4,751)		-	(4,751)	-	-	-
Crewe	327	10	317	-	-	-	317		317	-	-	-	-
Dominion-Chesterfield	210	210	-	-	-	-	-		-	-	-	-	-
DuPont-Spruance	7,816	12,649	(4,833)	-	-	-	(4,833)		-	(4,833)	-	-	-
Georgia-Pacific	49,658	30,379	19,279	-	-	-	19,279		11,567	-	-	-	7,712
Greif Packaging	29,694	11,878	17,816	-	-	-	17,816		15,144	-	-	-	2,672
Henrico Co	114,209	79,256	34,953	-	-	-	34,953		29,710	-	-	-	5,243
Honeywell-Hopewell	51,592	45,683	5,909	-	-	-	5,909		-	-	-	-	5,909
Hopewell RWTF	76,139	66,515	9,624	-	-	-	9,624		8,662	-	-	-	962
Lynchburg	33,501	31,674	1,827	-	-	-	1,827		1,644	-	-	-	183
MeadWestvaco	159,892	49,490	110,402	-	-	-	110,402		110,402	-	-	-	-
MSA-Lexington	4,568	1,096	3,472	-	-	-	3,472		3,472	-	-	-	-
Philip Morris	2,650	2,436	214	-	-	-	214		-	-	-	-	214
Richmond	68,525	68,525	-	-	-	-	-		-	-	-	-	-
RWSA-Moores Creek	22,842	10,197	12,645	-	-	-	12,645		12,645	-	-	-	-
South Central WWA	35,024	47,036	(12,012)	-	-	-	(12,012)		-	(12,012)	-	-	-
Tyson Foods-Glen Allen	409	302	107	-	-	-	107		-	-	-	-	107
LOWER JAMES BASIN	382,257	361,770	20,487	-	(9,011)	-	11,476	No Sale	No Sale	No Sale	-	-	11,476
HRSD-Army Base	38,332	51,635	(13,303)	13,303	-	-	-		-	-	-	-	-
HRSD-Boat Harbor	53,239	67,098	(13,859)	13,859	-	-	-		-	-	-	-	-
HRSD-Ches/Eliz	51,110	68,364	(17,254)	17,254	-	-	-		-	-	-	-	-
HRSD-James River	42,591	41,545	1,046	(1,046)	-	-	-		-	-	-	-	-
HRSD-Nansemond	63,887	38,041	25,846	(25,091)	-	-	755		-	-	-	-	755
HRSD-VIP	85,183	65,451	19,732	-	(9,011)	-	10,721		-	-	-	-	10,721
HRSD-Williamsburg	47,915	29,636	18,279	(18,279)	-	-	-		-	-	-	-	-

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

**** Expected Class B Credits are estimates only. Actual Class B Credits—and the resulting Class B sales price—will vary from estimates based on actual Delivered Loads in the Compliance Year.**

JAMES Basin: Phosphorus Credit Ledger

Compliance Year:	2014	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** (expected)		
UPPER JAMES BASIN	731,588	540,398	191,190	-	-	(1,371)	189,819	\$ 0.79	\$ 4.60	\$ 0.47	190,684	(36,476)	35,611
Alleghany Co-L. Jackson	5,330	2,111	3,219	(61)	-	(1,371)	1,787		-	-	1,787		
Alleghany Co-Low Moor	761	822	(61)	61	-	-	-		-	-	-		
Amherst (Town)	914	2,801	(1,887)	-	-	-	(1,887)		-	(1,887)	-		
Aqua Virginia-L. Monticello	1,515	1,233	282	-	-	-	282		-	-	282		
Babcock & Wilcox, N.O.G.	1,523	477	1,046	-	-	-	1,046		-	-	1,046		
Buena Vista	3,426	14,000	(10,574)	-	-	-	(10,574)		-	(10,574)	-		
Chesterfield-Falling Cr.	15,380	18,456	(3,076)	3,076	-	-	-		-	-	-		
Chesterfield-Proctors Cr.	41,115	35,852	5,263	(3,076)	-	-	2,187		-	-	2,187		
Covington	4,568	9,319	(4,751)	-	-	-	(4,751)		-	(4,751)	-		
Crewe	327	26	301	-	-	-	301		301	-	-		
Dominion-Chesterfield	210	210	-	-	-	-	-		-	-	-		
DuPont-Spruance	7,816	12,928	(5,112)	-	-	-	(5,112)		-	(5,112)	-		
Georgia-Pacific	49,658	30,684	18,974	-	-	-	18,974		13,282	-	5,692		
Greif Packaging	29,694	9,898	19,796	-	-	-	19,796		14,847	-	4,949		
Henrico Co	114,209	81,627	32,582	-	-	-	32,582		27,695	-	4,887		
Honeywell-Hopewell	51,592	38,070	13,522	-	-	-	13,522		-	-	13,522		
Hopewell RWTF	76,139	67,368	8,771	-	-	-	8,771		7,894	-	877		
Lynchburg	33,501	32,892	609	-	-	-	609		548	-	61		
MeadWestvaco	159,892	49,490	110,402	-	-	-	110,402		110,402	-	-		
MSA-Lexington	4,568	1,371	3,197	-	-	-	3,197		3,197	-	-		
Philip Morris	2,650	2,436	214	-	-	-	214		-	-	214		
Richmond	68,525	68,525	-	-	-	-	-		-	-	-		
RWSA-Moores Creek	22,842	10,324	12,518	-	-	-	12,518		12,518	-	-		
South Central WWA	35,024	49,176	(14,152)	-	-	-	(14,152)		-	(14,152)	-		
Tyson Foods-Glen Allen	409	302	107	-	-	-	107		-	-	107		
LOWER JAMES BASIN	382,257	364,276	17,981	-	(9,011)	-	8,970	No Sale	No Sale	No Sale	-	-	8,970
HRSD-Army Base	38,332	51,658	(13,326)	13,326	-	-	-		-	-	-		
HRSD-Boat Harbor	53,239	67,364	(14,125)	14,125	-	-	-		-	-	-		
HRSD-Ches/Eliz	51,110	68,823	(17,713)	17,713	-	-	-		-	-	-		
HRSD-James River	42,591	41,814	777	(777)	-	-	-		-	-	-		
HRSD-Nansemond	63,887	38,808	25,079	(25,079)	-	-	-		-	-	-		
HRSD-VIP	85,183	65,602	19,581	(1,600)	(9,011)	-	8,970		-	-	8,970		
HRSD-Williamsburg	47,915	30,207	17,708	(17,708)	-	-	-		-	-	-		

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

**** Expected Class B Credits are estimates only. Actual Class B Credits—and the resulting Class B sales price—will vary from estimates based on actual Delivered Loads in the Compliance Year.**

JAMES Basin: Phosphorus Credit Ledger

Compliance Year:	2015	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** (expected)			
								\$	0.96	\$	4.93	\$	0.58	
UPPER JAMES BASIN	731,588	555,426	176,162	-	-	(1,371)	174,791					180,715	(39,469)	33,545
Alleghany Co-L. Jackson	5,330	2,101	3,229	(122)	-	(1,371)	1,736		-	-	1,736			
Alleghany Co-Low Moor	761	883	(122)	122	-	-	-		-	-	-			
Amherst (Town)	914	2,801	(1,887)	-	-	-	(1,887)		-	(1,887)	-			
Aqua Virginia-L. Monticello	1,515	1,264	251	-	-	-	251		-	-	251			
Babcock & Wilcox, N.O.G.	1,523	477	1,046	-	-	-	1,046		-	-	1,046			
Buena Vista	3,426	14,000	(10,574)	-	-	-	(10,574)		-	(10,574)	-			
Chesterfield-Falling Cr.	15,380	18,456	(3,076)	3,076	-	-	-		-	-	-			
Chesterfield-Proctors Cr.	41,115	37,259	3,856	(3,076)	-	-	780		-	-	780			
Covington	4,568	9,319	(4,751)	-	-	-	(4,751)		-	(4,751)	-			
Crewe	327	22	305	-	-	-	305		305	-	-			
Dominion-Chesterfield	210	210	-	-	-	-	-		-	-	-			
DuPont-Spruance	7,816	13,780	(5,964)	-	-	-	(5,964)		-	(5,964)	-			
Georgia-Pacific	49,658	24,791	24,867	-	-	-	24,867		17,407	-	7,460			
Greif Packaging	29,694	23,755	5,939	-	-	-	5,939		2,970	-	2,969			
Henrico Co	114,209	84,080	30,129	-	-	-	30,129		25,610	-	4,519			
Honeywell-Hopewell	51,592	38,070	13,522	-	-	-	13,522		-	-	13,522			
Hopewell RWTF	76,139	68,221	7,918	-	-	-	7,918		7,126	-	792			
Lynchburg	33,501	31,978	1,523	-	-	-	1,523		1,371	-	152			
MeadWestvaco	159,892	49,490	110,402	-	-	-	110,402		110,402	-	-			
MSA-Lexington	4,568	1,434	3,134	-	-	-	3,134		3,134	-	-			
Philip Morris	2,650	2,436	214	-	-	-	214		-	-	214			
Richmond	68,525	68,525	-	-	-	-	-		-	-	-			
RWSA-Moores Creek	22,842	10,452	12,390	-	-	-	12,390		12,390	-	-			
South Central WWA	35,024	51,317	(16,293)	-	-	-	(16,293)		-	(16,293)	-			
Tyson Foods-Glen Allen	409	305	104	-	-	-	104		-	-	104			
								PRICE:	No Sale	No Sale	No Sale			
LOWER JAMES BASIN	382,257	339,251	43,006	-	(9,011)	-	33,995					-	-	33,995
HRSD-Army Base	38,332	24,118	14,214	(14,214)	-	-	-		-	-	-			
HRSD-Boat Harbor	53,239	67,631	(14,392)	14,392	-	-	-		-	-	-			
HRSD-Ches/Eliz	51,110	69,284	(18,174)	18,174	-	-	-		-	-	-			
HRSD-James River	42,591	42,085	506	(506)	-	-	-		-	-	-			
HRSD-Nansemond	63,887	39,590	24,297	(720)	-	-	23,577		-	-	23,577			
HRSD-VIP	85,183	65,754	19,429	-	(9,011)	-	10,418		-	-	10,418			
HRSD-Williamsburg	47,915	30,789	17,126	(17,126)	-	-	-		-	-	-			

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

**** Expected Class B Credits are estimates only. Actual Class B Credits—and the resulting Class B sales price—will vary from estimates based on actual Delivered Loads in the Compliance Year.**

JAMES Basin: Phosphorus Credit Ledger

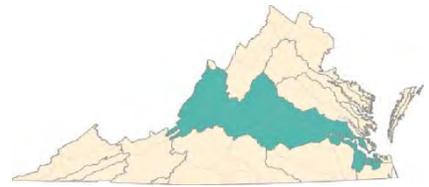
Compliance Year:		2016		Credit Forecasts		Preliminary Use of Credits			Credit Exchange (Pounds)			
Facility Name	Delivered WLA	Expected Load	Expected Credits	In-Bubble Exchange	Private Exchange	WQIF-Held Credits	Expected Net Credits		Class A Sales	Class A* Purchases	Class B** (expected)	
								PRICE:	\$ 1.31	\$ 5.27	\$ 0.88	
UPPER JAMES BASIN	623,204	497,051	126,153	-	-	(904)	125,249		141,065	(39,026)	23,210	
Alleghany Co-L. Jackson	3,517	1,411	2,106	(121)	-	(904)	1,081		-	-	1,081	
Alleghany Co-Low Moor	502	623	(121)	121	-	-	-		-	-	-	
Amherst (Town)	603	1,044	(441)	-	-	-	(441)		-	(441)	-	
Aqua Virginia-L. Monticello	1,000	5,819	(4,819)	-	-	-	(4,819)		-	(4,819)	-	
Babcock & Wilcox, N.O.G.	1,005	315	690	-	-	-	690		-	-	690	
Buena Vista	2,261	9,240	(6,979)	-	-	-	(6,979)		-	(6,979)	-	
Chesterfield-Falling Cr.	15,380	16,918	(1,538)	1,538	-	-	-		-	-	-	
Chesterfield-Proctors Cr.	41,115	38,666	2,449	(1,538)	-	-	911		-	-	911	
Covington	3,015	6,151	(3,136)	-	-	-	(3,136)		-	(3,136)	-	
Crewe	350	25	325	-	-	-	325		325	-	-	
Dominion-Chesterfield	210	210	-	-	-	-	-		-	-	-	
DuPont-Spruance	7,816	13,891	(6,075)	-	-	-	(6,075)		-	(6,075)	-	
Georgia-Pacific	32,774	16,523	16,251	-	-	-	16,251		16,251	-	-	
Greif Packaging	19,598	13,065	6,533	-	-	-	6,533		6,533	-	-	
Henrico Co	114,209	86,602	27,607	-	-	-	27,607		23,466	-	4,141	
Honeywell-Hopewell	51,592	38,070	13,522	-	-	-	13,522		-	-	13,522	
Hopewell RWTF	76,139	63,530	12,609	-	-	-	12,609		11,348	-	1,261	
Lynchburg	22,111	20,402	1,709	-	-	-	1,709		1,367	-	342	
MeadWestvaco	105,529	32,664	72,865	-	-	-	72,865		72,865	-	-	
MSA-Lexington	3,015	995	2,020	-	-	-	2,020		1,010	-	1,010	
Philip Morris	2,650	2,436	214	-	-	-	214		-	-	214	
Richmond	68,525	68,525	-	-	-	-	-		-	-	-	
RWSA-Moores Creek	15,076	7,176	7,900	-	-	-	7,900		7,900	-	-	
South Central WWA	35,024	52,600	(17,576)	-	-	-	(17,576)		-	(17,576)	-	
Tyson Foods-Glen Allen	188	150	38	-	-	-	38		-	-	38	
								PRICE:	No Sale	No Sale	No Sale	
LOWER JAMES BASIN	382,257	341,810	40,447	-	-	-	40,447		-	-	40,447	
HRSD-Army Base	38,332	24,128	14,204	(14,204)	-	-	-		-	-	-	
HRSD-Boat Harbor	53,239	67,900	(14,661)	14,661	-	-	-		-	-	-	
HRSD-Ches/Eliz	51,110	69,749	(18,639)	18,639	-	-	-		-	-	-	
HRSD-James River	42,591	42,358	233	(233)	-	-	-		-	-	-	
HRSD-Nansemond	63,887	40,388	23,499	(2,330)	-	-	21,169		-	-	21,169	
HRSD-VIP	85,183	65,905	19,278	-	-	-	19,278		-	-	19,278	
HRSD-Williamsburg	47,915	31,382	16,533	(16,533)	-	-	-		-	-	-	

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

** Expected Class B Credits are estimates only. Actual Class B Credits—and the resulting Class B sales price—will vary from estimates based on actual Delivered Loads in the Compliance Year.

James River Basin

Supplemental Information for Individual Facilities



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.

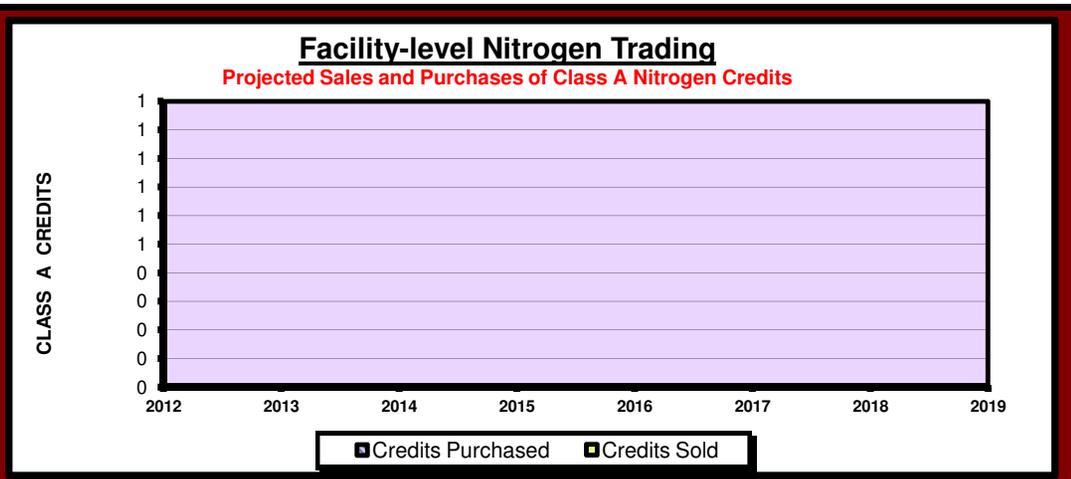
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply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

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
Lower Jackson	-	-	-	-	-	-	-	-
Low Moor	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Lower Jackson	3,609	3,654	3,700	3,746	3,088	2,930	2,772	2,692
Low Moor	950	847	767	621	412	286	159	32
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	4,559	4,501	4,467	4,367	3,500	3,216	2,931	2,724
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
<i>Expected Class B Credits</i>	4,559	4,501	4,467	4,367	3,500	3,216	2,931	2,724
<i>WQIF-Held Credits</i>	4,934	4,934	4,934	4,934	4,276	4,276	4,276	4,276

PHOSPHORUS Credits	Exchange 5-year Planning Period					Future Projections		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
Lower Jackson	(2,597)	(2,791)	(61)	(122)	(121)	(161)	(202)	(242)
Low Moor	2,597	2,791	61	122	121	161	202	242
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Lower Jackson	-	-	1,787	1,736	1,081	1,017	952	900
Low Moor	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	-	-	1,787	1,736	1,081	1,017	952	900
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
<i>Expected Class B Credits</i>	0	0	1,787	1,736	1,081	1,017	952	900
<i>WQIF-Held Credits</i>	604	419	1,371	1,371	904	904	904	904

NITROGEN FACILITY SUMMARY

Allegheny Co-L. Jackson
 UPPER JAMES Trading Basin

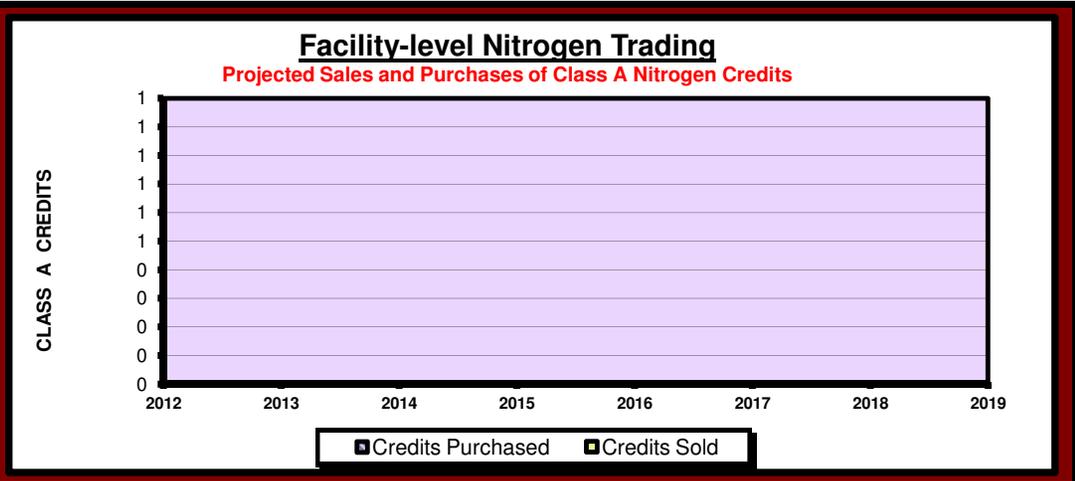


Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	2.33	2.32	2.31	2.30	2.34	2.38	2.42	2.44
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)	35,481	35,328	35,176	35,024	35,633	36,242	36,851	37,156
Delivery Factor	0.30	0.30	0.30	0.30	0.26	0.26	0.26	0.26
Expected Load	10,644	10,599	10,553	10,507	9,265	9,423	9,581	9,661
Delivered WLA	19,187	19,187	19,187	19,187	16,629	16,629	16,629	16,629
Expected Credits (delivered)	8,543	8,588	8,634	8,680	7,364	7,206	7,048	6,968
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	(4,934)	(4,934)	(4,934)	(4,934)	(4,276)	(4,276)	(4,276)	(4,276)
Expected Net Credits	3,609	3,654	3,700	3,746	3,088	2,930	2,772	2,692
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	3,609	3,654	3,700	3,746	3,088	2,930	2,772	2,692

NITROGEN FACILITY SUMMARY

Allegheny Co-Low Moor
UPPER JAMES Trading Basin



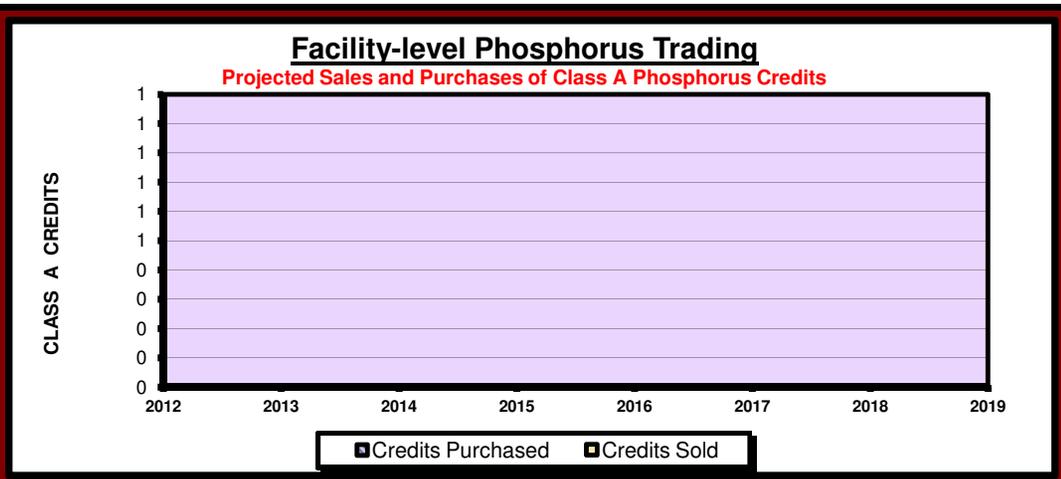
Loading & Credit Summary

Design Flow (mgd)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Projected Flow (mgd)	0.25	0.26	0.27	0.29	0.31	0.33	0.35	0.37
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)	5,969	6,314	6,578	7,066	7,553	8,040	8,528	9,015
Delivery Factor	0.30	0.30	0.30	0.30	0.26	0.26	0.26	0.26
Expected Load	1,791	1,894	1,974	2,120	1,964	2,090	2,217	2,344
Delivered WLA	2,741	2,741	2,741	2,741	2,376	2,376	2,376	2,376
Expected Credits (delivered)	950	847	767	621	412	286	159	32
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	950	847	767	621	412	286	159	32
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	950	847	767	621	412	286	159	32

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
0.25	0.26	0.27	0.29	0.31	0.33	0.35	0.37
8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
5,969	6,314	6,578	7,066	7,553	8,040	8,528	9,015
0.30	0.30	0.30	0.30	0.26	0.26	0.26	0.26
1,791	1,894	1,974	2,120	1,964	2,090	2,217	2,344
2,741	2,741	2,741	2,741	2,376	2,376	2,376	2,376
950	847	767	621	412	286	159	32
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
950	847	767	621	412	286	159	32
0	0	0	0	0	0	0	0
950	847	767	621	412	286	159	32

PHOSPHORUS FACILITY SUMMARY

Allegheny Co-L. Jackson
UPPER JAMES Trading Basin

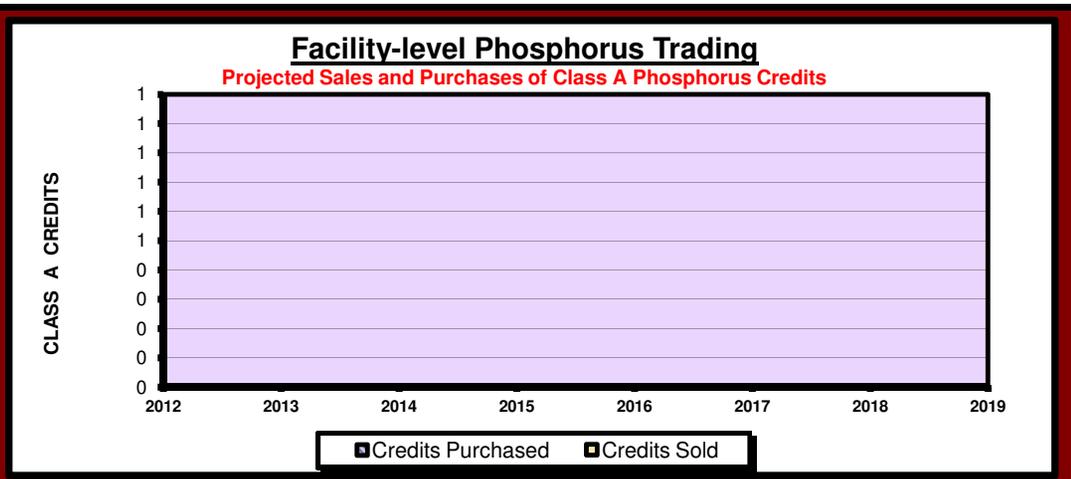


Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60
2.33	2.32	2.31	2.30	2.34	2.38	2.42	2.44
0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
2,129	2,120	2,111	2,101	2,138	2,175	2,211	2,229
1.00	1.00	1.00	1.00	0.66	0.66	0.66	0.66
2,129	2,120	2,111	2,101	1,411	1,435	1,459	1,471
5,330	5,330	5,330	5,330	3,517	3,517	3,517	3,517
3,201	3,210	3,219	3,229	2,106	2,082	2,058	2,046
(2,597)	(2,791)	(61)	(122)	(121)	(161)	(202)	(242)
0	0	0	0	0	0	0	0
(604)	(419)	(1,371)	(1,371)	(904)	(904)	(904)	(904)
0	0	1,787	1,736	1,081	1,017	952	900
0	0	0	0	0	0	0	0
0	0	1,787	1,736	1,081	1,017	952	900

PHOSPHORUS FACILITY SUMMARY

Allegheny Co-Low Moor
UPPER JAMES Trading Basin



Loading & Credit Summary

Design Flow (mgd)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Projected Flow (mgd)	0.25	0.26	0.27	0.29	0.31	0.33	0.35	0.37
Projected Avg. Annual Concentration (mg/L)	4.50	4.50	1.00	1.00	1.00	1.00	1.00	1.00
Discharged Load (end of pipe)	3,358	3,552	822	883	944	1,005	1,066	1,127
Delivery Factor	1.00	1.00	1.00	1.00	0.66	0.66	0.66	0.66
Expected Load	3,358	3,552	822	883	623	663	704	744
Delivered WLA	761	761	761	761	502	502	502	502
Expected Credits (delivered)	(2,597)	(2,791)	(61)	(122)	(121)	(161)	(202)	(242)
Transfers In (Out) within Owner Bubble	2,597	2,791	61	122	121	161	202	242
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							
Class A Credit Sales (Purchases)	0							
Expected Class B Credits	0							

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
0.25	0.26	0.27	0.29	0.31	0.33	0.35	0.37
4.50	4.50	1.00	1.00	1.00	1.00	1.00	1.00
3,358	3,552	822	883	944	1,005	1,066	1,127
1.00	1.00	1.00	1.00	0.66	0.66	0.66	0.66
3,358	3,552	822	883	623	663	704	744
761	761	761	761	502	502	502	502
(2,597)	(2,791)	(61)	(122)	(121)	(161)	(202)	(242)
2,597	2,791	61	122	121	161	202	242
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

Allegheny County - Additional Information

Under an Agreement dated September 18, 2007, the Town of Clifton Forge's Plant has been converted to a regional pump station and wastewater from that facility is pumped to the new regional Lower Jackson Plant owned and operated by Allegheny County. Flows from the Town of Clifton Forge's Plant ceased on October 8, 2011, the same day that the new regional Lower Jackson Plant began to discharge.

The County has applied to DEQ for aggregated mass load limits in accordance with Part I B 3 (Facility Consolidation) of the Watershed General Permit. The 2012 Annual Update assumes that this consolidation request will be granted, and the preceding nitrogen and phosphorus facility summaries for the regional Lower Jackson Plant reflect the following combined wasteload allocations for Compliance Year 2012:

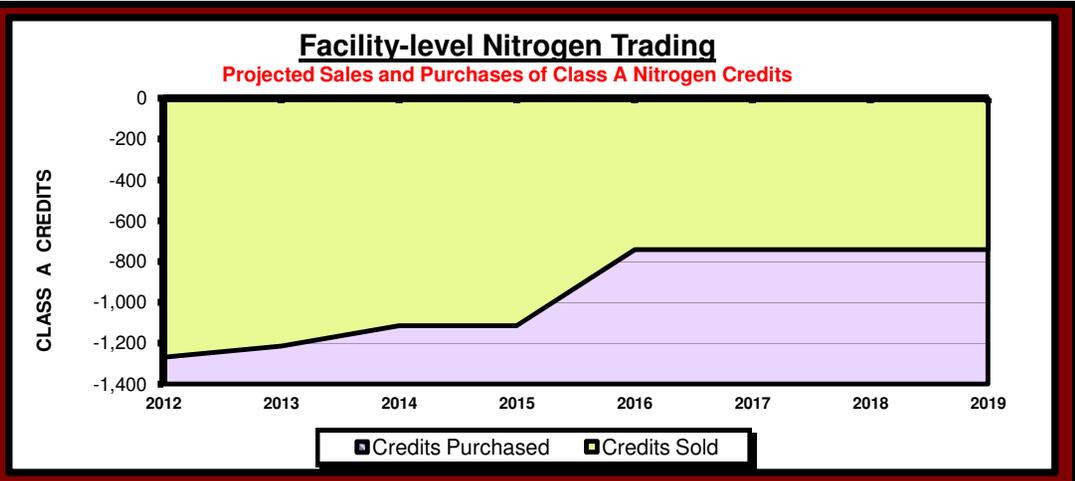
- TN: 8,223 (Lower Jackson Plant) + 10,964 (Clifton Forge) = 19,187 delivered pounds
- TP: 2,284 (Lower Jackson Plant) + 3,046 (Clifton Forge) = 5,330 delivered pounds

These consolidated wasteload allocations are based on a combined design flow of 3.5 mgd. The regional Lower Jackson Plant has been constructed and received a CTO for a design flow of 2.6 mgd. Accordingly, 4,934 Nitrogen Credits and 1,371 Phosphorus Credits are WQIF-Held in accordance with the Watershed General Permit.

In the event that the wasteload allocation consolidation is rejected, and the County were to require additional Credits for this or any other reason, as a Participant in The Exchange the County will have access to available Class B Credits as provided in the Nutrient Credit Services Agreement.

NITROGEN FACILITY SUMMARY

Amherst (Town)
UPPER JAMES Trading Basin

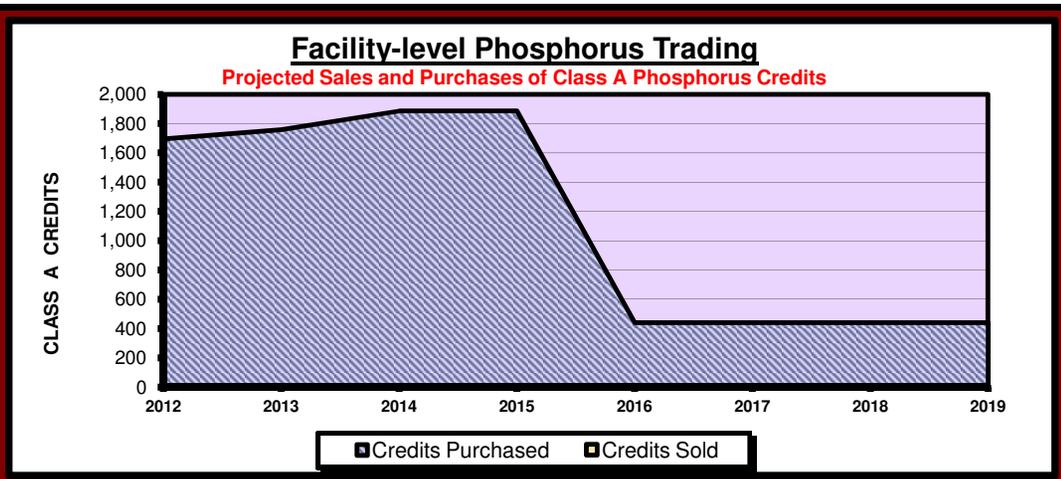


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Projected Flow (mgd)	0.41	0.42	0.44	0.44	0.44	0.44	0.44	0.44
Projected Avg. Annual Concentration (mg/L)	5.46	5.46	5.46	5.46	4.93	4.93	4.93	4.93
Discharged Load (end of pipe)	6,807	6,984	7,317	7,317	6,606	6,606	6,606	6,606
Delivery Factor	0.61	0.61	0.61	0.61	0.34	0.34	0.34	0.34
Expected Load	4,152	4,260	4,463	4,463	2,246	2,246	2,246	2,246
Delivered WLA	6,688	6,688	6,688	6,688	3,728	3,728	3,728	3,728
Expected Credits (delivered)	2,536	2,428	2,225	2,225	1,482	1,482	1,482	1,482
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	2,536	2,428	2,225	2,225	1,482	1,482	1,482	1,482
Class A Credit Sales (Purchases)	1,268	1,214	1,113	1,113	741	741	741	741
Expected Class B Credits	1,268	1,214	1,112	1,112	741	741	741	741

PHOSPHORUS FACILITY SUMMARY

Amherst (Town)
 UPPER JAMES Trading Basin



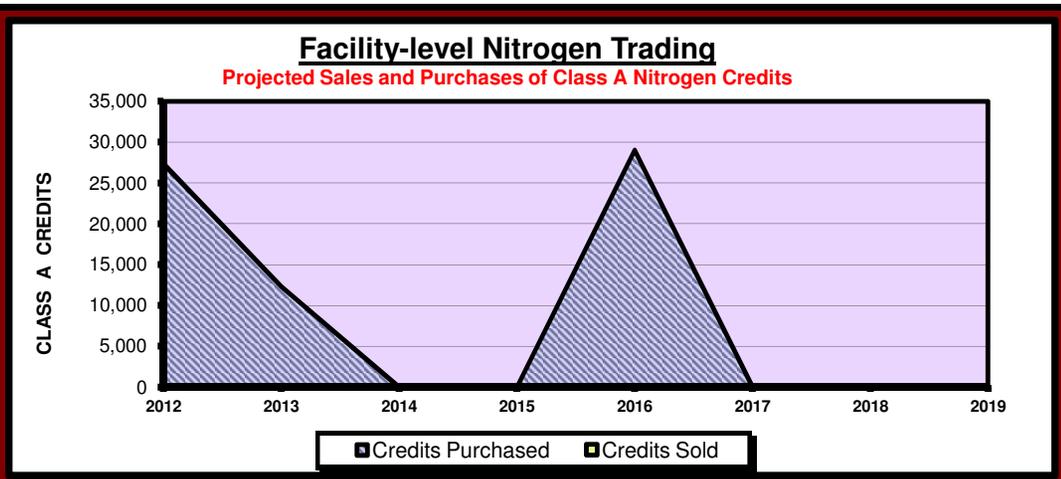
Loading & Credit Summary

Design Flow (mgd)	0.60
Projected Flow (mgd)	0.41
Projected Avg. Annual Concentration (mg/L)	2.09
Discharged Load (end of pipe)	2,611
Delivery Factor	1.00
Expected Load	2,611
Delivered WLA	914
Expected Credits (delivered)	(1,697)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(1,697)
Class A Credit Sales (Purchases)	(1,697)
Expected Class B Credits	0

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Projected Flow (mgd)	0.41	0.42	0.44	0.44	0.44	0.44	0.44	0.44
Projected Avg. Annual Concentration (mg/L)	2.09	2.09	2.09	2.09	1.18	1.18	1.18	1.18
Discharged Load (end of pipe)	2,611	2,673	2,801	2,801	1,581	1,581	1,581	1,581
Delivery Factor	1.00	1.00	1.00	1.00	0.66	0.66	0.66	0.66
Expected Load	2,611	2,673	2,801	2,801	1,044	1,044	1,044	1,044
Delivered WLA	914	914	914	914	603	603	603	603
Expected Credits (delivered)	(1,697)	(1,759)	(1,887)	(1,887)	(441)	(441)	(441)	(441)
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	(1,697)	(1,759)	(1,887)	(1,887)	(441)	(441)	(441)	(441)
Class A Credit Sales (Purchases)	(1,697)	(1,759)	(1,887)	(1,887)	(441)	(441)	(441)	(441)
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

Aqua Virginia-L. Monticello
 UPPER JAMES Trading Basin

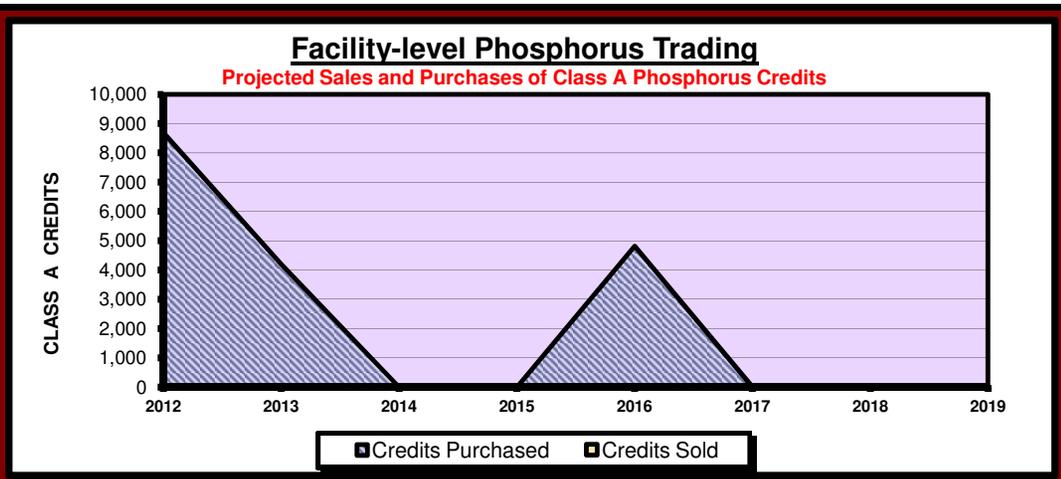


Loading & Credit Summary	
Design Flow (mgd)	1.00
Projected Flow (mgd)	0.69
Projected Avg. Annual Concentration (mg/L)	30.00
Discharged Load (end of pipe)	63,043
Delivery Factor	0.61
Expected Load	38,456
Delivered WLA	11,091
Expected Credits (delivered)	(27,365)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(27,365)
Class A Credit Sales (Purchases)	(27,365)
Expected Class B Credits	0

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
0.69	0.70	0.81	0.83	0.67	0.68	0.68	0.69
30.00	18.00	6.00	6.00	30.00	6.00	6.00	6.00
63,043	38,374	14,801	15,167	61,508	12,408	12,514	12,620
0.61	0.61	0.61	0.61	0.67	0.67	0.67	0.67
38,456	23,408	9,029	9,252	41,210	8,313	8,384	8,455
11,091	11,091	11,091	11,091	12,182	12,182	12,182	12,182
(27,365)	(12,317)	2,062	1,839	(29,028)	3,869	3,798	3,727
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
(27,365)	(12,317)	2,062	1,839	(29,028)	3,869	3,798	3,727
(27,365)	(12,317)	0	0	(29,028)	0	0	0
0	0	2,062	1,839	0	3,869	3,798	3,727

PHOSPHORUS FACILITY SUMMARY

Aqua Virginia-L. Monticello
 UPPER JAMES Trading Basin



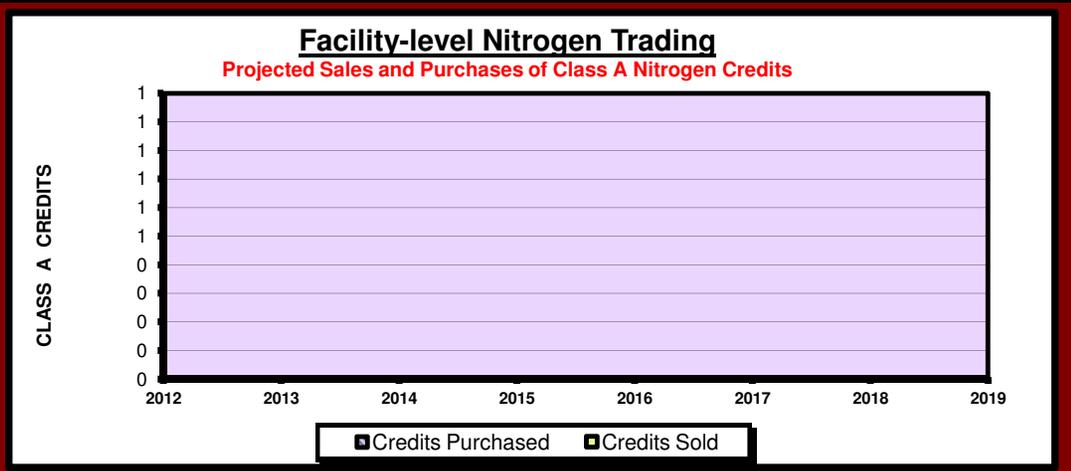
Loading & Credit Summary

Design Flow (mgd)	1.00
Projected Flow (mgd)	0.69
Projected Avg. Annual Concentration (mg/L)	4.86
Discharged Load (end of pipe)	10,213
Delivery Factor	1.00
Expected Load	10,213
Delivered WLA	1,515
Expected Credits (delivered)	(8,698)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(8,698)
Class A Credit Sales (Purchases)	(8,698)
Expected Class B Credits	0

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	0.69	0.70	0.81	0.83	0.67	0.68	0.68	0.69
Projected Avg. Annual Concentration (mg/L)	4.86	2.68	0.50	0.50	4.30	0.50	0.50	0.50
Discharged Load (end of pipe)	10,213	5,713	1,233	1,264	8,816	1,034	1,043	1,052
Delivery Factor	1.00	1.00	1.00	1.00	0.66	0.66	0.66	0.66
Expected Load	10,213	5,713	1,233	1,264	5,819	682	688	694
Delivered WLA	1,515	1,515	1,515	1,515	1,000	1,000	1,000	1,000
Expected Credits (delivered)	(8,698)	(4,198)	282	251	(4,819)	318	312	306
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	(8,698)	(4,198)	282	251	(4,819)	318	312	306
Class A Credit Sales (Purchases)	(8,698)	(4,198)	0	0	(4,819)	0	0	0
Expected Class B Credits	0	0	282	251	0	318	312	306

NITROGEN FACILITY SUMMARY

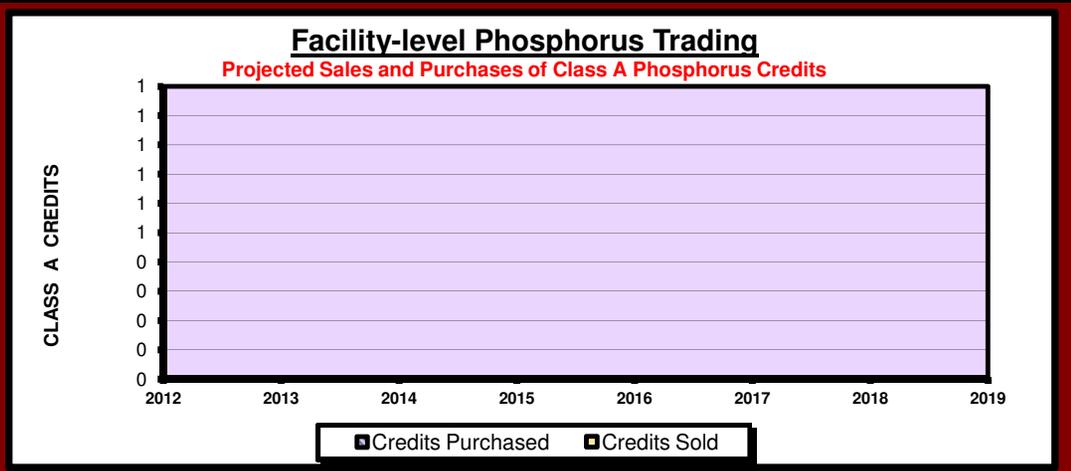
Babcock & Wilcox, N.O.G.
 UPPER JAMES Trading Basin



Loading & Credit Summary	2012	2013	2014	2015	2016	2017	2018	2019
	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)	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54
Projected Avg. Annual Concentration (mg/L)	113.70	113.70	113.70	113.70	113.70	113.70	113.70	113.70
Discharged Load (end of pipe)	186,991	186,991	186,991	186,991	186,991	186,991	186,991	186,991
Delivery Factor	0.61	0.61	0.61	0.61	0.65	0.65	0.65	0.65
Expected Load	114,065	114,065	114,065	114,065	121,544	121,544	121,544	121,544
Delivered WLA	114,070	114,070	114,070	114,070	121,550	121,550	121,550	121,550
Expected Credits (delivered)	5	5	5	5	6	6	6	6
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	5	5	5	6	6	6	6
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	5	5	5	5	6	6	6	6

PHOSPHORUS FACILITY SUMMARY

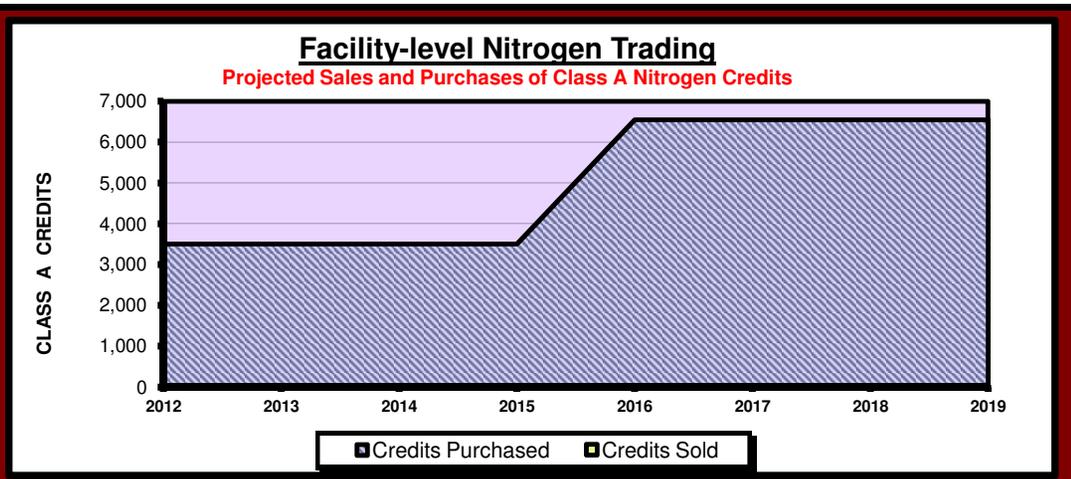
Babcock & Wilcox, N.O.G.
 UPPER JAMES Trading Basin



	2012	2013	2014	2015	2016	2017	2018	2019
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Loading & Credit Summary								
Design Flow (mgd)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Projected Flow (mgd)	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54
Projected Avg. Annual Concentration (mg/L)	0.36	0.36	0.29	0.29	0.29	0.29	0.29	0.29
Discharged Load (end of pipe)	592	592	477	477	477	477	477	477
Delivery Factor	1.00	1.00	1.00	1.00	0.66	0.66	0.66	0.66
Expected Load	592	592	477	477	315	315	315	315
Delivered WLA	1,523	1,523	1,523	1,523	1,005	1,005	1,005	1,005
Expected Credits (delivered)	931	931	1,046	1,046	690	690	690	690
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	931	931	1,046	1,046	690	690	690	690
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	931	931	1,046	1,046	690	690	690	690

NITROGEN FACILITY SUMMARY

Buena Vista
UPPER JAMES Trading Basin

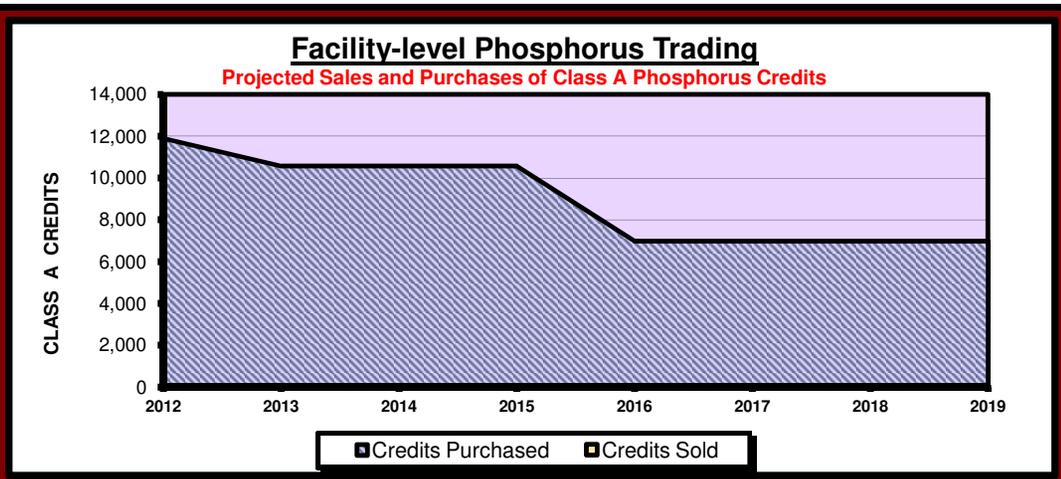


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Projected Flow (mgd)	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36
Projected Avg. Annual Concentration (mg/L)	12.75	12.75	12.75	12.75	12.75	12.75	12.75	12.75
Discharged Load (end of pipe)	52,810	52,810	52,810	52,810	52,810	52,810	52,810	52,810
Delivery Factor	0.30	0.30	0.30	0.30	0.56	0.56	0.56	0.56
Expected Load	15,843	15,843	15,843	15,843	29,574	29,574	29,574	29,574
Delivered WLA	12,335	12,335	12,335	12,335	23,024	23,024	23,024	23,024
Expected Credits (delivered)	(3,508)	(3,508)	(3,508)	(3,508)	(6,550)	(6,550)	(6,550)	(6,550)
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	(3,508)	(3,508)	(3,508)	(3,508)	(6,550)	(6,550)	(6,550)	(6,550)
Class A Credit Sales (Purchases)	(3,508)	(3,508)	(3,508)	(3,508)	(6,550)	(6,550)	(6,550)	(6,550)
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	

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36
3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38
14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000
1.00	1.00	1.00	1.00	0.66	0.66	0.66	0.66
14,000	14,000	14,000	14,000	9,240	9,240	9,240	9,240
3,426	3,426	3,426	3,426	2,261	2,261	2,261	2,261
(10,574)	(10,574)	(10,574)	(10,574)	(6,979)	(6,979)	(6,979)	(6,979)
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
(10,574)	(10,574)	(10,574)	(10,574)	(6,979)	(6,979)	(6,979)	(6,979)
(11,899)	(10,574)	(10,574)	(10,574)	(6,979)	(6,979)	(6,979)	(6,979)
1,325	0	0	0	0	0	0	0

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.

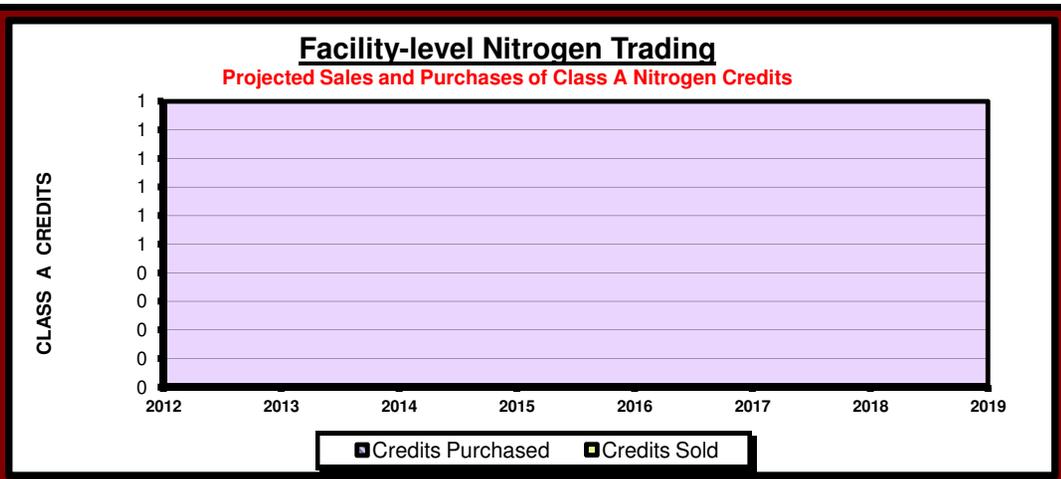
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply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

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
Falling Creek	15,380	15,380	15,380	15,380	15,380	15,380	15,380	-
Proctors Creek	(15,380)	(15,380)	(15,380)	(15,380)	(15,380)	(15,380)	(15,380)	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Falling Creek	-	-	-	-	-	-	-	-
Proctors Creek	37,857	80,023	67,125	54,227	41,329	28,431	14,360	15,670
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Net Credits	37,857	80,023	67,125	54,227	41,329	28,431	14,360	15,670
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
<i>Expected Class B Credits</i>	<i>37,857</i>	<i>80,023</i>	<i>67,125</i>	<i>54,227</i>	<i>41,329</i>	<i>28,431</i>	<i>14,360</i>	<i>15,670</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		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
Falling Creek	3,076	3,076	3,076	3,076	1,538	1,538	-	-
Proctors Creek	(3,076)	(3,076)	(3,076)	(3,076)	(1,538)	(1,538)	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Falling Creek	-	-	-	-	-	-	-	-
Proctors Creek	5,001	3,594	2,187	780	911	6,182	6,441	5,162
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Expected Credits	5,001	3,594	2,187	780	911	6,182	6,441	5,162
Private Exchanges	(3,580)	-	-	-	-	-	-	-
Expected Net Credits	1,421	3,594	2,187	780	911	6,182	6,441	5,162
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
<i>Expected Class B Credits</i>	<i>1,421</i>	<i>3,594</i>	<i>2,187</i>	<i>780</i>	<i>911</i>	<i>6,182</i>	<i>6,441</i>	<i>5,162</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

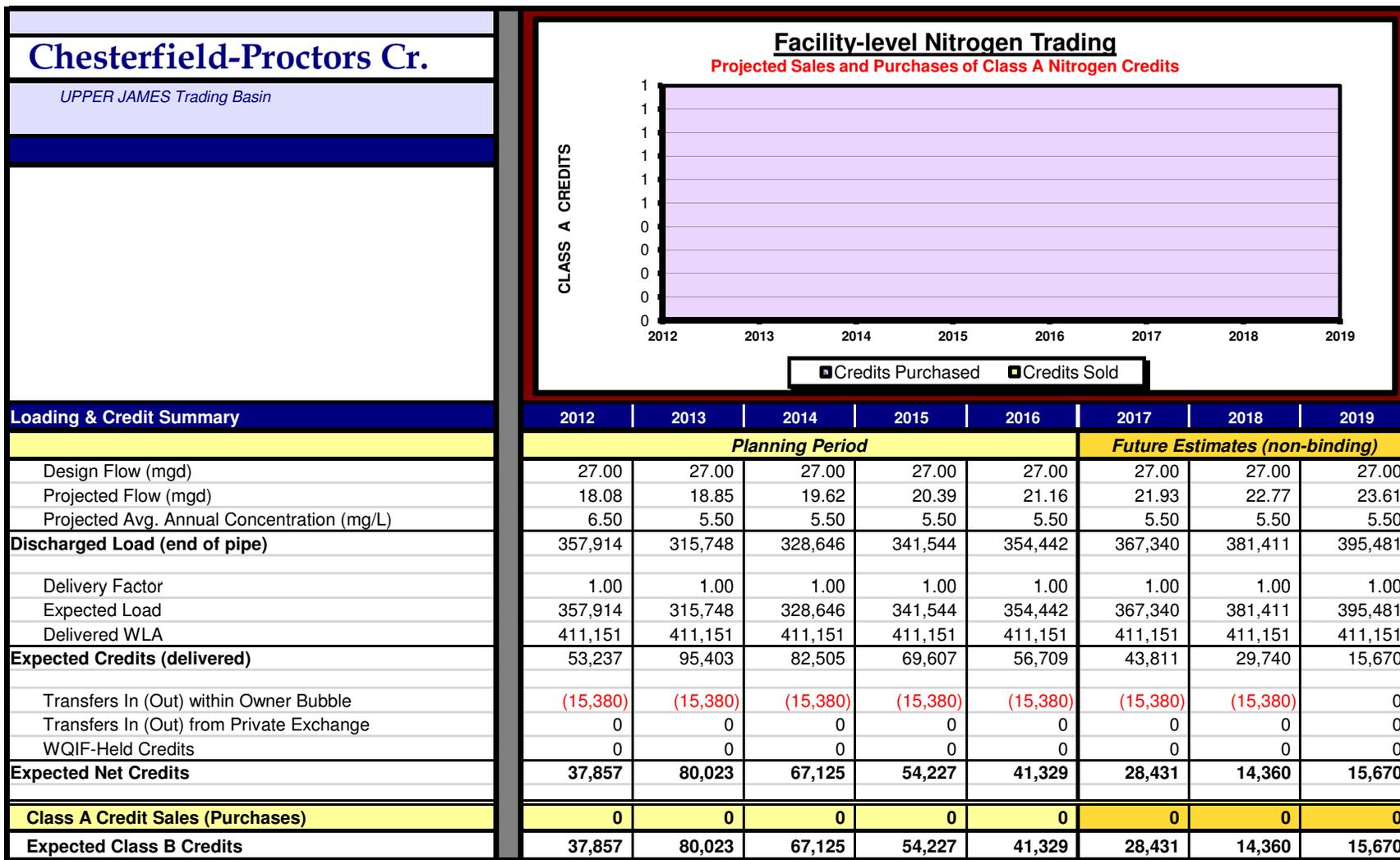
Chesterfield-Falling Cr.
UPPER JAMES Trading Basin



Loading & Credit Summary	
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	

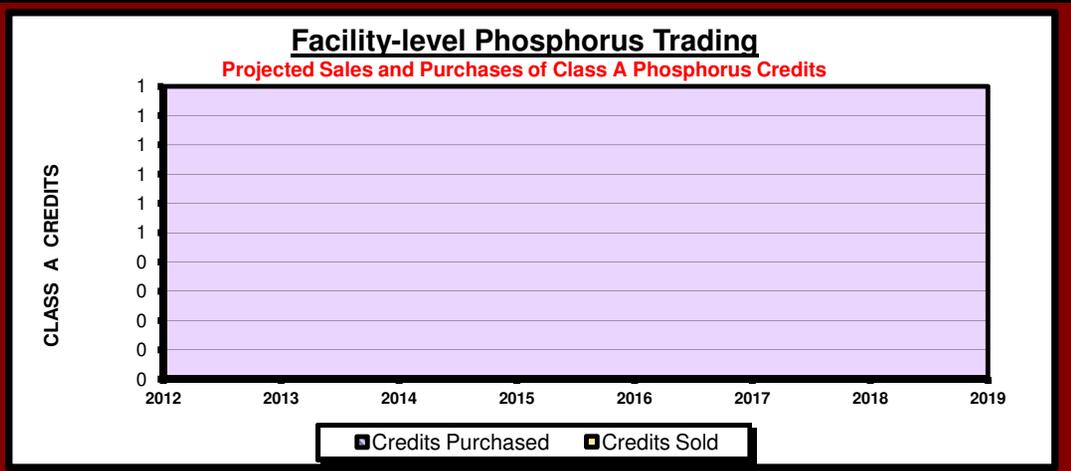
2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
10.10	10.10	10.10	10.10	10.10	10.10	10.10	10.10
10.10	10.10	10.10	10.10	10.10	10.10	10.10	10.10
5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.00
169,181	169,181	169,181	169,181	169,181	169,181	169,181	153,801
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
169,181	169,181	169,181	169,181	169,181	169,181	169,181	153,801
153,801	153,801	153,801	153,801	153,801	153,801	153,801	153,801
(15,380)	(15,380)	(15,380)	(15,380)	(15,380)	(15,380)	(15,380)	0
15,380	15,380	15,380	15,380	15,380	15,380	15,380	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	0

NITROGEN FACILITY SUMMARY



PHOSPHORUS FACILITY SUMMARY

Chesterfield-Falling Cr.
UPPER JAMES Trading Basin



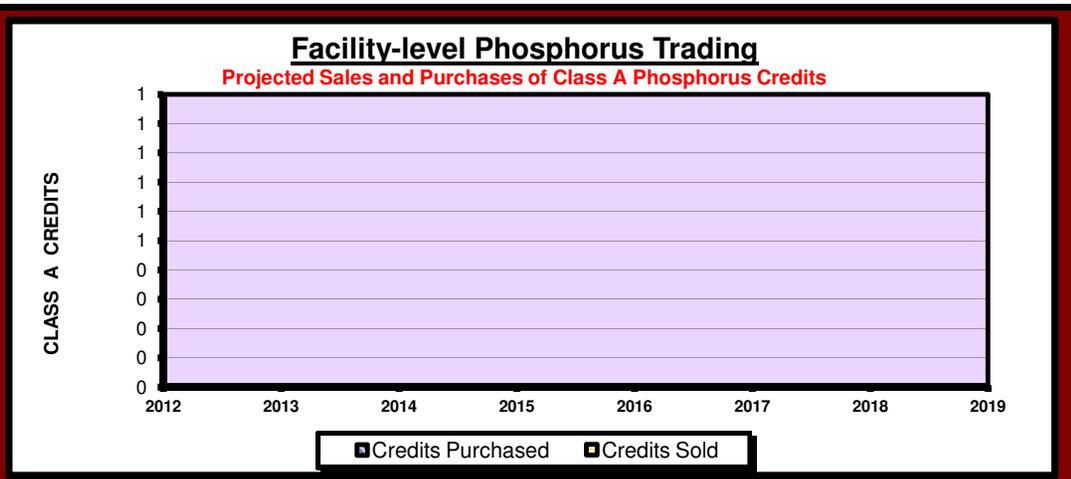
Loading & Credit Summary

Design Flow (mgd)	10.10
Projected Flow (mgd)	10.10
Projected Avg. Annual Concentration (mg/L)	0.60
Discharged Load (end of pipe)	18,456
Delivery Factor	1.00
Expected Load	18,456
Delivered WLA	15,380
Expected Credits (delivered)	(3,076)
Transfers In (Out) within Owner Bubble	3,076
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

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	10.10	10.10	10.10	10.10	10.10	10.10	10.10	10.10
Projected Flow (mgd)	10.10	10.10	10.10	10.10	10.10	10.10	10.10	10.10
Projected Avg. Annual Concentration (mg/L)	0.60	0.60	0.60	0.60	0.55	0.55	0.50	0.50
Discharged Load (end of pipe)	18,456	18,456	18,456	18,456	16,918	16,918	15,380	15,380
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	18,456	18,456	18,456	18,456	16,918	16,918	15,380	15,380
Delivered WLA	15,380	15,380	15,380	15,380	15,380	15,380	15,380	15,380
Expected Credits (delivered)	(3,076)	(3,076)	(3,076)	(3,076)	(1,538)	(1,538)	0	0
Transfers In (Out) within Owner Bubble	3,076	3,076	3,076	3,076	1,538	1,538	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

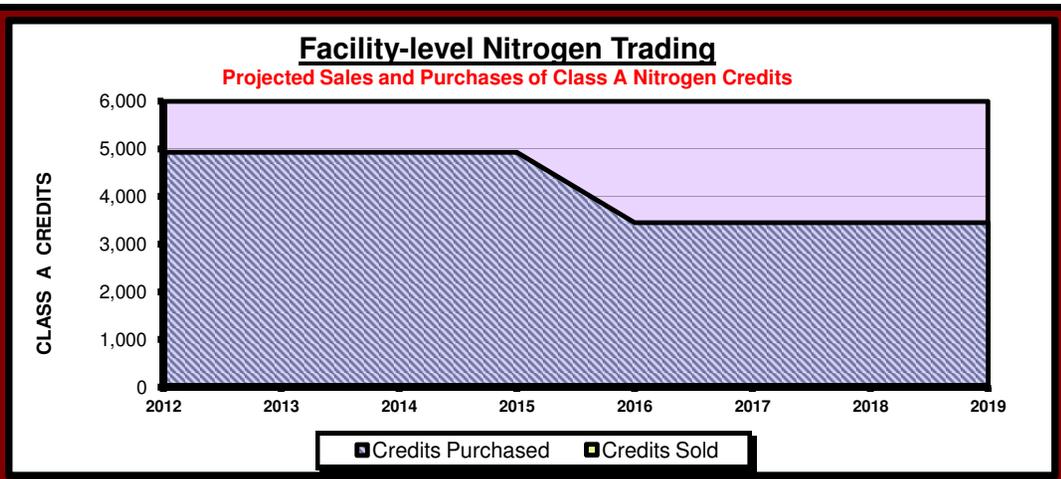
Chesterfield-Proctors Cr.
UPPER JAMES Trading Basin



	2012	2013	2014	2015	2016	2017	2018	2019
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Loading & Credit Summary								
Design Flow (mgd)	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00
Projected Flow (mgd)	18.08	18.85	19.62	20.39	21.16	21.93	22.77	23.61
Projected Avg. Annual Concentration (mg/L)	0.60	0.60	0.60	0.60	0.60	0.50	0.50	0.50
Discharged Load (end of pipe)	33,038	34,445	35,852	37,259	38,666	33,395	34,674	35,953
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	33,038	34,445	35,852	37,259	38,666	33,395	34,674	35,953
Delivered WLA	41,115	41,115	41,115	41,115	41,115	41,115	41,115	41,115
Expected Credits (delivered)	8,077	6,670	5,263	3,856	2,449	7,720	6,441	5,162
Transfers In (Out) within Owner Bubble	(3,076)	(3,076)	(3,076)	(3,076)	(1,538)	(1,538)	0	0
Transfers In (Out) from Private Exchange	(3,580)	0	0	0	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	1,421	3,594	2,187	780	911	6,182	6,441	5,162
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	1,421	3,594	2,187	780	911	6,182	6,441	5,162

NITROGEN FACILITY SUMMARY

Covington
UPPER JAMES Trading Basin

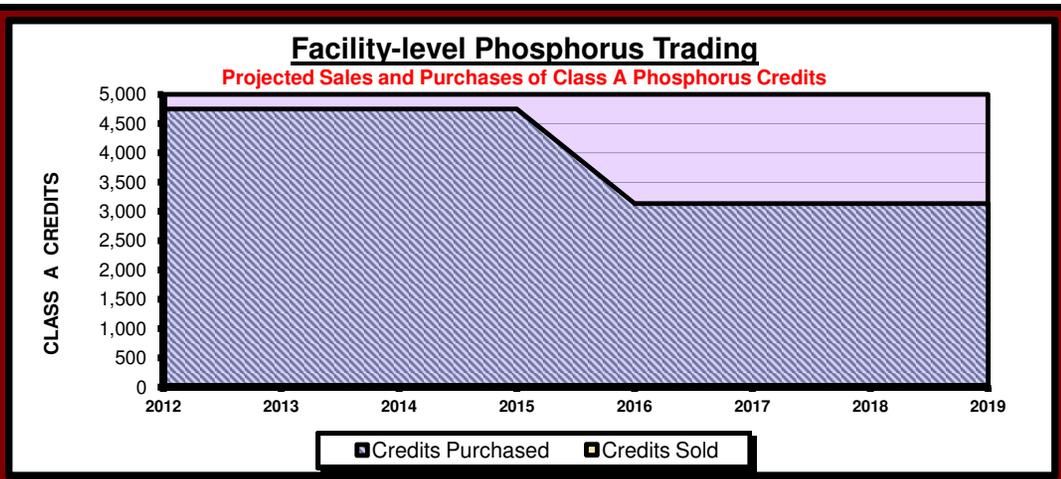


Loading & Credit Summary	
Design Flow (mgd)	3.00
Projected Flow (mgd)	1.80
Projected Avg. Annual Concentration (mg/L)	13.00
Discharged Load (end of pipe)	71,266
Delivery Factor	0.30
Expected Load	21,380
Delivered WLA	16,446
Expected Credits (delivered)	(4,934)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(4,934)
Class A Credit Sales (Purchases)	(4,934)
Expected Class B Credits	0

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80
13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00
71,266	71,266	71,266	71,266	71,266	71,266	71,266	71,266
0.30	0.30	0.30	0.30	0.21	0.21	0.21	0.21
21,380	21,380	21,380	21,380	14,966	14,966	14,966	14,966
16,446	16,446	16,446	16,446	11,512	11,512	11,512	11,512
(4,934)	(4,934)	(4,934)	(4,934)	(3,454)	(3,454)	(3,454)	(3,454)
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
(4,934)	(4,934)	(4,934)	(4,934)	(3,454)	(3,454)	(3,454)	(3,454)
(4,934)	(4,934)	(4,934)	(4,934)	(3,454)	(3,454)	(3,454)	(3,454)
0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Covington
 UPPER JAMES Trading Basin



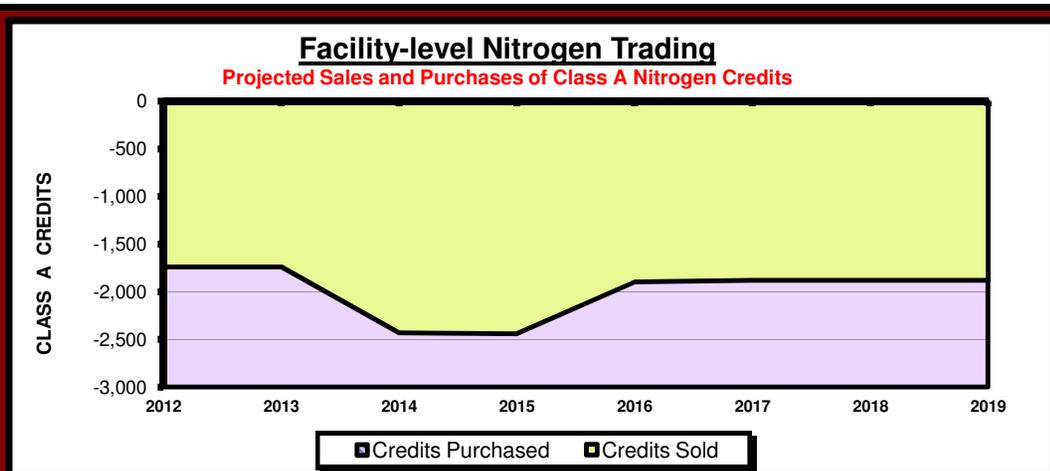
Loading & Credit Summary

Design Flow (mgd)	3.00
Projected Flow (mgd)	1.80
Projected Avg. Annual Concentration (mg/L)	1.70
Discharged Load (end of pipe)	9,319
Delivery Factor	1.00
Expected Load	9,319
Delivered WLA	4,568
Expected Credits (delivered)	(4,751)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(4,751)
Class A Credit Sales (Purchases)	(4,751)
Expected Class B Credits	0

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80
Projected Avg. Annual Concentration (mg/L)	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70
Discharged Load (end of pipe)	9,319	9,319	9,319	9,319	9,319	9,319	9,319	9,319
Delivery Factor	1.00	1.00	1.00	1.00	0.66	0.66	0.66	0.66
Expected Load	9,319	9,319	9,319	9,319	6,151	6,151	6,151	6,151
Delivered WLA	4,568	4,568	4,568	4,568	3,015	3,015	3,015	3,015
Expected Credits (delivered)	(4,751)	(4,751)	(4,751)	(4,751)	(3,136)	(3,136)	(3,136)	(3,136)
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	(4,751)	(4,751)	(4,751)	(4,751)	(3,136)	(3,136)	(3,136)	(3,136)
Class A Credit Sales (Purchases)	(4,751)	(4,751)	(4,751)	(4,751)	(3,136)	(3,136)	(3,136)	(3,136)
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

Crewe
UPPER JAMES Trading Basin



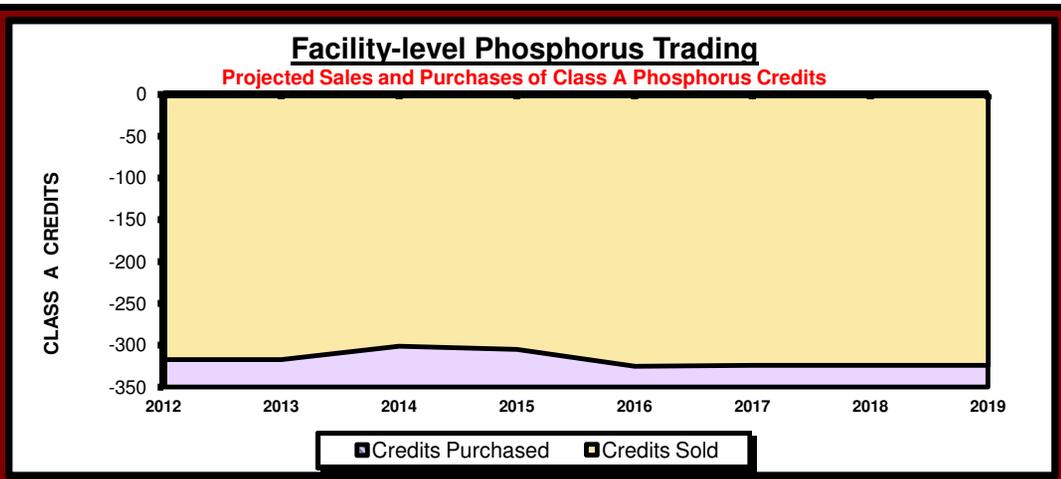
Loading & Credit Summary

Design Flow (mgd)	0.50
Projected Flow (mgd)	0.30
Projected Avg. Annual Concentration (mg/L)	5.00
Discharged Load (end of pipe)	4,568
Delivery Factor	0.38
Expected Load	1,736
Delivered WLA	3,472
Expected Credits (delivered)	1,736
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	1,736
Class A Credit Sales (Purchases)	1,736
Expected Class B Credits	0

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	0.30	0.30	0.20	0.21	0.23	0.23	0.23	0.23
Projected Avg. Annual Concentration (mg/L)	5.00	5.00	4.50	4.25	3.80	3.80	3.80	3.80
Discharged Load (end of pipe)	4,568	4,568	2,741	2,718	2,604	2,662	2,662	2,662
Delivery Factor	0.38	0.38	0.38	0.38	0.29	0.29	0.29	0.29
Expected Load	1,736	1,736	1,042	1,033	755	772	772	772
Delivered WLA	3,472	3,472	3,472	3,472	2,650	2,650	2,650	2,650
Expected Credits (delivered)	1,736	1,736	2,430	2,439	1,895	1,878	1,878	1,878
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	1,736	1,736	2,430	2,439	1,895	1,878	1,878	1,878
Class A Credit Sales (Purchases)	1,736	1,736	2,430	2,439	1,895	1,878	1,878	1,878
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Crewe
 UPPER JAMES Trading Basin

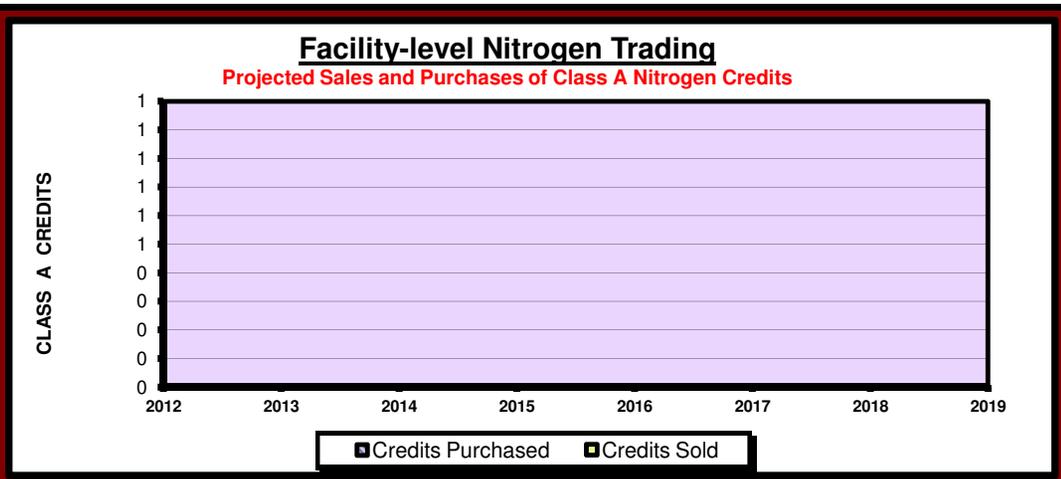


Loading & Credit Summary	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Projected Flow (mgd)	0.30	0.30	0.20	0.21	0.23	0.23	0.23	0.23
Projected Avg. Annual Concentration (mg/L)	0.03	0.03	0.10	0.08	0.08	0.08	0.08	0.08
Discharged Load (end of pipe)	23	23	61	51	55	56	56	56
Delivery Factor	0.43	0.43	0.43	0.43	0.46	0.46	0.46	0.46
Expected Load	10	10	26	22	25	26	26	26
Delivered WLA	327	327	327	327	350	350	350	350
Expected Credits (delivered)	317	317	301	305	325	324	324	324
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	317	317	301	305	325	324	324	324
Class A Credit Sales (Purchases)	317	317	301	305	325	324	324	324
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

Dominion-Chesterfield

UPPER JAMES Trading Basin

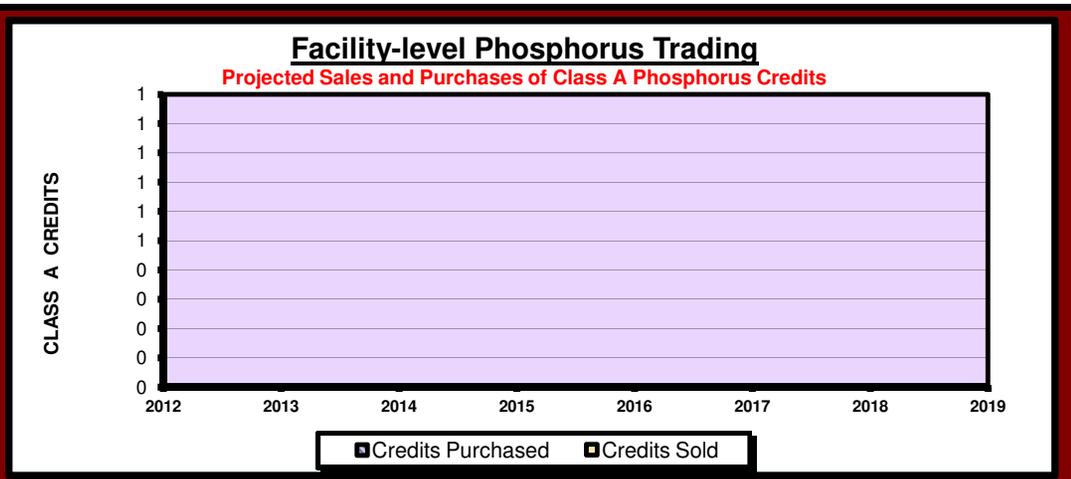


Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50
Projected Flow (mgd)	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50
Projected Avg. Annual Concentration (mg/L)	8.39	8.39	8.39	8.39	8.39	8.39	8.39	8.39
Discharged Load (end of pipe)	344,955	344,955	344,955	344,955	344,955	344,955	344,955	344,955
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	344,955	344,955	344,955	344,955	344,955	344,955	344,955	344,955
Delivered WLA	352,036	352,036	352,036	352,036	352,036	352,036	352,036	352,036
Expected Credits (delivered)	7,081	7,081	7,081	7,081	7,081	7,081	7,081	7,081
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	7,081	7,081	7,081	7,081	7,081	7,081	7,081	7,081
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	7,081	7,081	7,081	7,081	7,081	7,081	7,081	7,081

PHOSPHORUS FACILITY SUMMARY

Dominion-Chesterfield
UPPER JAMES Trading Basin

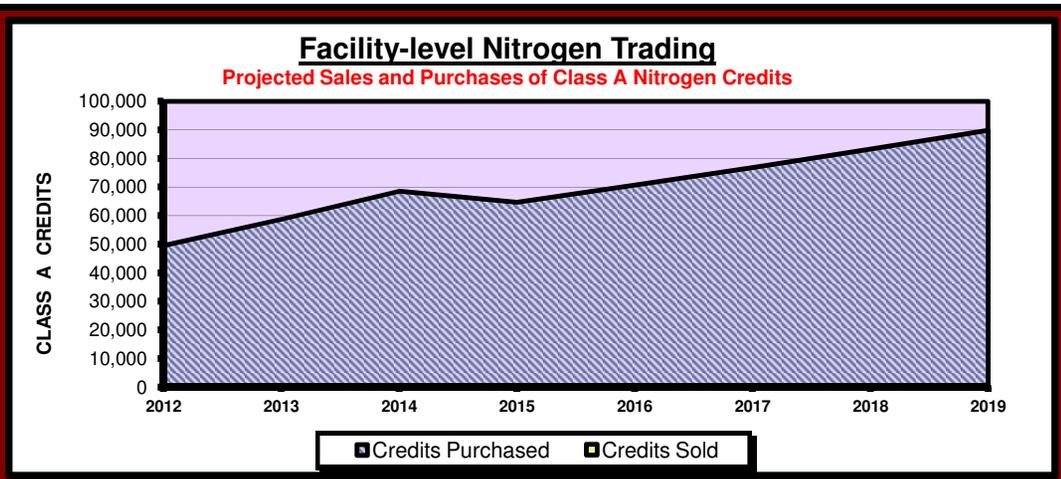


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50
Projected Flow (mgd)	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50
Projected Avg. Annual Concentration (mg/L)	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Discharged Load (end of pipe)	3,790	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	3,790	210	210	210	210	210	210	210
Delivered WLA	210	210	210	210	210	210	210	210
Expected Credits (delivered)	(3,580)	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	3,580	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

DuPont-Spruance
 UPPER JAMES Trading Basin

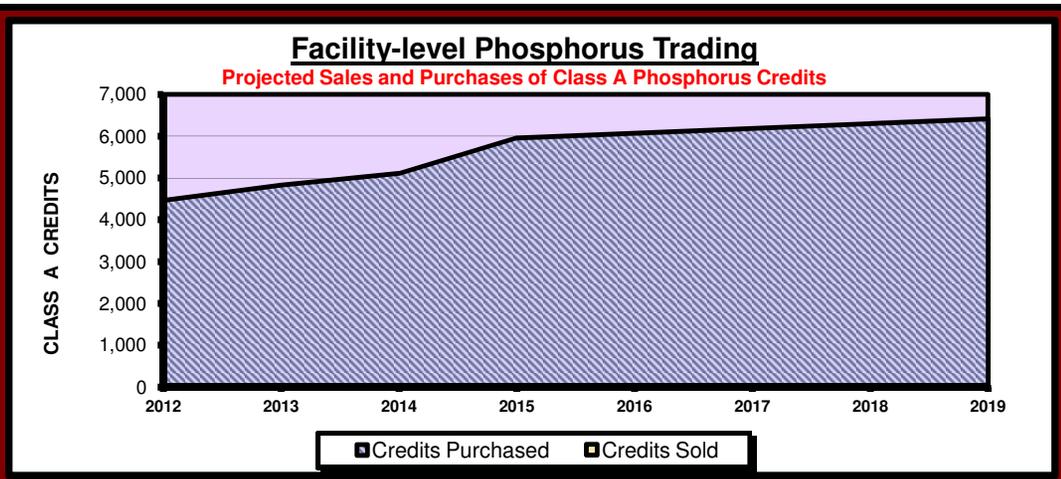


Loading & Credit Summary	
Design Flow (mgd)	23.33
Projected Flow (mgd)	29.44
Projected Avg. Annual Concentration (mg/L)	2.80
Discharged Load (end of pipe)	250,603
Delivery Factor	1.00
Expected Load	250,603
Delivered WLA	201,080
Expected Credits (delivered)	(49,523)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(49,523)
Class A Credit Sales (Purchases)	(49,523)
Expected Class B Credits	0

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	29.44	29.88	30.32	30.78	31.24	31.71	32.19	32.68
Projected Avg. Annual Concentration (mg/L)	2.80	2.86	2.92	2.84	2.86	2.88	2.90	2.92
Discharged Load (end of pipe)	250,603	259,809	269,637	265,760	271,824	277,942	284,404	290,923
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	250,603	259,809	269,637	265,760	271,824	277,942	284,404	290,923
Delivered WLA	201,080	201,080	201,080	201,080	201,080	201,080	201,080	201,080
Expected Credits (delivered)	(49,523)	(58,729)	(68,557)	(64,680)	(70,744)	(76,862)	(83,324)	(89,843)
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	(49,523)	(58,729)	(68,557)	(64,680)	(70,744)	(76,862)	(83,324)	(89,843)
Class A Credit Sales (Purchases)	(49,523)	(58,729)	(68,557)	(64,680)	(70,744)	(76,862)	(83,324)	(89,843)
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

DuPont-Spruance
 UPPER JAMES Trading Basin



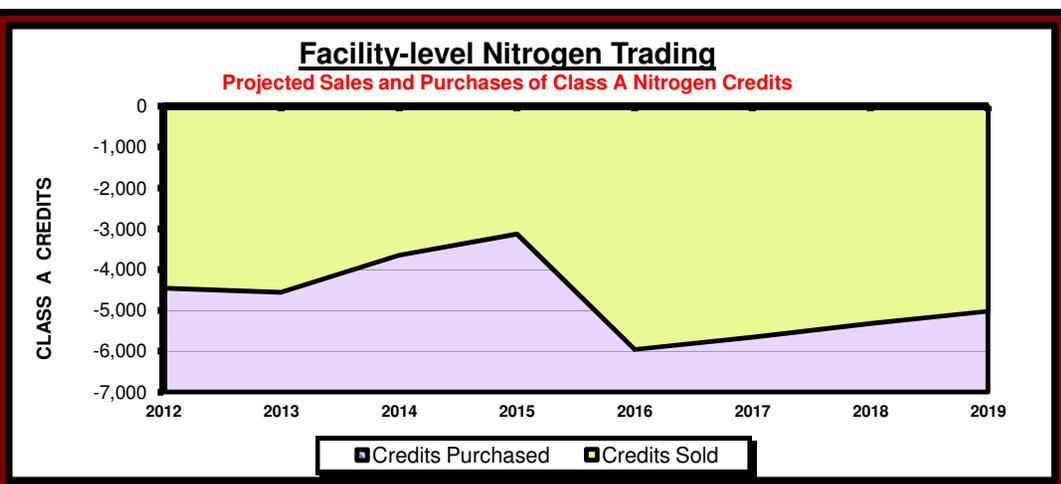
Loading & Credit Summary

Design Flow (mgd)	23.33
Projected Flow (mgd)	29.44
Projected Avg. Annual Concentration (mg/L)	0.14
Discharged Load (end of pipe)	12,284
Delivery Factor	1.00
Expected Load	12,284
Delivered WLA	7,816
Expected Credits (delivered)	(4,468)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(4,468)
Class A Credit Sales (Purchases)	(4,468)
Expected Class B Credits	0

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	29.44	29.88	30.32	30.78	31.24	31.71	32.19	32.68
Projected Avg. Annual Concentration (mg/L)	0.14	0.14	0.14	0.15	0.15	0.15	0.14	0.14
Discharged Load (end of pipe)	12,284	12,649	12,928	13,780	13,891	14,003	14,117	14,233
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	12,284	12,649	12,928	13,780	13,891	14,003	14,117	14,233
Delivered WLA	7,816	7,816	7,816	7,816	7,816	7,816	7,816	7,816
Expected Credits (delivered)	(4,468)	(4,833)	(5,112)	(5,964)	(6,075)	(6,187)	(6,301)	(6,417)
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	(4,468)	(4,833)	(5,112)	(5,964)	(6,075)	(6,187)	(6,301)	(6,417)
Class A Credit Sales (Purchases)	(4,468)	(4,833)	(5,112)	(5,964)	(6,075)	(6,187)	(6,301)	(6,417)
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

Georgia-Pacific
UPPER JAMES Trading Basin

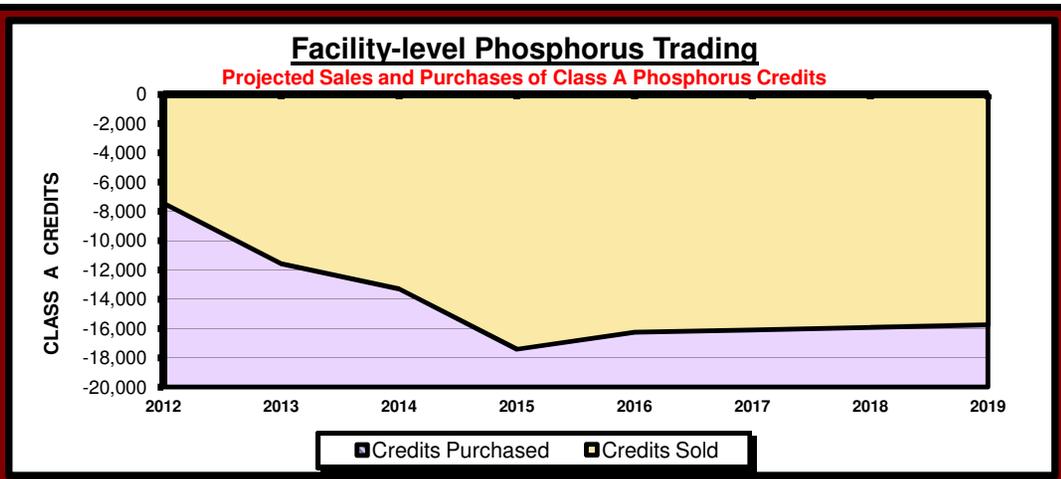


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	10.87	10.87	10.87	10.87	10.87	10.87	10.87	10.87
Projected Flow (mgd)	7.62	7.98	8.06	8.14	8.22	8.30	8.39	8.47
Projected Avg. Annual Concentration (mg/L)	4.00	4.00	4.00	4.10	4.10	4.10	4.10	4.10
Discharged Load (end of pipe)	92,829	97,214	98,189	101,643	102,641	103,640	104,764	105,763
Delivery Factor	0.30	0.30	0.30	0.30	0.60	0.60	0.60	0.60
Expected Load	27,849	29,164	29,457	30,493	61,585	62,184	62,859	63,458
Delivered WLA	36,747	36,747	36,747	36,747	73,493	73,493	73,493	73,493
Expected Credits (delivered)	8,898	7,583	7,290	6,254	11,908	11,309	10,634	10,035
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	8,898	7,583	7,290	6,254	11,908	11,309	10,634	10,035
Class A Credit Sales (Purchases)	4,449	4,550	3,645	3,127	5,954	5,655	5,317	5,018
Expected Class B Credits	4,449	3,033	3,645	3,127	5,954	5,654	5,317	5,017

PHOSPHORUS FACILITY SUMMARY

Georgia-Pacific
UPPER JAMES Trading Basin

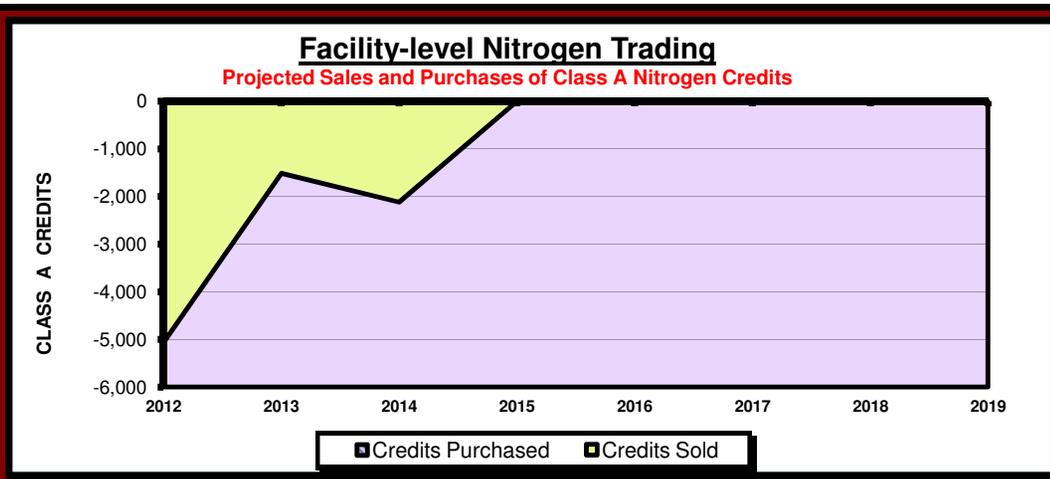


Loading & Credit Summary	
Design Flow (mgd)	10.87
Projected Flow (mgd)	7.62
Projected Avg. Annual Concentration (mg/L)	1.50
Discharged Load (end of pipe)	34,811
Delivery Factor	1.00
Expected Load	34,811
Delivered WLA	49,658
Expected Credits (delivered)	14,847
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	14,847
Class A Credit Sales (Purchases)	7,424
Expected Class B Credits	7,423

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
10.87	10.87	10.87	10.87	10.87	10.87	10.87	10.87
7.62	7.98	8.06	8.14	8.22	8.30	8.39	8.47
1.50	1.25	1.25	1.00	1.00	1.00	1.00	1.00
34,811	30,379	30,684	24,791	25,035	25,278	25,552	25,796
1.00	1.00	1.00	1.00	0.66	0.66	0.66	0.66
34,811	30,379	30,684	24,791	16,523	16,684	16,864	17,025
49,658	49,658	49,658	49,658	32,774	32,774	32,774	32,774
14,847	19,279	18,974	24,867	16,251	16,090	15,910	15,749
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
14,847	19,279	18,974	24,867	16,251	16,090	15,910	15,749
7,424	11,567	13,282	17,407	16,251	16,090	15,910	15,749
7,423	7,712	5,692	7,460	0	0	0	0

NITROGEN FACILITY SUMMARY

Greif Packaging
UPPER JAMES Trading Basin

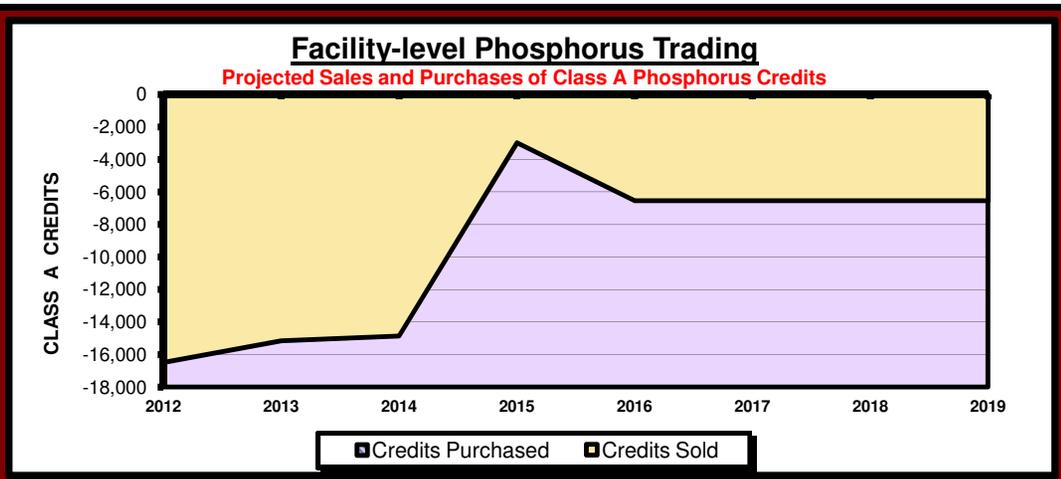


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	6.20	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Projected Avg. Annual Concentration (mg/L)	3.00	3.45	3.35	3.70	3.70	3.70	3.70	3.70
Discharged Load (end of pipe)	56,647	68,297	66,317	73,246	73,246	73,246	73,246	73,246
Delivery Factor	0.61	0.61	0.61	0.61	0.65	0.65	0.65	0.65
Expected Load	34,555	41,661	40,453	44,680	47,610	47,610	47,610	47,610
Delivered WLA	44,680	44,680	44,680	44,680	47,610	47,610	47,610	47,610
Expected Credits (delivered)	10,125	3,019	4,227	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	10,125	3,019	4,227	0	0	0	0	0
Class A Credit Sales (Purchases)	5,063	1,510	2,114	0	0	0	0	0
Expected Class B Credits	5,062	1,509	2,113	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Greif Packaging
 UPPER JAMES Trading Basin

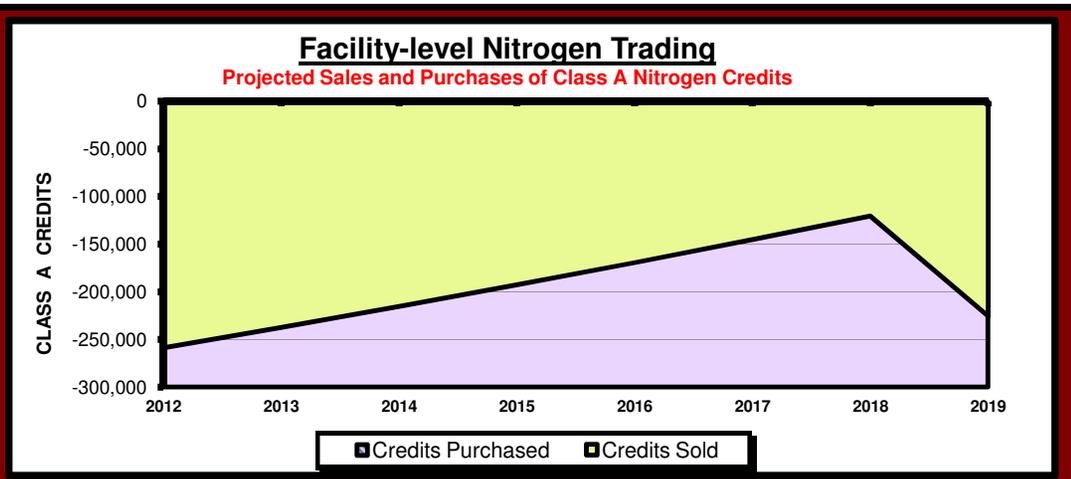


Loading & Credit Summary	
Design Flow (mgd)	6.50
Projected Flow (mgd)	6.20
Projected Avg. Annual Concentration (mg/L)	0.70
Discharged Load (end of pipe)	13,218
Delivery Factor	1.00
Expected Load	13,218
Delivered WLA	29,694
Expected Credits (delivered)	16,476
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	16,476
Class A Credit Sales (Purchases)	16,476
Expected Class B Credits	0

2012	2013	2014	2015	2016	2017	2018	2019	
Planning Period					Future Estimates (non-binding)			
6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	
6.20	6.50	6.50	6.50	6.50	6.50	6.50	6.50	
0.70	0.60	0.50	1.20	1.00	1.00	1.00	1.00	
13,218	11,878	9,898	23,755	19,796	19,796	19,796	19,796	
1.00	1.00	1.00	1.00	0.66	0.66	0.66	0.66	
13,218	11,878	9,898	23,755	13,065	13,065	13,065	13,065	
29,694	29,694	29,694	29,694	19,598	19,598	19,598	19,598	
16,476	17,816	19,796	5,939	6,533	6,533	6,533	6,533	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
16,476	17,816	19,796	5,939	6,533	6,533	6,533	6,533	
16,476	15,144	14,847	2,970	6,533	6,533	6,533	6,533	
0	2,672	4,949	2,969	0	0	0	0	

NITROGEN FACILITY SUMMARY

Henrico Co
 UPPER JAMES Trading Basin

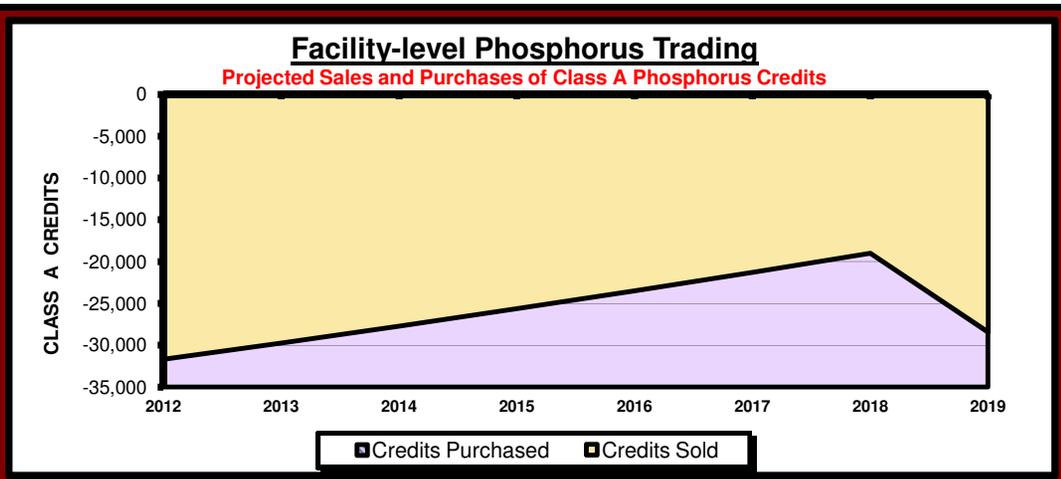


Loading & Credit Summary	
Design Flow (mgd)	75.00
Projected Flow (mgd)	56.14
Projected Avg. Annual Concentration (mg/L)	4.90
Discharged Load (end of pipe)	837,791
Delivery Factor	1.00
Expected Load	837,791
Delivered WLA	1,142,085
Expected Credits (delivered)	304,294
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	304,294
Class A Credit Sales (Purchases)	258,650
Expected Class B Credits	45,644

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
56.14	57.83	59.56	61.35	63.19	65.09	67.04	69.05
4.90	4.90	4.90	4.90	4.90	4.90	4.90	3.90
837,791	863,011	888,828	915,541	943,000	971,354	1,000,454	820,154
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
837,791	863,011	888,828	915,541	943,000	971,354	1,000,454	820,154
1,142,085	1,142,085	1,142,085	1,142,085	1,142,085	1,142,085	1,142,085	1,142,085
304,294	279,074	253,257	226,544	199,085	170,731	141,631	321,931
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
304,294	279,074	253,257	226,544	199,085	170,731	141,631	321,931
258,650	237,213	215,268	192,562	169,222	145,121	120,386	225,352
45,644	41,861	37,989	33,982	29,863	25,610	21,245	96,579

PHOSPHORUS FACILITY SUMMARY

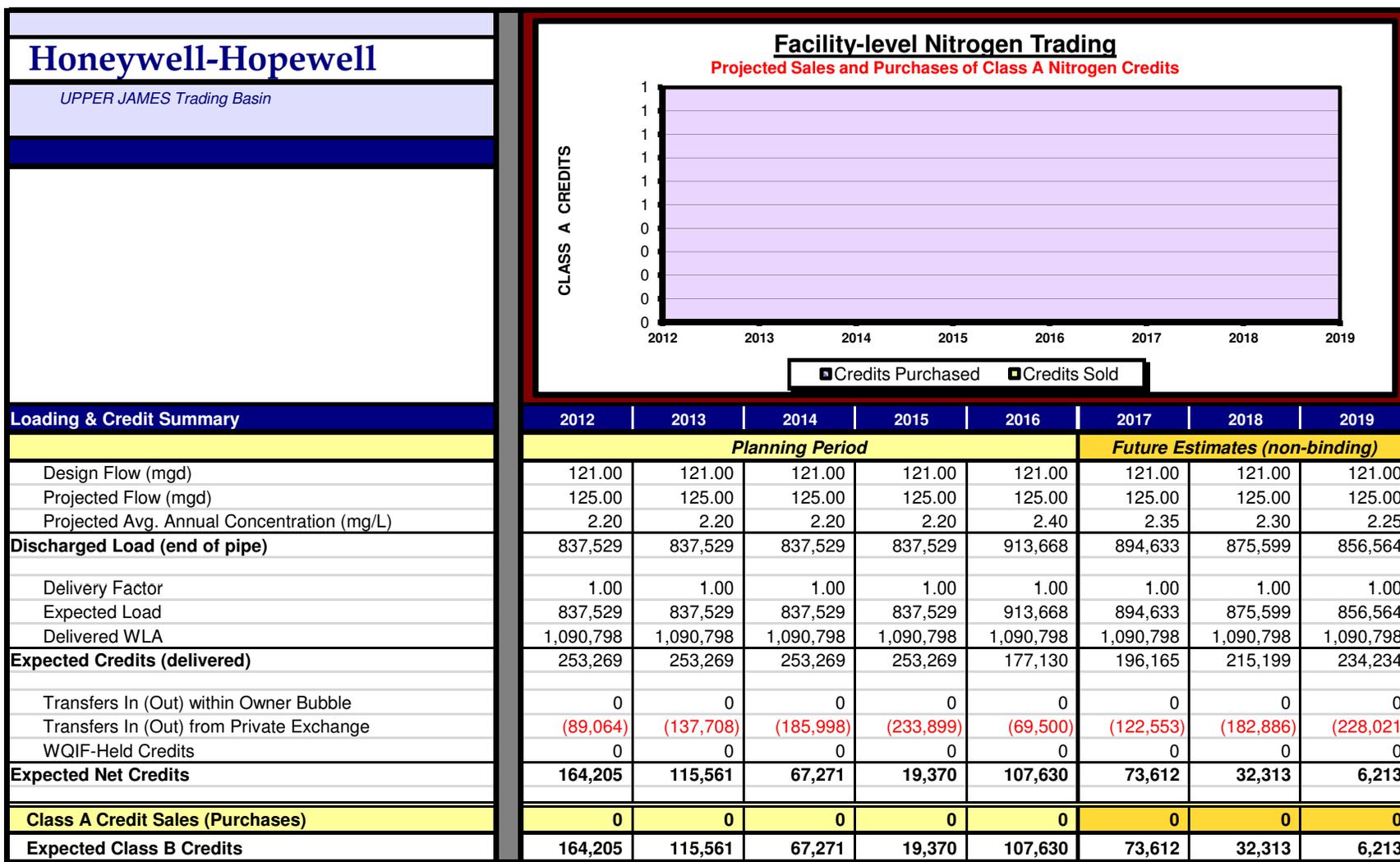
Henrico Co
UPPER JAMES Trading Basin



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	

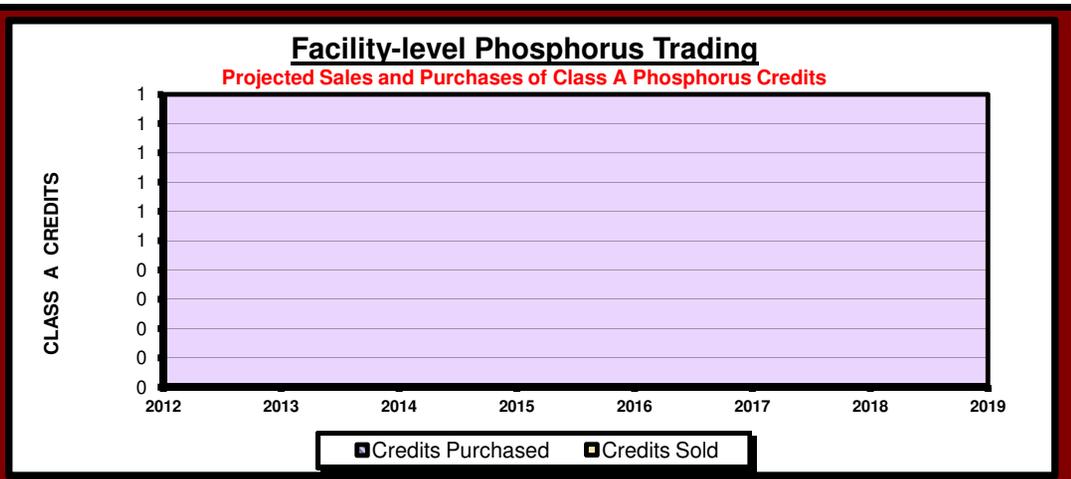
	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
Projected Flow (mgd)	56.14	57.83	59.56	61.35	63.19	65.09	67.04	69.05
Projected Avg. Annual Concentration (mg/L)	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.35
Discharged Load (end of pipe)	76,940	79,256	81,627	84,080	86,602	89,206	91,878	73,604
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	76,940	79,256	81,627	84,080	86,602	89,206	91,878	73,604
Delivered WLA	114,209	114,209	114,209	114,209	114,209	114,209	114,209	114,209
Expected Credits (delivered)	37,269	34,953	32,582	30,129	27,607	25,003	22,331	40,605
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	37,269	34,953	32,582	30,129	27,607	25,003	22,331	40,605
Class A Credit Sales (Purchases)	31,679	29,710	27,695	25,610	23,466	21,253	18,981	28,424
Expected Class B Credits	5,590	5,243	4,887	4,519	4,141	3,750	3,350	12,181

NITROGEN FACILITY SUMMARY



PHOSPHORUS FACILITY SUMMARY

Honeywell-Hopewell
 UPPER JAMES Trading Basin

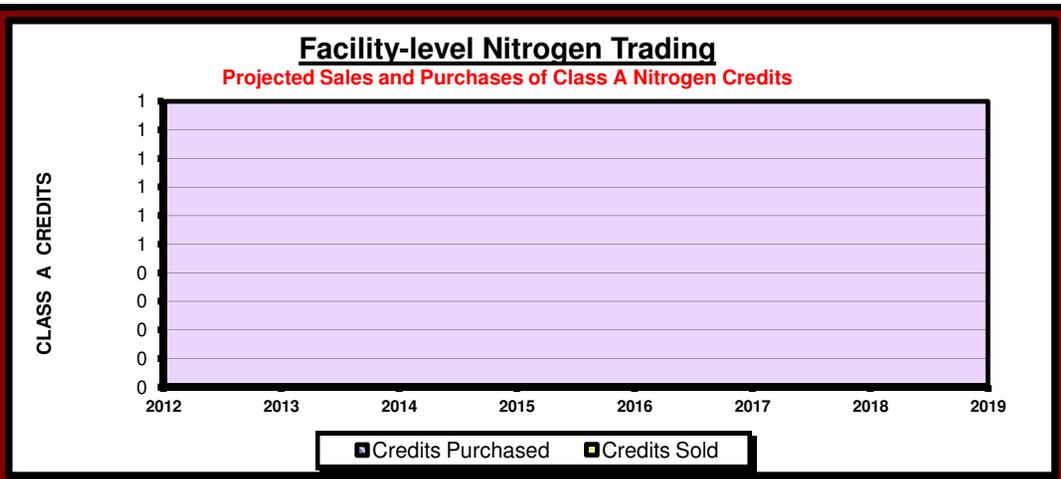


Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00
Projected Avg. Annual Concentration (mg/L)	0.12	0.12	0.10	0.10	0.10	0.10	0.10	0.10
Discharged Load (end of pipe)	45,683	45,683	38,070	38,070	38,070	38,070	38,070	38,070
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	45,683	45,683	38,070	38,070	38,070	38,070	38,070	38,070
Delivered WLA	51,592	51,592	51,592	51,592	51,592	51,592	51,592	51,592
Expected Credits (delivered)	5,909	5,909	13,522	13,522	13,522	13,522	13,522	13,522
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	5,909	5,909	13,522	13,522	13,522	13,522	13,522	13,522
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	5,909	5,909	13,522	13,522	13,522	13,522	13,522	13,522

NITROGEN FACILITY SUMMARY

Hopewell RWTF
 UPPER JAMES Trading Basin

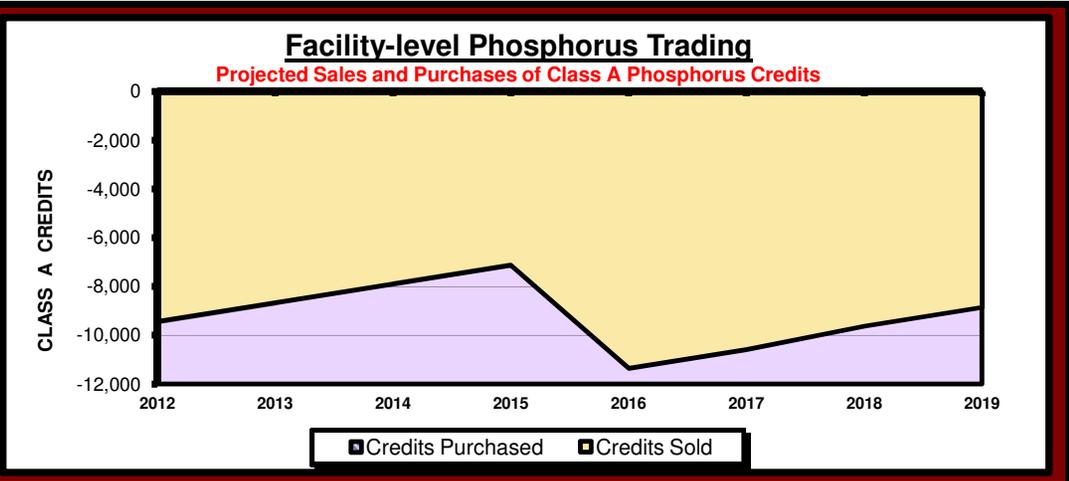


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Projected Flow (mgd)	30.80	31.20	31.60	32.00	29.80	30.20	30.70	31.10
Projected Avg. Annual Concentration (mg/L)	20.43	20.68	20.92	21.15	20.90	21.20	21.50	21.70
Discharged Load (end of pipe)	1,916,400	1,965,044	2,013,334	2,061,235	1,896,836	1,949,889	2,010,222	2,055,357
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	1,916,400	1,965,044	2,013,334	2,061,235	1,896,836	1,949,889	2,010,222	2,055,357
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)	(89,064)	(137,708)	(185,998)	(233,899)	(69,500)	(122,553)	(182,886)	(228,021)
Transfers In (Out) within Owner Bubble	0	0	0	0	0	0	0	0
Transfers In (Out) from Private Exchange	89,064	137,708	185,998	233,899	69,500	122,553	182,886	228,021
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

Hopewell RWTF
 UPPER JAMES Trading Basin



Loading & Credit Summary

Design Flow (mgd)	50.00
Projected Flow (mgd)	30.80
Projected Avg. Annual Concentration (mg/L)	0.70
Discharged Load (end of pipe)	65,662
Delivery Factor	1.00
Expected Load	65,662
Delivered WLA	76,139
Expected Credits (delivered)	10,477
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	10,477
Class A Credit Sales (Purchases)	9,429
Expected Class B Credits	1,048

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Projected Flow (mgd)	30.80	31.20	31.60	32.00	29.80	30.20	30.70	31.10
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)	65,662	66,515	67,368	68,221	63,530	64,383	65,449	66,302
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	65,662	66,515	67,368	68,221	63,530	64,383	65,449	66,302
Delivered WLA	76,139	76,139	76,139	76,139	76,139	76,139	76,139	76,139
Expected Credits (delivered)	10,477	9,624	8,771	7,918	12,609	11,756	10,690	9,837
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	10,477	9,624	8,771	7,918	12,609	11,756	10,690	9,837
Class A Credit Sales (Purchases)	9,429	8,662	7,894	7,126	11,348	10,580	9,621	8,853
Expected Class B Credits	1,048	962	877	792	1,261	1,176	1,069	984

Owner Bubble: Hampton Roads Sanitation District (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.

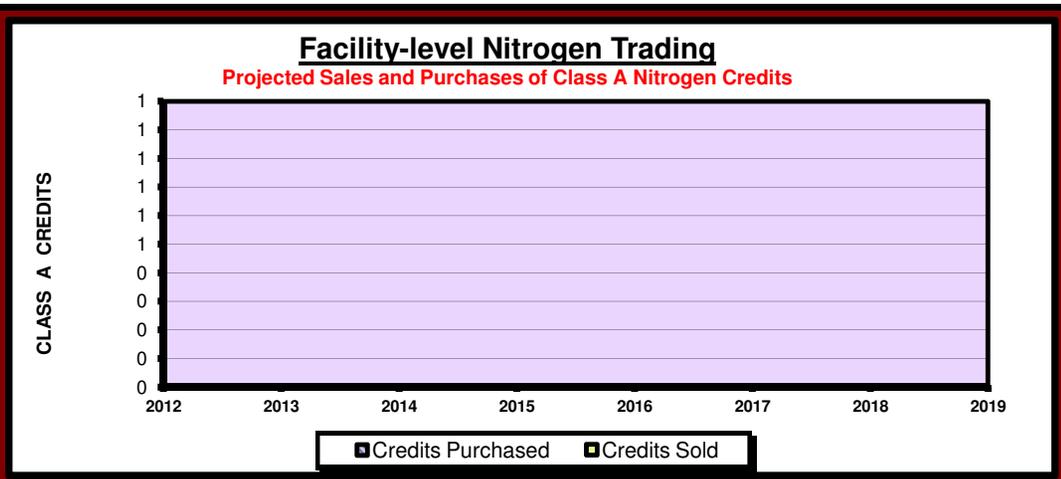
Expected Net Credits for an owner bubble may be either positive or negative. If Expected Net Credits is positive, the owner may pledge a percentage of such Credits to the Exchange. If Expected Net Credits is negative, Net Expected Credits identifies the number of Credits that must be purchased to comply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

NITROGEN Credits	Exchange 5-year Planning Period					Future Projections		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
Army Base	250,201	250,581	250,961	-	-	(268,806)	(268,730)	(268,654)
Boat Harbor	351,594	355,927	360,278	364,646	369,031	500,620	505,040	509,478
Ches/Eliz	99,713	107,762	115,864	124,022	132,234	652,200	660,522	668,900
James River	(754,670)	(751,459)	(748,228)	(584,072)	(598,620)	21,341	24,657	27,994
Nansemond	(36,417)	(54,328)	(72,333)	-	-	(264,489)	(254,997)	(245,314)
VIP	89,579	91,517	93,458	95,404	97,355	(508,662)	(507,573)	(506,482)
Williamsburg	-	-	-	-	-	(132,204)	(158,919)	(185,922)
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Army Base	-	-	-	437,732	437,656	-	-	-
Boat Harbor	-	-	-	-	-	-	-	-
Ches/Eliz	-	-	-	-	-	-	-	-
James River	-	-	-	160,904	143,083	-	-	-
Nansemond	287,416	260,915	234,146	297,538	288,418	-	-	-
VIP	-	-	-	-	-	-	-	-
Williamsburg	392,931	385,092	377,102	368,959	360,658	163,441	131,799	99,774
Expected Net Credits	680,347	646,007	611,248	1,265,133	1,229,815	163,441	131,799	99,774
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
<i>Expected Class B Credits</i>	<i>680,347</i>	<i>646,007</i>	<i>611,248</i>	<i>1,265,133</i>	<i>1,229,815</i>	<i>163,441</i>	<i>131,799</i>	<i>99,774</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		
	2012	2013	2014	2015	2016	2017	2018	2019
Credits Transferred within Bubble								
Army Base	13,280	13,303	13,326	(14,214)	(14,204)	(14,193)	(14,183)	(14,172)
Boat Harbor	13,593	13,859	14,125	14,392	14,661	14,930	15,201	15,473
Ches/Eliz	16,798	17,254	17,713	18,174	18,639	19,107	19,578	20,052
James River	(1,313)	(1,046)	(777)	(506)	(233)	42	318	596
Nansemond	(23,519)	(25,091)	(25,079)	(720)	(2,330)	(3,957)	(5,601)	(7,264)
VIP	-	-	(1,600)	-	-	-	-	-
Williamsburg	(18,839)	(18,279)	(17,708)	(17,126)	(16,533)	(15,929)	(15,313)	(14,685)
TOTAL (must sum to 0)	-	-	-	-	-	-	-	-
Credits Available outside Bubble								
Army Base	-	-	-	-	-	-	-	-
Boat Harbor	-	-	-	-	-	-	-	-
Ches/Eliz	-	-	-	-	-	-	-	-
James River	-	-	-	-	-	-	-	-
Nansemond	3,078	755	-	23,577	21,169	18,727	16,253	13,743
VIP	19,882	19,732	17,981	19,429	19,278	19,126	18,973	18,820
Williamsburg	-	-	-	-	-	-	-	-
Expected Credits	22,960	20,487	17,981	43,006	40,447	37,853	35,226	32,563
Private Exchanges	(9,011)	(9,011)	(9,011)	(9,011)	-	-	-	-
Expected Net Credits	13,949	11,476	8,970	33,995	40,447	37,853	35,226	32,563
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
<i>Expected Class B Credits</i>	<i>13,949</i>	<i>11,476</i>	<i>8,970</i>	<i>33,995</i>	<i>40,447</i>	<i>37,853</i>	<i>35,226</i>	<i>32,563</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

HRSD-Army Base
 LOWER JAMES Trading Basin

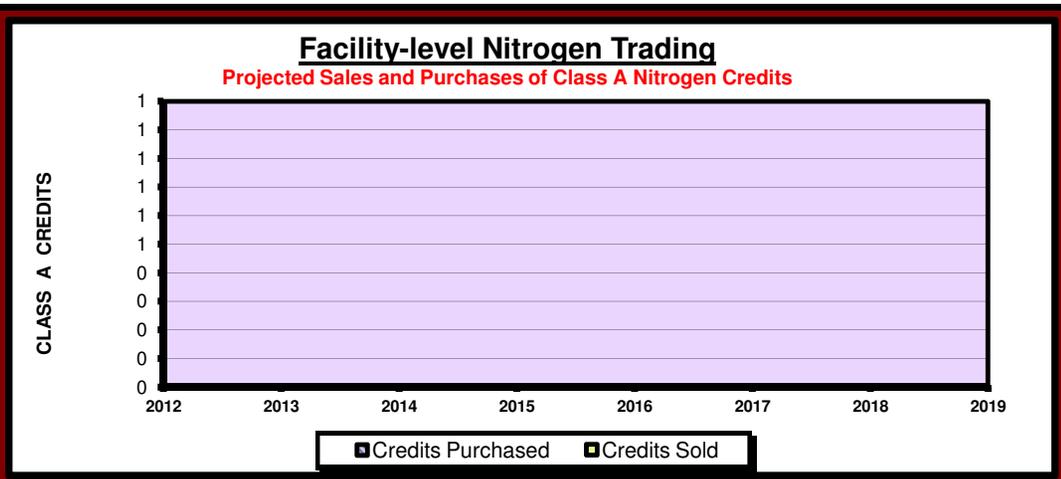


Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00
Projected Flow (mgd)	11.30	11.30	11.31	11.31	11.32	11.32	11.33	11.33
Projected Avg. Annual Concentration (mg/L)	25.00	25.00	25.00	5.00	5.00	5.00	5.00	5.00
Discharged Load (end of pipe)	860,201	860,581	860,961	172,268	172,344	172,420	172,496	172,572
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	860,201	860,581	860,961	172,268	172,344	172,420	172,496	172,572
Delivered WLA	610,000	610,000	610,000	610,000	610,000	441,226	441,226	441,226
Expected Credits (delivered)	(250,201)	(250,581)	(250,961)	437,732	437,656	268,806	268,730	268,654
Transfers In (Out) within Owner Bubble	250,201	250,581	250,961	0	0	(268,806)	(268,730)	(268,654)
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	437,732	437,656	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	437,732	437,656	0	0	0

NITROGEN FACILITY SUMMARY

HRSD-Boat Harbor
 LOWER JAMES Trading Basin

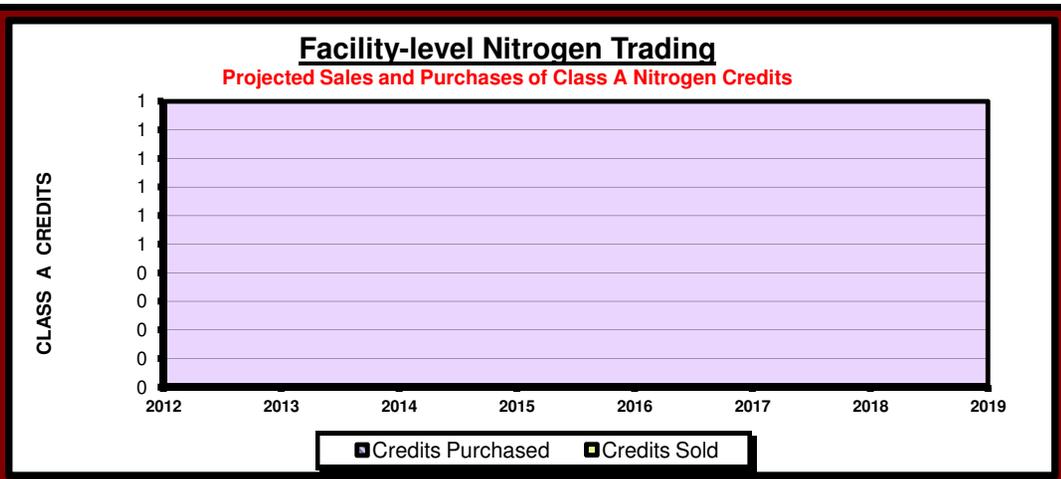


Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
Projected Flow (mgd)	14.63	14.69	14.75	14.80	14.86	14.92	14.98	15.04
Projected Avg. Annual Concentration (mg/L)	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50
Discharged Load (end of pipe)	1,091,594	1,095,927	1,100,278	1,104,646	1,109,031	1,113,433	1,117,853	1,122,291
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	1,091,594	1,095,927	1,100,278	1,104,646	1,109,031	1,113,433	1,117,853	1,122,291
Delivered WLA	740,000	740,000	740,000	740,000	740,000	612,813	612,813	612,813
Expected Credits (delivered)	(351,594)	(355,927)	(360,278)	(364,646)	(369,031)	(500,620)	(505,040)	(509,478)
Transfers In (Out) within Owner Bubble	351,594	355,927	360,278	364,646	369,031	500,620	505,040	509,478
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-Ches/Eliz
 LOWER JAMES Trading Basin

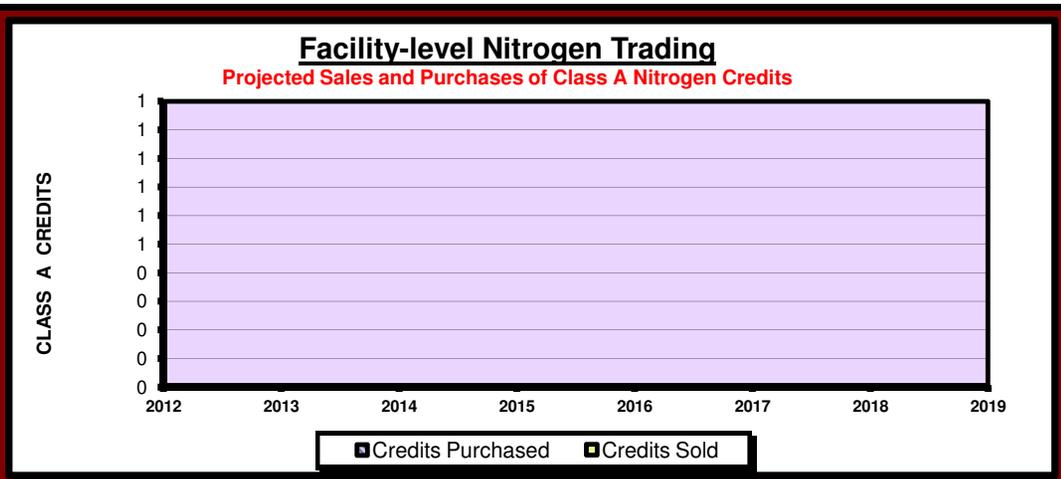


Loading & Credit Summary	
Design Flow (mgd)	24.00
Projected Flow (mgd)	14.86
Projected Avg. Annual Concentration (mg/L)	26.50
Discharged Load (end of pipe)	1,199,713
Delivery Factor	1.00
Expected Load	1,199,713
Delivered WLA	1,100,000
Expected Credits (delivered)	(99,713)
Transfers In (Out) within Owner Bubble	99,713
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

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Projected Flow (mgd)	14.86	14.96	15.07	15.17	15.27	15.37	15.47	15.58
Projected Avg. Annual Concentration (mg/L)	26.50	26.50	26.50	26.50	26.50	26.50	26.50	26.50
Discharged Load (end of pipe)	1,199,713	1,207,762	1,215,864	1,224,022	1,232,234	1,240,501	1,248,823	1,257,201
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	1,199,713	1,207,762	1,215,864	1,224,022	1,232,234	1,240,501	1,248,823	1,257,201
Delivered WLA	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	588,301	588,301	588,301
Expected Credits (delivered)	(99,713)	(107,762)	(115,864)	(124,022)	(132,234)	(652,200)	(660,522)	(668,900)
Transfers In (Out) within Owner Bubble	99,713	107,762	115,864	124,022	132,234	652,200	660,522	668,900
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-James River
 LOWER JAMES Trading Basin

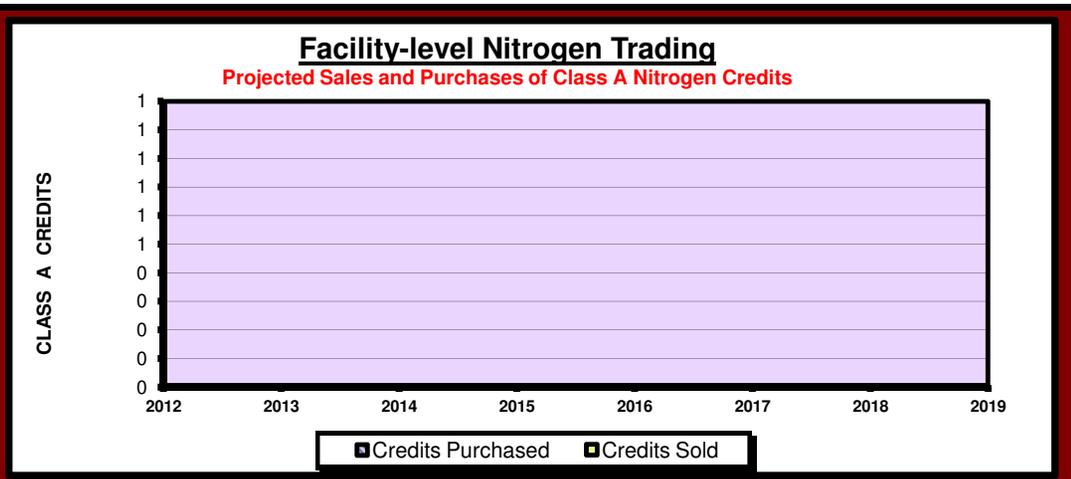


Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Projected Flow (mgd)	13.55	13.64	13.73	13.82	13.91	14.00	14.09	14.18
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)	495,330	498,541	501,772	505,024	508,297	511,592	514,908	518,245
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	495,330	498,541	501,772	505,024	508,297	511,592	514,908	518,245
Delivered WLA	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	490,251	490,251	490,251
Expected Credits (delivered)	754,670	751,459	748,228	744,976	741,703	(21,341)	(24,657)	(27,994)
Transfers In (Out) within Owner Bubble	(754,670)	(751,459)	(748,228)	(584,072)	(598,620)	21,341	24,657	27,994
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	160,904	143,083	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	160,904	143,083	0	0	0

NITROGEN FACILITY SUMMARY

HRSD-Nansemond
 LOWER JAMES Trading Basin



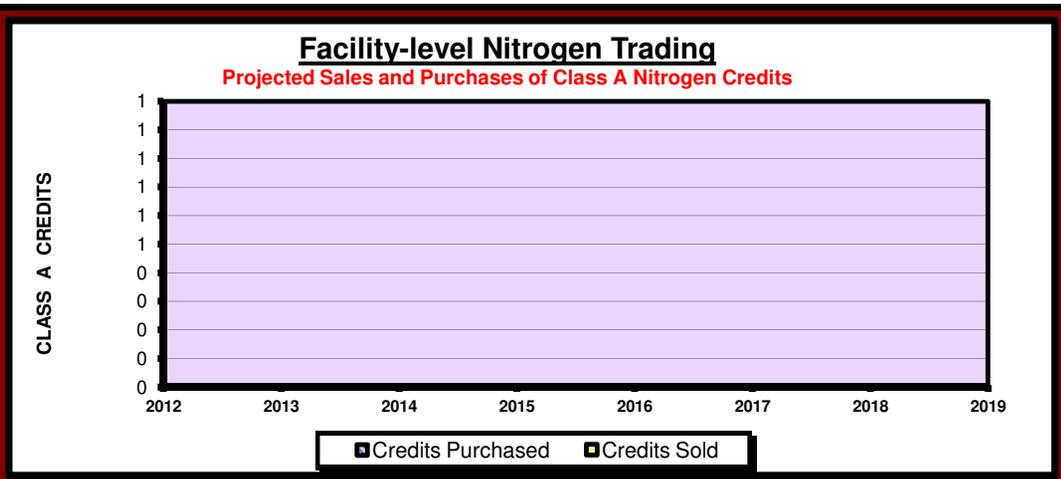
Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Projected Flow (mgd)	17.49	17.84	18.20	18.57	18.94	19.33	19.72	20.11
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)	426,167	434,757	443,521	452,462	461,582	470,887	480,379	490,062
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	426,167	434,757	443,521	452,462	461,582	470,887	480,379	490,062
Delivered WLA	750,000	750,000	750,000	750,000	750,000	735,376	735,376	735,376
Expected Credits (delivered)	323,833	315,243	306,479	297,538	288,418	264,489	254,997	245,314
Transfers In (Out) within Owner Bubble	(36,417)	(54,328)	(72,333)	0	0	(264,489)	(254,997)	(245,314)
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	287,416	260,915	234,146	297,538	288,418	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	287,416	260,915	234,146	297,538	288,418	0	0	0

NITROGEN FACILITY SUMMARY

HRSD-VIP

LOWER JAMES Trading Basin

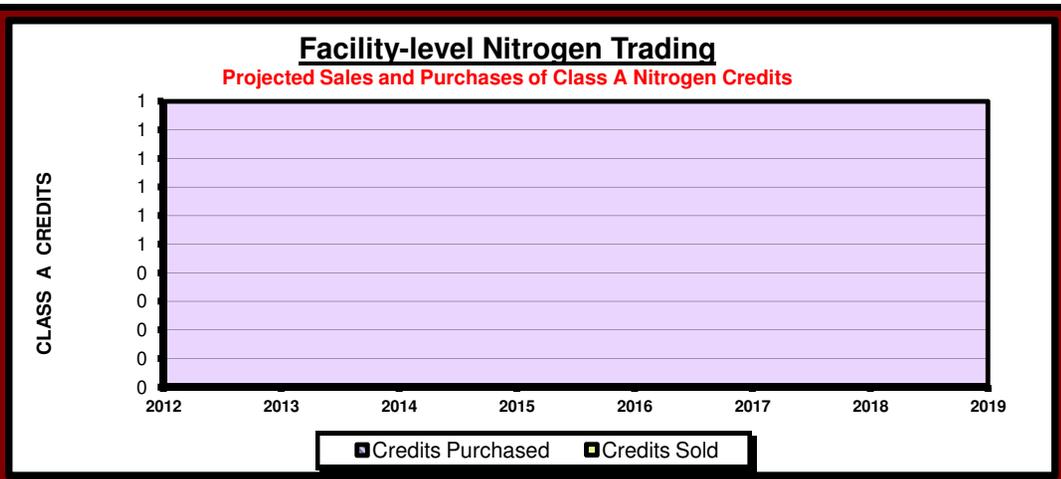


Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00
Projected Flow (mgd)	30.63	30.70	30.77	30.84	30.91	30.99	31.06	31.13
Projected Avg. Annual Concentration (mg/L)	9.00	9.00	9.00	9.00	9.00	5.00	5.00	5.00
Discharged Load (end of pipe)	839,579	841,517	843,458	845,404	847,355	471,839	472,928	474,019
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	839,579	841,517	843,458	845,404	847,355	471,839	472,928	474,019
Delivered WLA	750,000	750,000	750,000	750,000	750,000	980,501	980,501	980,501
Expected Credits (delivered)	(89,579)	(91,517)	(93,458)	(95,404)	(97,355)	508,662	507,573	506,482
Transfers In (Out) within Owner Bubble	89,579	91,517	93,458	95,404	97,355	(508,662)	(507,573)	(506,482)
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-Williamsburg
 LOWER 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	

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50
Projected Flow (mgd)	9.55	9.73	9.92	10.11	10.30	10.50	10.70	10.91
Projected Avg. Annual Concentration (mg/L)	14.00	14.00	14.00	14.00	14.00	8.00	8.00	8.00
Discharged Load (end of pipe)	407,069	414,908	422,898	431,041	439,342	255,887	260,814	265,836
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	407,069	414,908	422,898	431,041	439,342	255,887	260,814	265,836
Delivered WLA	800,000	800,000	800,000	800,000	800,000	551,532	551,532	551,532
Expected Credits (delivered)	392,931	385,092	377,102	368,959	360,658	295,645	290,718	285,696
Transfers In (Out) within Owner Bubble	0	0	0	0	0	(132,204)	(158,919)	(185,922)
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	392,931	385,092	377,102	368,959	360,658	163,441	131,799	99,774
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	392,931	385,092	377,102	368,959	360,658	163,441	131,799	99,774

FACILITY (OR OWNER BUBBLE) NAME: VAN040090 HRSD James River Aggregate

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

Check One:

- James River TN Compliance
 York River TP Compliance

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 under II.B.)

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

Completion of the Army Base, Williamsburg, and James River STP projects is needed to reliably meet the 2012 aggregate wasteload allocation. Construction has begun on all of these projects. A project is required at the Virginia Initiative STP to maintain year round nitrogen removal and to reliably meet the 2017 reduced aggregate wasteload allocation.

Implementation Schedule

- Does permittee anticipate using credit purchase to comply?
 NO YES
- 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.)
- Capital Project Milestone Schedule (Specify estimated date for each milestone. For bubbles, specify facility name(s) and list multiple facility schedules if applicable.)

Army Base STP

Engineer selection	<u>8/22/2006</u>
PER/CER to DEQ	<u>10/1/2007</u>
Plans & Specifications to DEQ	<u>7/1/2009</u>
Commence construction	<u>5/3/2010</u>
Complete construction	<u>3/1/2014</u>
CTO Request to DEQ (POTWs only)	<u>4/1/2014</u>

James River STP Contract B

Engineer selection	<u>9/1/2007</u>
PER/CER to DEQ	<u>6/1/2008</u>
Plans & Specifications to DEQ	<u>1/1/2009</u>
Commence construction	<u>6/1/2009</u>
Complete construction	<u>5/1/2012</u>
CTO Request to DEQ (POTWs only)	<u>5/1/2012</u>

Williamsburg STP

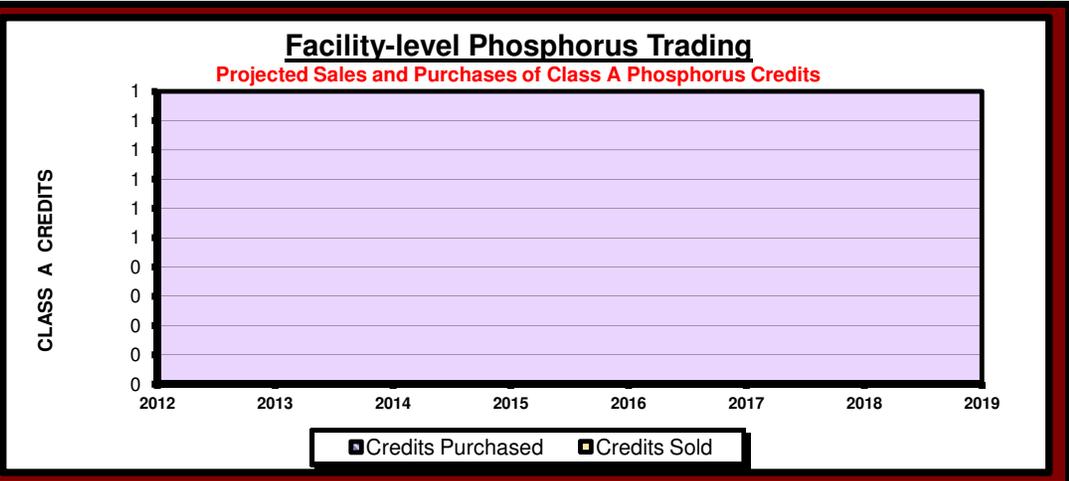
Engineer selection	<u>11/1/2008</u>
PER/CER to DEQ	<u>3/1/2009</u>
Plans & Specifications to DEQ	<u>6/1/2008</u>
Commence construction	<u>1/1/2010</u>
Complete construction	<u>3/1/2012</u>
CTO Request to DEQ (POTWs only)	<u>3/1/2012</u>

Virginia Initiative STP

Engineer selection	<u>7/1/2011</u>
PER/CER to DEQ	<u>6/1/2011</u>
Plans & Specifications to DEQ	<u>2/1/2013</u>
Commence construction	<u>8/1/2013</u>
Complete construction	<u>2/1/2017</u>
CTO Request to DEQ (POTWs only)	<u>2/1/2017</u>

PHOSPHORUS FACILITY SUMMARY

HRSD-Army Base
 LOWER JAMES Trading Basin

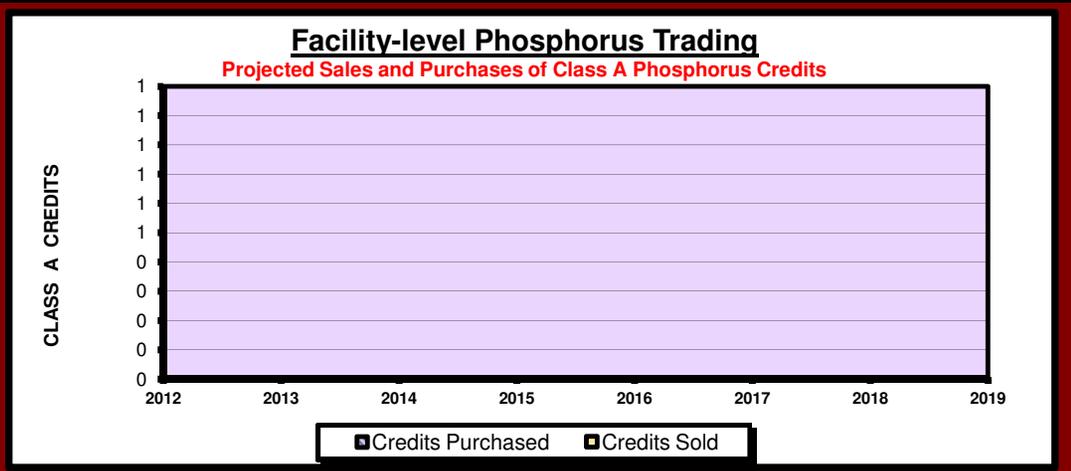


Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00
11.30	11.30	11.31	11.31	11.32	11.32	11.33	11.33
1.50	1.50	1.50	0.70	0.70	0.70	0.70	0.70
51,612	51,635	51,658	24,118	24,128	24,139	24,149	24,160
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
51,612	51,635	51,658	24,118	24,128	24,139	24,149	24,160
38,332	38,332	38,332	38,332	38,332	38,332	38,332	38,332
(13,280)	(13,303)	(13,326)	14,214	14,204	14,193	14,183	14,172
13,280	13,303	13,326	(14,214)	(14,204)	(14,193)	(14,183)	(14,172)
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

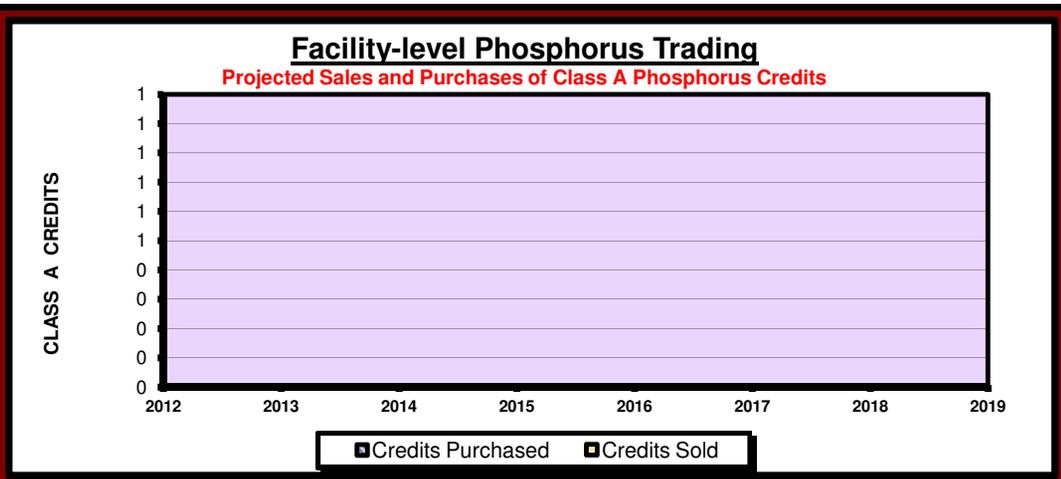
HRSD-Boat Harbor
 LOWER JAMES Trading Basin



Loading & Credit Summary	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
Projected Flow (mgd)	14.63	14.69	14.75	14.80	14.86	14.92	14.98	15.04
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)	66,832	67,098	67,364	67,631	67,900	68,169	68,440	68,712
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	66,832	67,098	67,364	67,631	67,900	68,169	68,440	68,712
Delivered WLA	53,239	53,239	53,239	53,239	53,239	53,239	53,239	53,239
Expected Credits (delivered)	(13,593)	(13,859)	(14,125)	(14,392)	(14,661)	(14,930)	(15,201)	(15,473)
Transfers In (Out) within Owner Bubble	13,593	13,859	14,125	14,392	14,661	14,930	15,201	15,473
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-Ches/Eliz
 LOWER JAMES Trading Basin

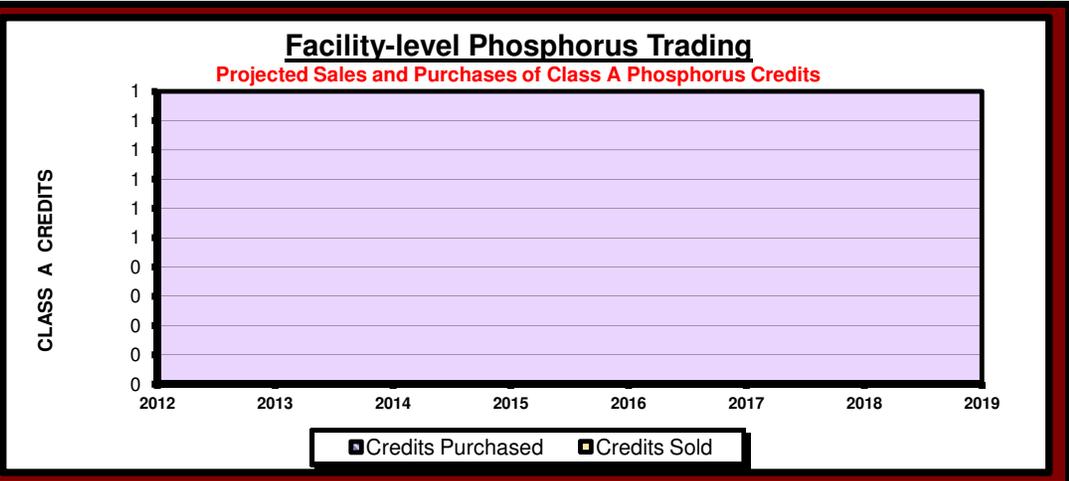


Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Projected Flow (mgd)	14.86	14.96	15.07	15.17	15.27	15.37	15.47	15.58
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)	67,908	68,364	68,823	69,284	69,749	70,217	70,688	71,162
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	67,908	68,364	68,823	69,284	69,749	70,217	70,688	71,162
Delivered WLA	51,110	51,110	51,110	51,110	51,110	51,110	51,110	51,110
Expected Credits (delivered)	(16,798)	(17,254)	(17,713)	(18,174)	(18,639)	(19,107)	(19,578)	(20,052)
Transfers In (Out) within Owner Bubble	16,798	17,254	17,713	18,174	18,639	19,107	19,578	20,052
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-James River
 LOWER JAMES Trading Basin

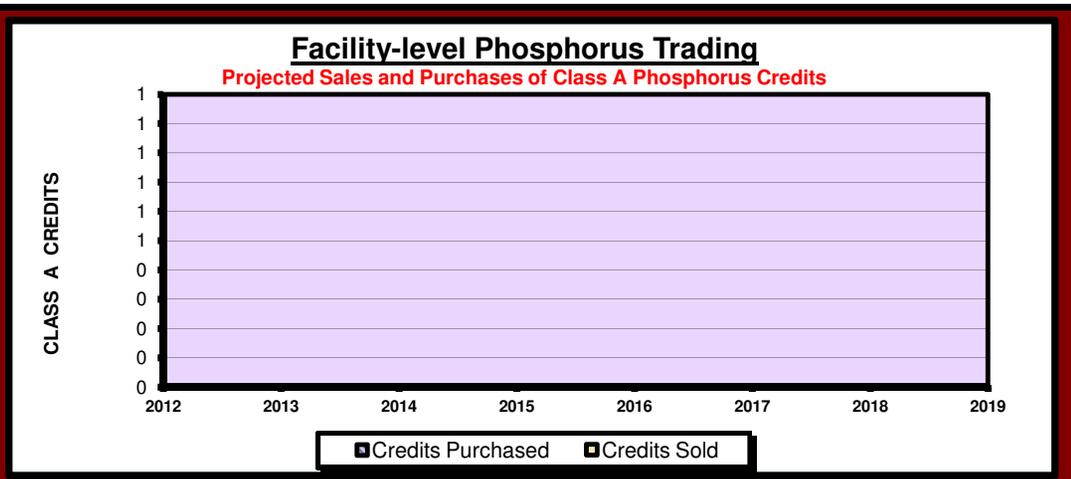


Loading & Credit Summary	
Design Flow (mgd)	20.00
Projected Flow (mgd)	13.55
Projected Avg. Annual Concentration (mg/L)	1.00
Discharged Load (end of pipe)	41,278
Delivery Factor	1.00
Expected Load	41,278
Delivered WLA	42,591
Expected Credits (delivered)	1,313
Transfers In (Out) within Owner Bubble	(1,313)
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

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Projected Flow (mgd)	13.55	13.64	13.73	13.82	13.91	14.00	14.09	14.18
Projected Avg. Annual Concentration (mg/L)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Discharged Load (end of pipe)	41,278	41,545	41,814	42,085	42,358	42,633	42,909	43,187
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	41,278	41,545	41,814	42,085	42,358	42,633	42,909	43,187
Delivered WLA	42,591	42,591	42,591	42,591	42,591	42,591	42,591	42,591
Expected Credits (delivered)	1,313	1,046	777	506	233	(42)	(318)	(596)
Transfers In (Out) within Owner Bubble	(1,313)	(1,046)	(777)	(506)	(233)	42	318	596
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-Nansemond
 LOWER JAMES Trading Basin

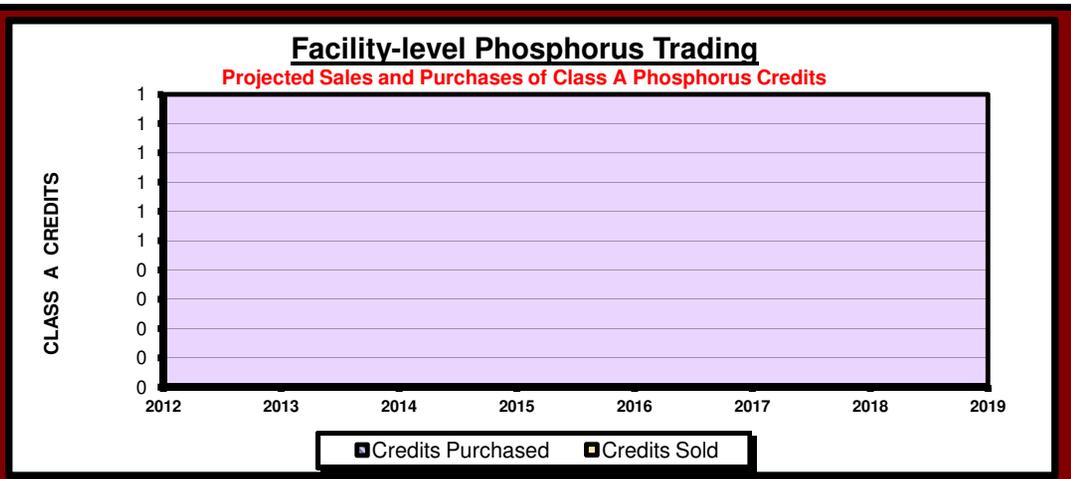


	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Projected Flow (mgd)	17.49	17.84	18.20	18.57	18.94	19.33	19.72	20.11
Projected Avg. Annual Concentration (mg/L)	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Discharged Load (end of pipe)	37,290	38,041	38,808	39,590	40,388	41,203	42,033	42,880
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	37,290	38,041	38,808	39,590	40,388	41,203	42,033	42,880
Delivered WLA	63,887	63,887	63,887	63,887	63,887	63,887	63,887	63,887
Expected Credits (delivered)	26,597	25,846	25,079	24,297	23,499	22,684	21,854	21,007
Transfers In (Out) within Owner Bubble	(23,519)	(25,091)	(25,079)	(720)	(2,330)	(3,957)	(5,601)	(7,264)
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	3,078	755	0	23,577	21,169	18,727	16,253	13,743
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	3,078	755	0	23,577	21,169	18,727	16,253	13,743

PHOSPHORUS FACILITY SUMMARY

HRSD-VIP

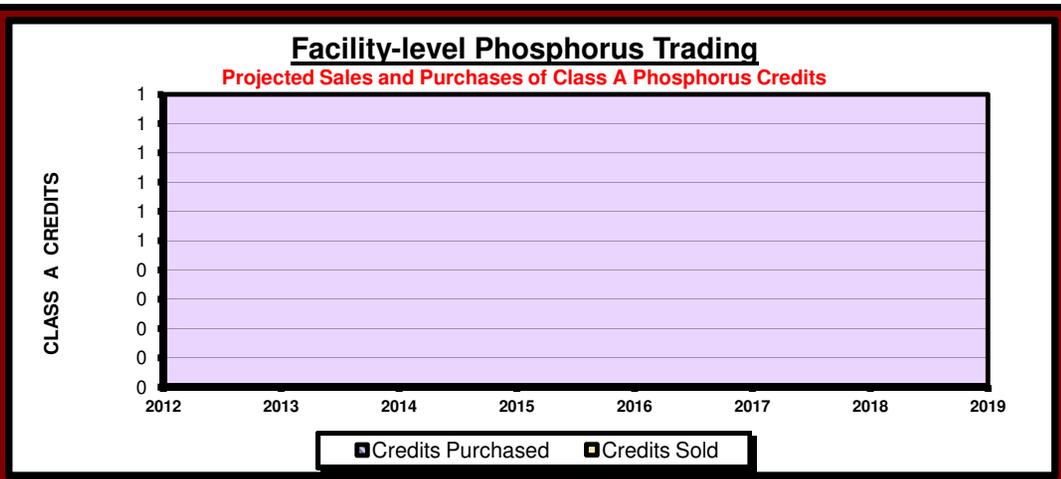
LOWER JAMES Trading Basin



	2012	2013	2014	2015	2016	2017	2018	2019
	<i>Planning Period</i>					<i>Future Estimates (non-binding)</i>		
Loading & Credit Summary								
Design Flow (mgd)	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00
Projected Flow (mgd)	30.63	30.70	30.77	30.84	30.91	30.99	31.06	31.13
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)	65,301	65,451	65,602	65,754	65,905	66,057	66,210	66,363
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	65,301	65,451	65,602	65,754	65,905	66,057	66,210	66,363
Delivered WLA	85,183	85,183	85,183	85,183	85,183	85,183	85,183	85,183
Expected Credits (delivered)	19,882	19,732	19,581	19,429	19,278	19,126	18,973	18,820
Transfers In (Out) within Owner Bubble	0	0	(1,600)	0	0	0	0	0
Transfers In (Out) from Private Exchange	(9,011)	(9,011)	(9,011)	(9,011)	0	0	0	0
WQIF-Held Credits	0	0	0	0	0	0	0	0
Expected Net Credits	10,871	10,721	8,970	10,418	19,278	19,126	18,973	18,820
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	10,871	10,721	8,970	10,418	19,278	19,126	18,973	18,820

PHOSPHORUS FACILITY SUMMARY

HRSD-Williamsburg
 LOWER JAMES Trading Basin



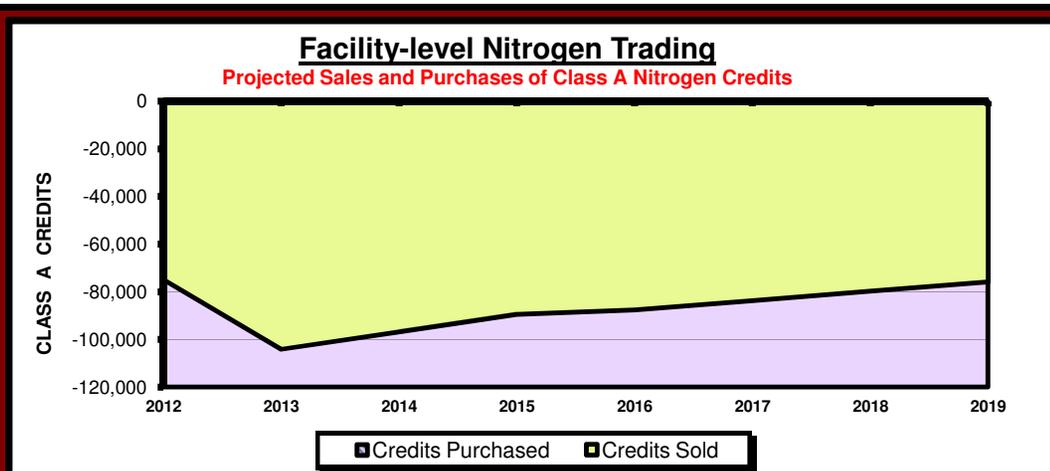
Loading & Credit Summary

Design Flow (mgd)	22.50
Projected Flow (mgd)	9.55
Projected Avg. Annual Concentration (mg/L)	1.00
Discharged Load (end of pipe)	29,076
Delivery Factor	1.00
Expected Load	29,076
Delivered WLA	47,915
Expected Credits (delivered)	18,839
Transfers In (Out) within Owner Bubble	(18,839)
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

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50
Projected Flow (mgd)	9.55	9.73	9.92	10.11	10.30	10.50	10.70	10.91
Projected Avg. Annual Concentration (mg/L)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Discharged Load (end of pipe)	29,076	29,636	30,207	30,789	31,382	31,986	32,602	33,230
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	29,076	29,636	30,207	30,789	31,382	31,986	32,602	33,230
Delivered WLA	47,915	47,915	47,915	47,915	47,915	47,915	47,915	47,915
Expected Credits (delivered)	18,839	18,279	17,708	17,126	16,533	15,929	15,313	14,685
Transfers In (Out) within Owner Bubble	(18,839)	(18,279)	(17,708)	(17,126)	(16,533)	(15,929)	(15,313)	(14,685)
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

Lynchburg
UPPER JAMES Trading Basin

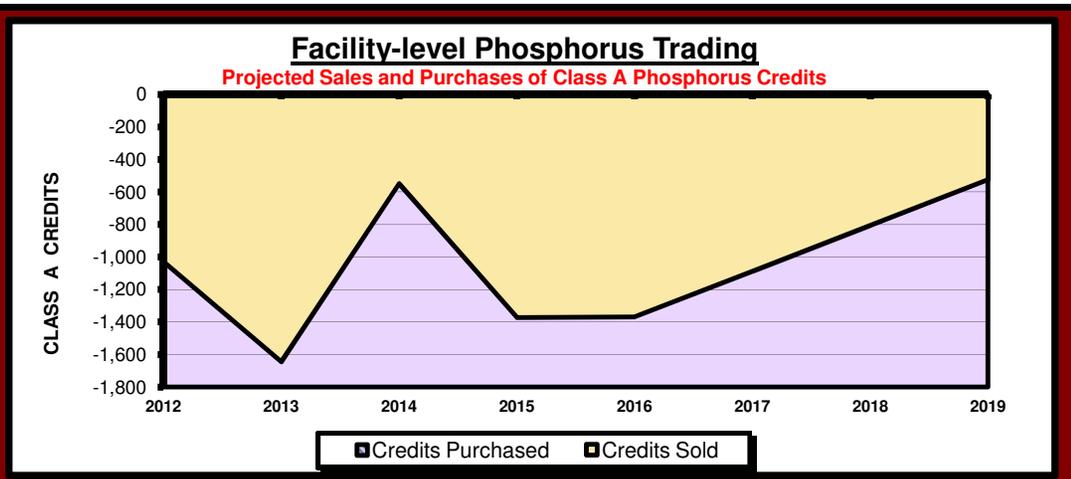


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	12.50	13.00	13.50	14.00	14.50	14.75	15.00	15.25
Projected Avg. Annual Concentration (mg/L)	10.50	8.75	8.75	8.75	8.75	8.75	8.75	8.75
Discharged Load (end of pipe)	399,730	346,432	359,757	373,081	386,405	393,068	399,730	406,392
Delivery Factor	0.61	0.61	0.61	0.61	0.65	0.65	0.65	0.65
Expected Load	243,835	211,324	219,452	227,579	251,164	255,494	259,824	264,155
Delivered WLA	326,971	326,971	326,971	326,971	348,412	348,412	348,412	348,412
Expected Credits (delivered)	83,136	115,647	107,519	99,392	97,248	92,918	88,588	84,257
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	83,136	115,647	107,519	99,392	97,248	92,918	88,588	84,257
Class A Credit Sales (Purchases)	74,822	104,082	96,767	89,453	87,523	83,626	79,729	75,831
Expected Class B Credits	8,314	11,565	10,752	9,939	9,725	9,292	8,859	8,426

PHOSPHORUS FACILITY SUMMARY

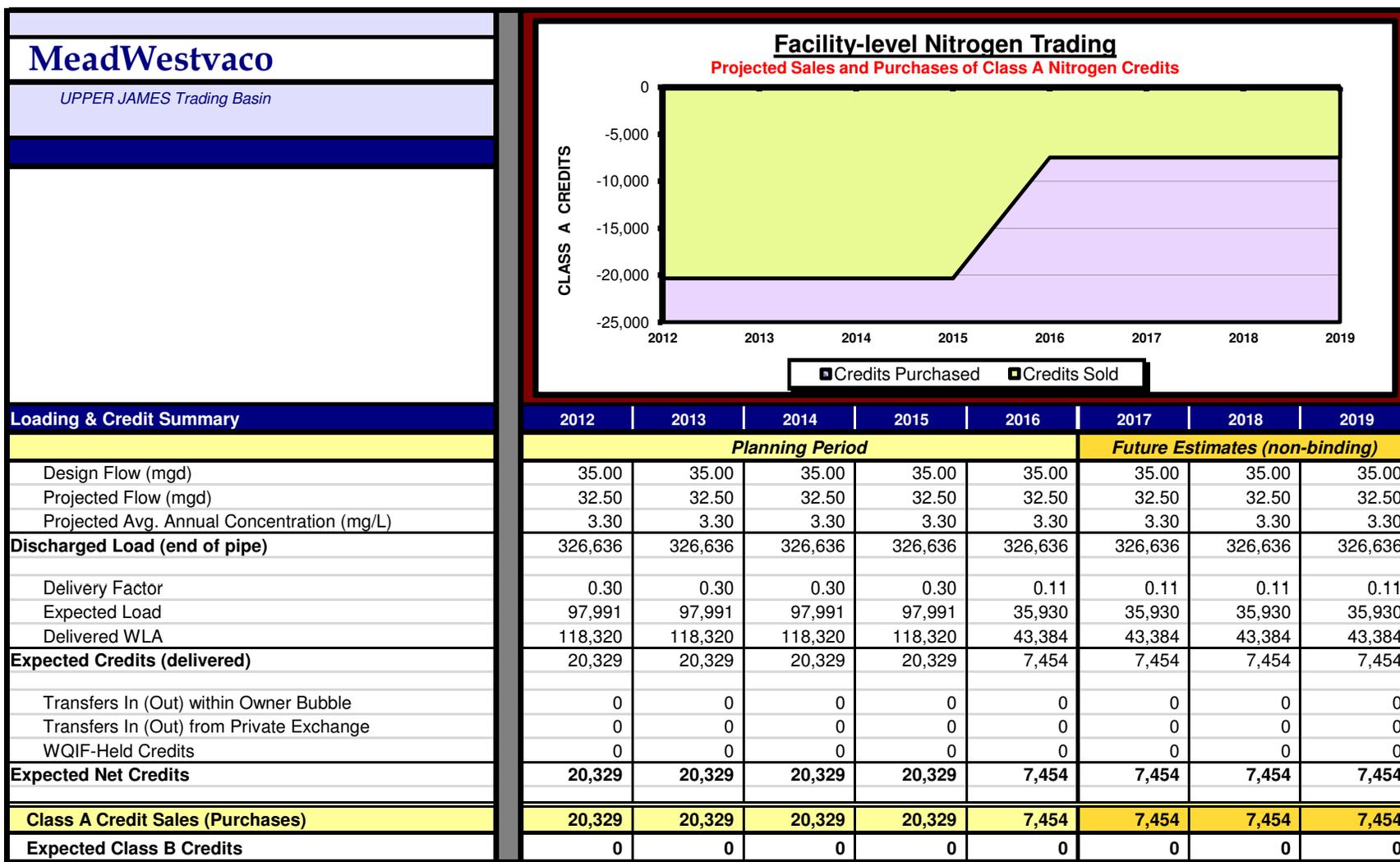
Lynchburg
UPPER JAMES Trading Basin



Loading & Credit Summary	
Design Flow (mgd)	22.00
Projected Flow (mgd)	12.50
Projected Avg. Annual Concentration (mg/L)	0.85
Discharged Load (end of pipe)	32,359
Delivery Factor	1.00
Expected Load	32,359
Delivered WLA	33,501
Expected Credits (delivered)	1,142
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	1,142
Class A Credit Sales (Purchases)	1,028
Expected Class B Credits	114

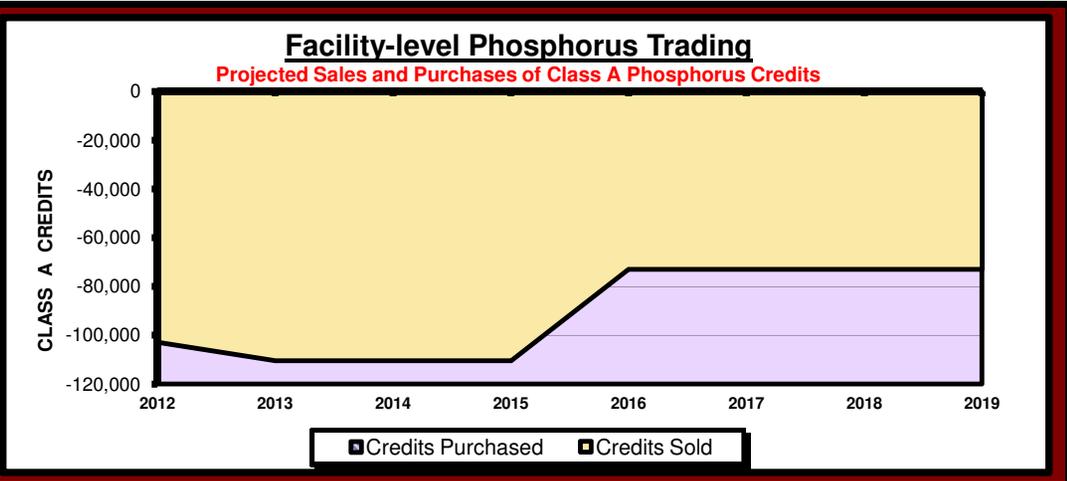
2012	2013	2014	2015	2016	2017	2018	2019	
Planning Period					Future Estimates (non-binding)			
22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	
12.50	13.00	13.50	14.00	14.50	14.75	15.00	15.25	
0.85	0.80	0.80	0.75	0.70	0.70	0.70	0.70	
32,359	31,674	32,892	31,978	30,912	31,445	31,978	32,511	
1.00	1.00	1.00	1.00	0.66	0.66	0.66	0.66	
32,359	31,674	32,892	31,978	20,402	20,754	21,106	21,457	
33,501	33,501	33,501	33,501	22,111	22,111	22,111	22,111	
1,142	1,827	609	1,523	1,709	1,357	1,005	654	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
1,142	1,827	609	1,523	1,709	1,357	1,005	654	
1,028	1,644	548	1,371	1,367	1,086	804	523	
114	183	61	152	342	271	201	131	

NITROGEN FACILITY SUMMARY



PHOSPHORUS FACILITY SUMMARY

MeadWestvaco
 UPPER JAMES Trading Basin



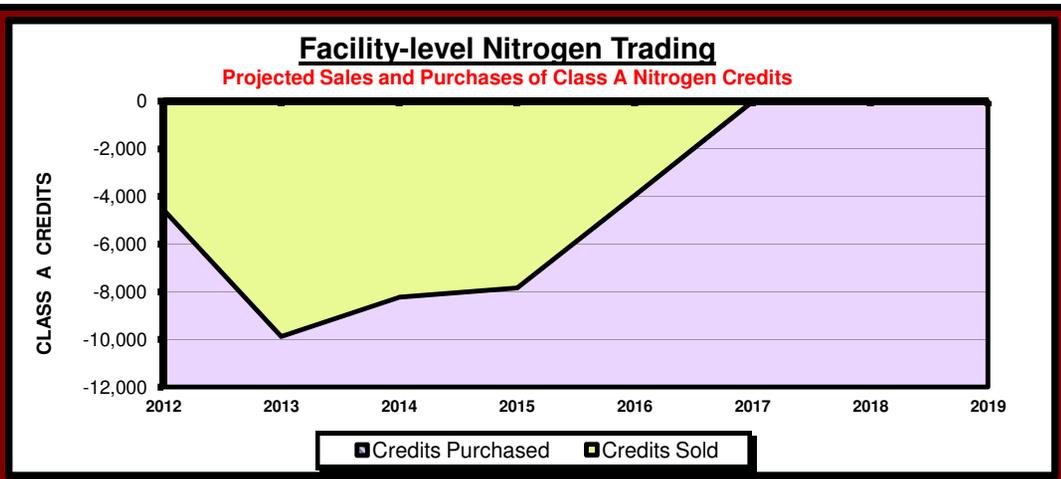
Loading & Credit Summary

Design Flow (mgd)	35.00
Projected Flow (mgd)	32.50
Projected Avg. Annual Concentration (mg/L)	0.50
Discharged Load (end of pipe)	49,490
Delivery Factor	1.00
Expected Load	49,490
Delivered WLA	159,892
Expected Credits (delivered)	110,402
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	110,402
Class A Credit Sales (Purchases)	102,788
Expected Class B Credits	7,614

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
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)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Discharged Load (end of pipe)	49,490	49,490	49,490	49,490	49,490	49,490	49,490	49,490
Delivery Factor	1.00	1.00	1.00	1.00	0.66	0.66	0.66	0.66
Expected Load	49,490	49,490	49,490	49,490	32,664	32,664	32,664	32,664
Delivered WLA	159,892	159,892	159,892	159,892	105,529	105,529	105,529	105,529
Expected Credits (delivered)	110,402	110,402	110,402	110,402	72,865	72,865	72,865	72,865
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	110,402	110,402	110,402	110,402	72,865	72,865	72,865	72,865
Class A Credit Sales (Purchases)	102,788	110,402	110,402	110,402	72,865	72,865	72,865	72,865
Expected Class B Credits	7,614	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

MSA-Lexington
UPPER JAMES Trading Basin

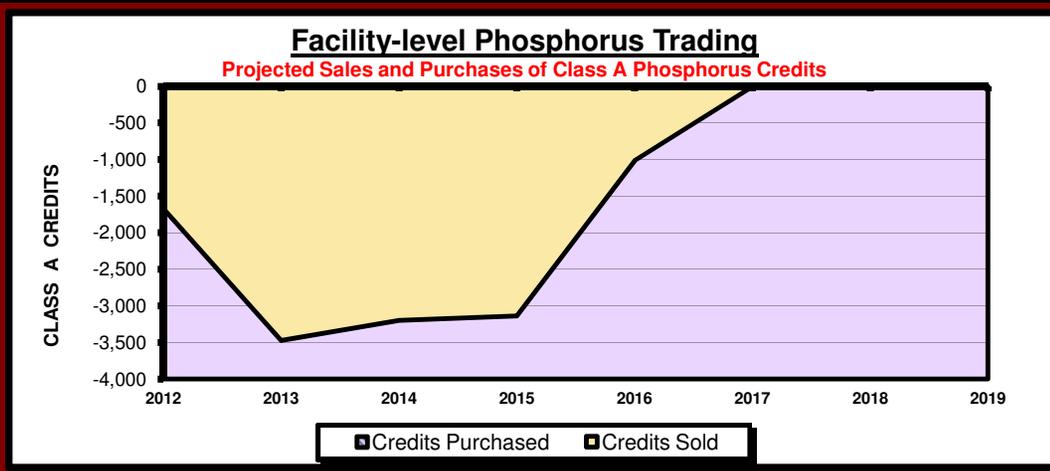


Loading & Credit Summary	
Design Flow (mgd)	3.00
Projected Flow (mgd)	1.34
Projected Avg. Annual Concentration (mg/L)	6.00
Discharged Load (end of pipe)	24,486
Delivery Factor	0.30
Expected Load	7,346
Delivered WLA	16,446
Expected Credits (delivered)	9,100
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	9,100
Class A Credit Sales (Purchases)	4,550
Expected Class B Credits	4,550

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	1.34	1.20	1.50	1.57	1.65	1.74	1.83	1.93
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)	24,486	21,928	27,410	28,689	30,151	31,796	33,440	35,268
Delivery Factor	0.30	0.30	0.30	0.30	0.32	0.32	0.32	0.32
Expected Load	7,346	6,578	8,223	8,607	9,648	10,175	10,701	11,286
Delivered WLA	16,446	16,446	16,446	16,446	17,542	17,542	17,542	17,542
Expected Credits (delivered)	9,100	9,868	8,223	7,839	7,894	7,367	6,841	6,256
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	9,100	9,868	8,223	7,839	7,894	7,367	6,841	6,256
Class A Credit Sales (Purchases)	4,550	9,868	8,223	7,839	3,947	0	0	0
Expected Class B Credits	4,550	0	0	0	3,947	7,367	6,841	6,256

PHOSPHORUS FACILITY SUMMARY

MSA-Lexington
 UPPER JAMES Trading Basin



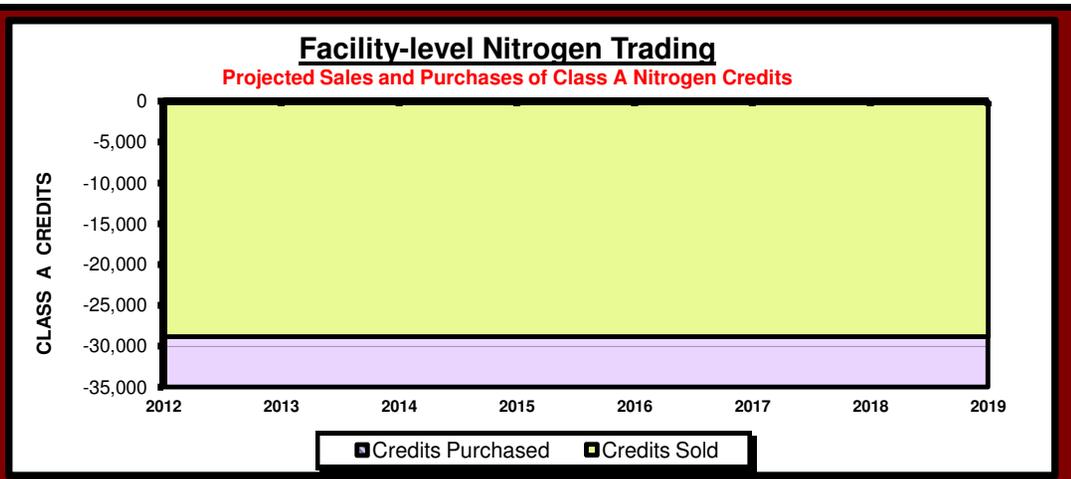
Loading & Credit Summary

Design Flow (mgd)	3.00
Projected Flow (mgd)	1.34
Projected Avg. Annual Concentration (mg/L)	0.30
Discharged Load (end of pipe)	1,224
Delivery Factor	1.00
Expected Load	1,224
Delivered WLA	4,568
Expected Credits (delivered)	3,344
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	3,344
Class A Credit Sales (Purchases)	1,672
Expected Class B Credits	1,672

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	1.34	1.20	1.50	1.57	1.65	1.74	1.83	1.93
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)	1,224	1,096	1,371	1,434	1,508	1,590	1,672	1,763
Delivery Factor	1.00	1.00	1.00	1.00	0.66	0.66	0.66	0.66
Expected Load	1,224	1,096	1,371	1,434	995	1,049	1,104	1,164
Delivered WLA	4,568	4,568	4,568	4,568	3,015	3,015	3,015	3,015
Expected Credits (delivered)	3,344	3,472	3,197	3,134	2,020	1,966	1,911	1,851
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	3,344	3,472	3,197	3,134	2,020	1,966	1,911	1,851
Class A Credit Sales (Purchases)	1,672	3,472	3,197	3,134	1,010	0	0	0
Expected Class B Credits	1,672	0	0	0	1,010	1,966	1,911	1,851

NITROGEN FACILITY SUMMARY

Philip Morris
 UPPER JAMES Trading Basin

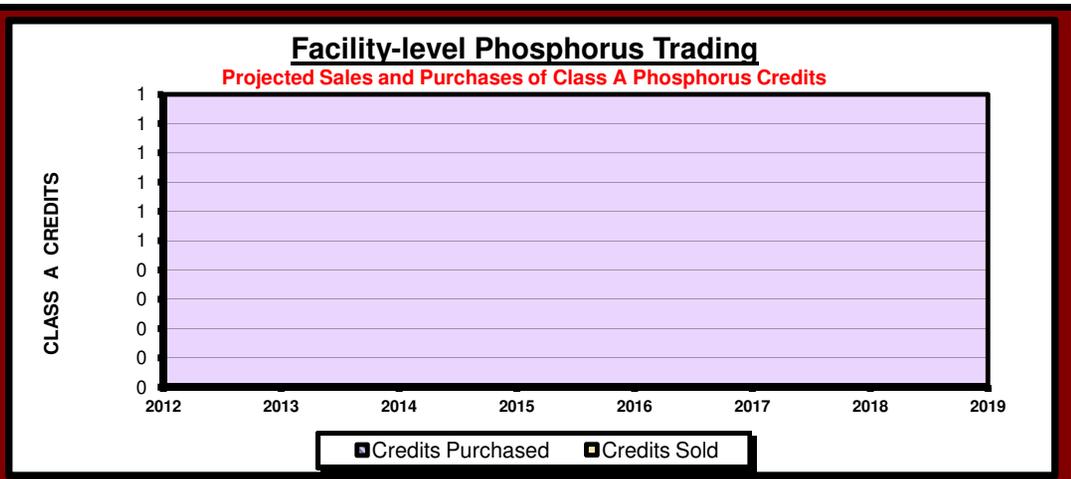


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
Projected Avg. Annual Concentration (mg/L)	13.90	13.90	13.90	13.90	13.90	13.90	13.90	13.90
Discharged Load (end of pipe)	67,733	67,733	67,733	67,733	67,733	67,733	67,733	67,733
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	67,733	67,733	67,733	67,733	67,733	67,733	67,733	67,733
Delivered WLA	139,724	139,724	139,724	139,724	139,724	139,724	139,724	139,724
Expected Credits (delivered)	71,991	71,991	71,991	71,991	71,991	71,991	71,991	71,991
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	71,991	71,991	71,991	71,991	71,991	71,991	71,991	71,991
Class A Credit Sales (Purchases)	28,796	28,796	28,796	28,796	28,796	28,796	28,796	28,796
Expected Class B Credits	43,195	43,195	43,195	43,195	43,195	43,195	43,195	43,195

PHOSPHORUS FACILITY SUMMARY

Philip Morris
 UPPER JAMES Trading Basin



Loading & Credit Summary

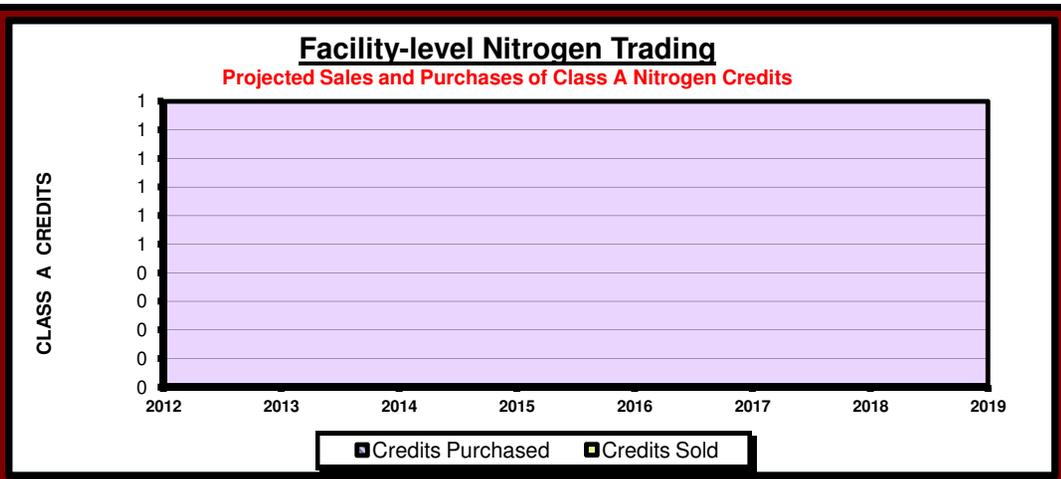
Design Flow (mgd)	2.90
Projected Flow (mgd)	1.60
Projected Avg. Annual Concentration (mg/L)	0.50
Discharged Load (end of pipe)	2,436
Delivery Factor	1.00
Expected Load	2,436
Delivered WLA	2,650
Expected Credits (delivered)	214
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	214
Class A Credit Sales (Purchases)	0
Expected Class B Credits	214

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
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)	2,436	2,436	2,436	2,436	2,436	2,436	2,436	2,436
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	2,436	2,436	2,436	2,436	2,436	2,436	2,436	2,436
Delivered WLA	2,650	2,650	2,650	2,650	2,650	2,650	2,650	2,650
Expected Credits (delivered)	214	214	214	214	214	214	214	214
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	214	214	214	214	214	214	214	214
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	214	214	214	214	214	214	214	214

NITROGEN FACILITY SUMMARY

Richmond

UPPER JAMES Trading Basin



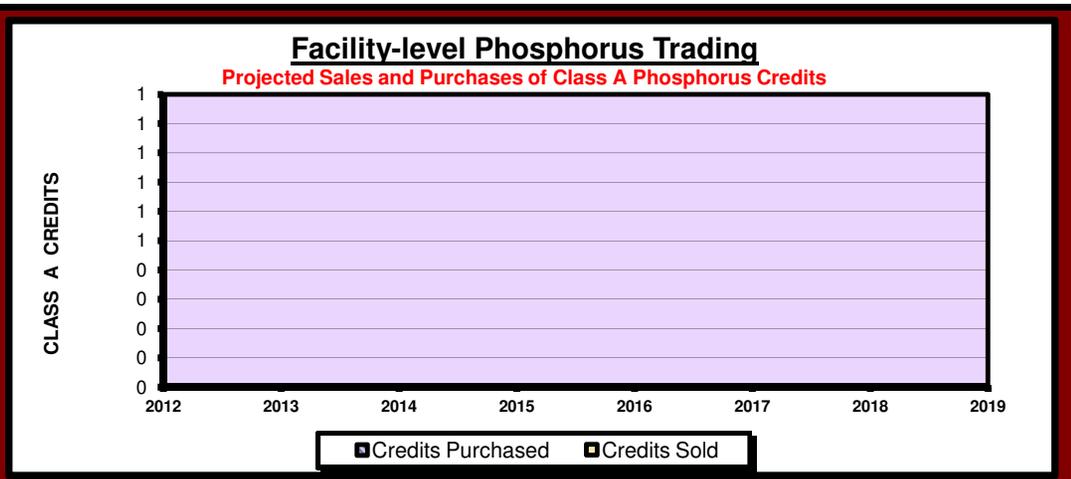
Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Discharged Load (end of pipe)	1,096,402	1,096,402	1,096,402	1,096,402	1,096,402	1,096,402	1,096,402	1,096,402
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	1,096,402	1,096,402	1,096,402	1,096,402	1,096,402	1,096,402	1,096,402	1,096,402
Delivered WLA	1,096,402	1,096,402	1,096,402	1,096,402	1,096,402	1,096,402	1,096,402	1,096,402
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

Richmond

UPPER JAMES Trading Basin

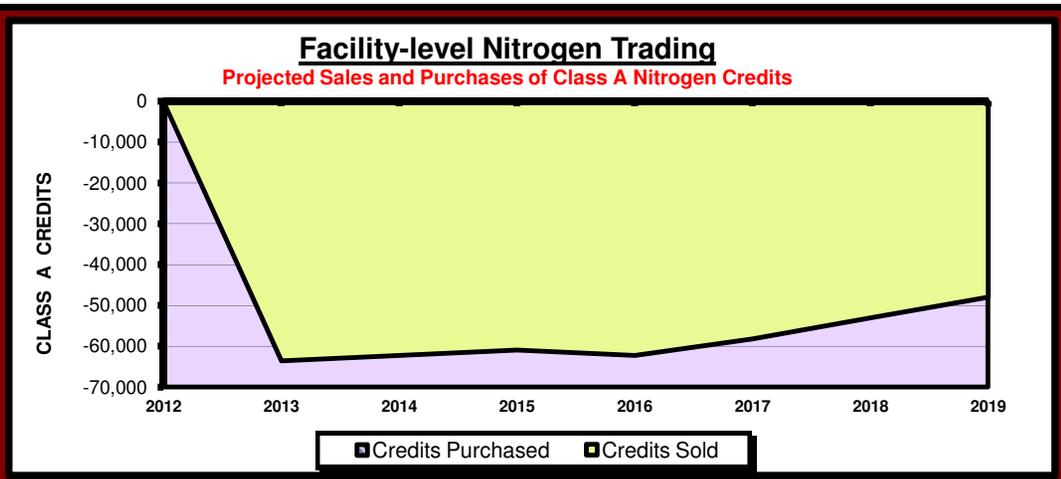


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	43.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00
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)	65,480	68,525	68,525	68,525	68,525	68,525	68,525	68,525
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	65,480	68,525	68,525	68,525	68,525	68,525	68,525	68,525
Delivered WLA	68,525	68,525	68,525	68,525	68,525	68,525	68,525	68,525
Expected Credits (delivered)	3,045	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	3,045	0	0	0	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	3,045	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

RWSA-Moores Creek
UPPER JAMES Trading Basin



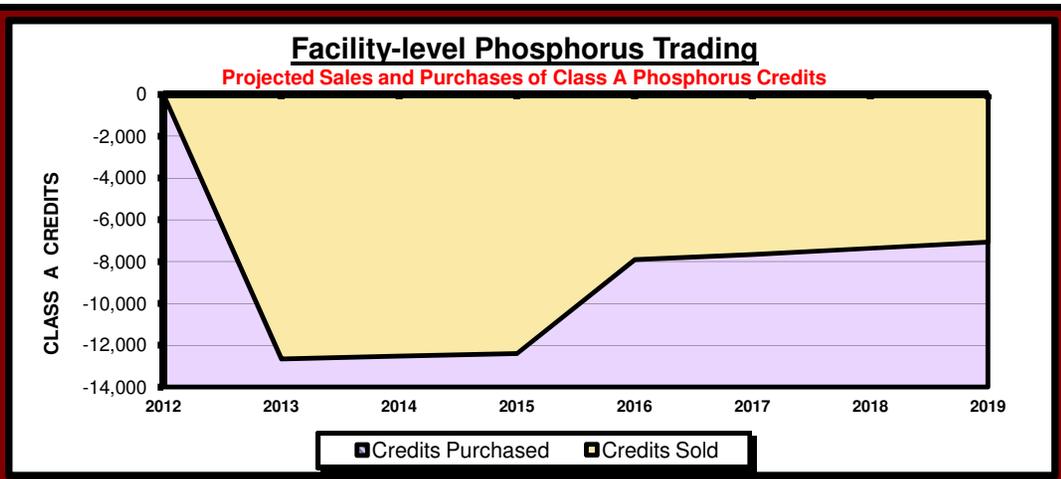
Loading & Credit Summary

Design Flow (mgd)	15.00
Projected Flow (mgd)	11.02
Projected Avg. Annual Concentration (mg/L)	8.00
Discharged Load (end of pipe)	268,497
Delivery Factor	0.61
Expected Load	163,783
Delivered WLA	167,201
Expected Credits (delivered)	3,418
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	3,418
Class A Credit Sales (Purchases)	0
Expected Class B Credits	3,418

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	11.02	11.16	11.30	11.44	11.90	12.30	12.80	13.30
Projected Avg. Annual Concentration (mg/L)	8.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Discharged Load (end of pipe)	268,497	169,942	172,074	174,206	181,211	187,302	194,916	202,530
Delivery Factor	0.61	0.61	0.61	0.61	0.67	0.67	0.67	0.67
Expected Load	163,783	103,665	104,965	106,266	121,411	125,492	130,594	135,695
Delivered WLA	167,201	167,201	167,201	167,201	183,647	183,647	183,647	183,647
Expected Credits (delivered)	3,418	63,536	62,236	60,935	62,236	58,155	53,053	47,952
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	3,418	63,536	62,236	60,935	62,236	58,155	53,053	47,952
Class A Credit Sales (Purchases)	0	63,536	62,236	60,935	62,236	58,155	53,053	47,952
Expected Class B Credits	3,418	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

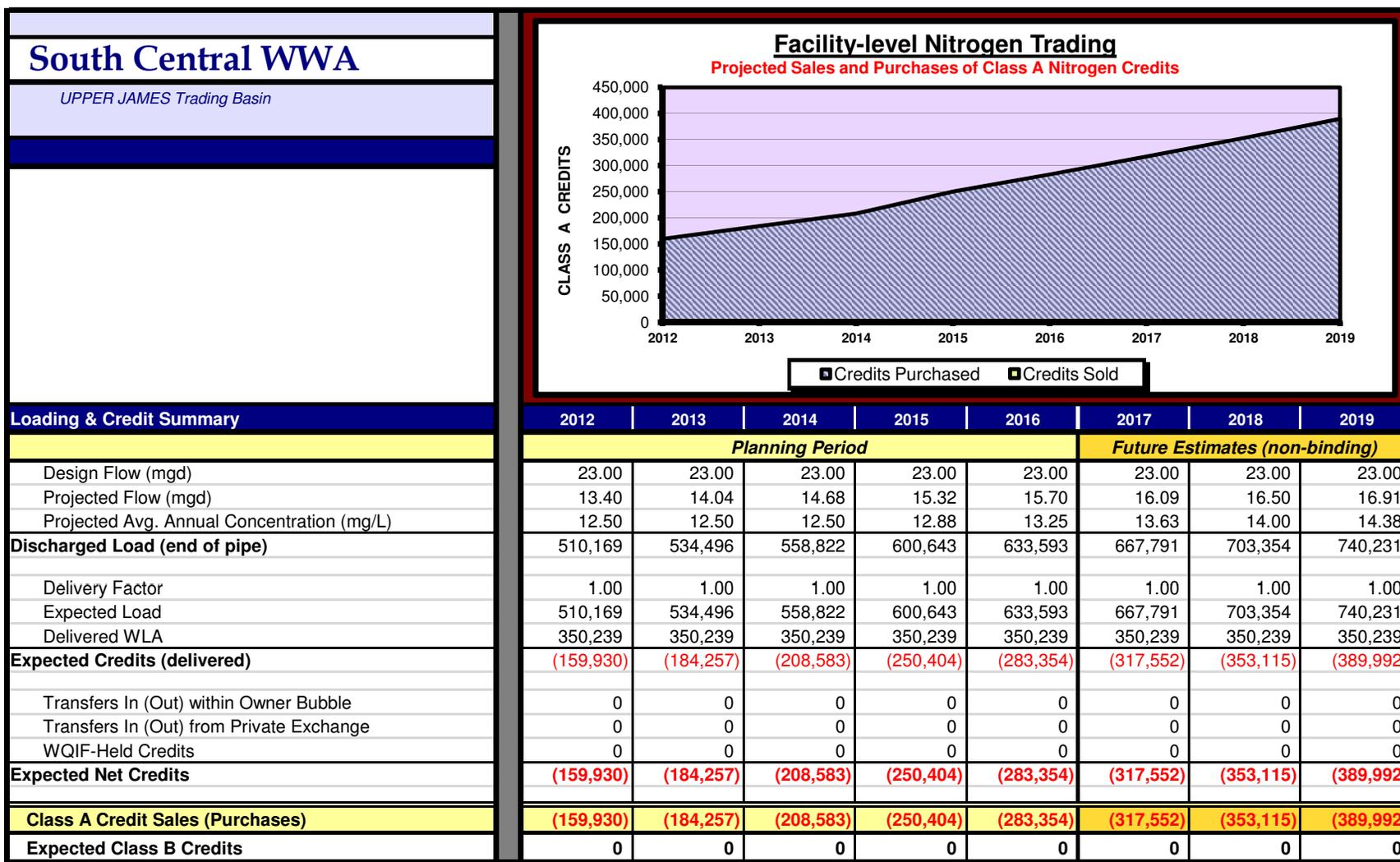
RWSA-Moores Creek
UPPER JAMES Trading Basin



Loading & Credit Summary

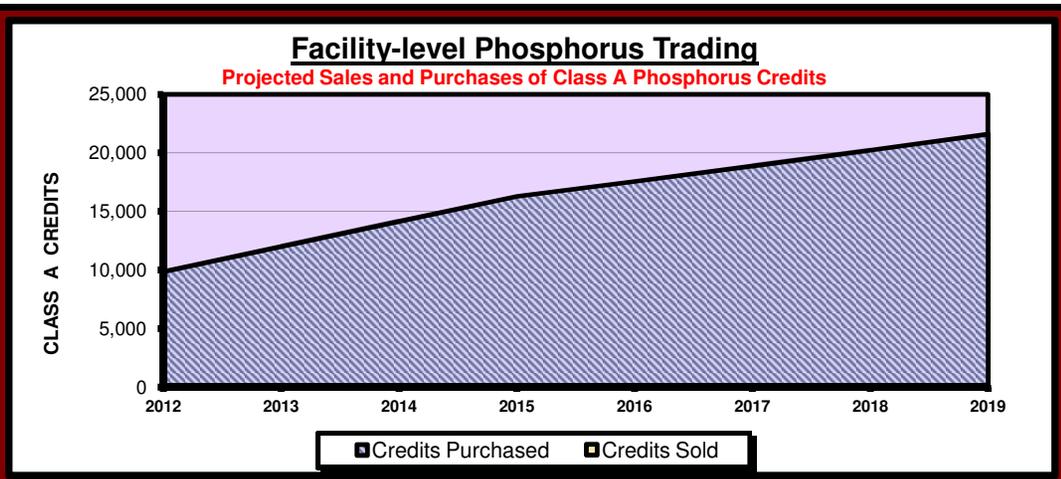
	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Projected Flow (mgd)	11.02	11.16	11.30	11.44	11.90	12.30	12.80	13.30
Projected Avg. Annual Concentration (mg/L)	0.65	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Discharged Load (end of pipe)	21,815	10,197	10,324	10,452	10,873	11,238	11,695	12,152
Delivery Factor	1.00	1.00	1.00	1.00	0.66	0.66	0.66	0.66
Expected Load	21,815	10,197	10,324	10,452	7,176	7,417	7,719	8,020
Delivered WLA	22,842	22,842	22,842	22,842	15,076	15,076	15,076	15,076
Expected Credits (delivered)	1,027	12,645	12,518	12,390	7,900	7,659	7,357	7,056
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	1,027	12,645	12,518	12,390	7,900	7,659	7,357	7,056
Class A Credit Sales (Purchases)	0	12,645	12,518	12,390	7,900	7,659	7,357	7,056
Expected Class B Credits	1,027	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY



PHOSPHORUS FACILITY SUMMARY

South Central WWA
 UPPER JAMES Trading Basin



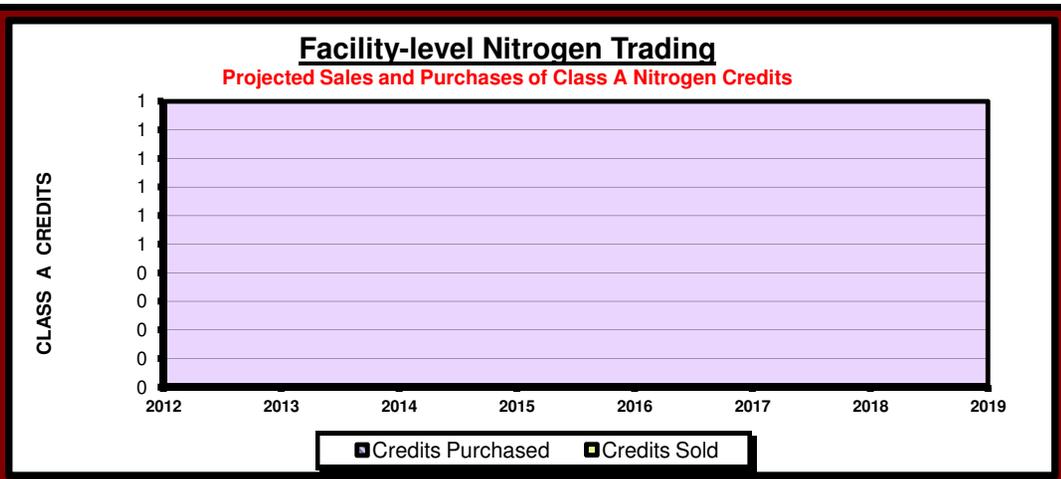
Loading & Credit Summary

Design Flow (mgd)	23.00
Projected Flow (mgd)	13.40
Projected Avg. Annual Concentration (mg/L)	1.10
Discharged Load (end of pipe)	44,895
Delivery Factor	1.00
Expected Load	44,895
Delivered WLA	35,024
Expected Credits (delivered)	(9,871)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(9,871)
Class A Credit Sales (Purchases)	(9,871)
Expected Class B Credits	0

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	13.40	14.04	14.68	15.32	15.70	16.09	16.50	16.91
Projected Avg. Annual Concentration (mg/L)	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Discharged Load (end of pipe)	44,895	47,036	49,176	51,317	52,600	53,913	55,264	56,644
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	44,895	47,036	49,176	51,317	52,600	53,913	55,264	56,644
Delivered WLA	35,024	35,024	35,024	35,024	35,024	35,024	35,024	35,024
Expected Credits (delivered)	(9,871)	(12,012)	(14,152)	(16,293)	(17,576)	(18,889)	(20,240)	(21,620)
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	(9,871)	(12,012)	(14,152)	(16,293)	(17,576)	(18,889)	(20,240)	(21,620)
Class A Credit Sales (Purchases)	(9,871)	(12,012)	(14,152)	(16,293)	(17,576)	(18,889)	(20,240)	(21,620)
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

Tyson Foods-Glen Allen
 UPPER JAMES Trading Basin

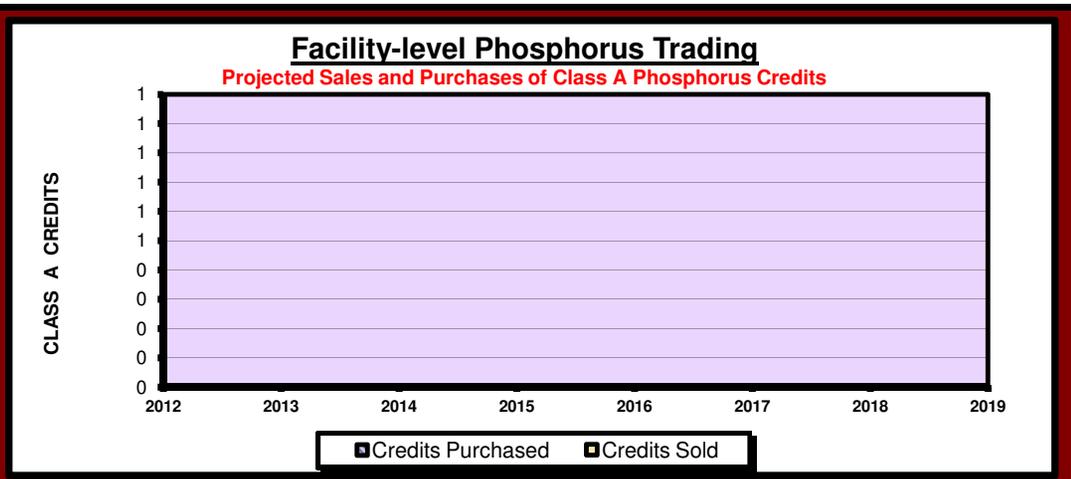


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Projected Flow (mgd)	1.00	1.00	1.00	1.00	1.07	1.07	1.07	1.07
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)	18,273	18,273	18,273	18,273	19,552	19,552	19,552	19,552
Delivery Factor	1.00	1.00	1.00	1.00	0.16	0.16	0.16	0.16
Expected Load	18,273	18,273	18,273	18,273	3,128	3,128	3,128	3,128
Delivered WLA	19,552	19,552	19,552	19,552	3,128	3,128	3,128	3,128
Expected Credits (delivered)	1,279	1,279	1,279	1,279	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	1,279	1,279	1,279	1,279	0	0	0	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	1,279	1,279	1,279	1,279	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Tyson Foods-Glen Allen
 UPPER JAMES Trading Basin



Loading & Credit Summary	
Design Flow (mgd)	1.07
Projected Flow (mgd)	1.00
Projected Avg. Annual Concentration (mg/L)	0.10
Discharged Load (end of pipe)	302
Delivery Factor	1.00
Expected Load	302
Delivered WLA	409
Expected Credits (delivered)	107
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	107
Class A Credit Sales (Purchases)	0
Expected Class B Credits	107

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
1.00	1.00	1.00	1.00	1.07	1.07	1.07	1.07
0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
302	302	302	305	326	326	326	326
1.00	1.00	1.00	1.00	0.46	0.46	0.46	0.46
302	302	302	305	150	150	150	150
409	409	409	409	188	188	188	188
107	107	107	104	38	38	38	38
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
107	107	107	104	38	38	38	38
0	0	0	0	0	0	0	0
107	107	107	104	38	38	38	38

SECTION 6

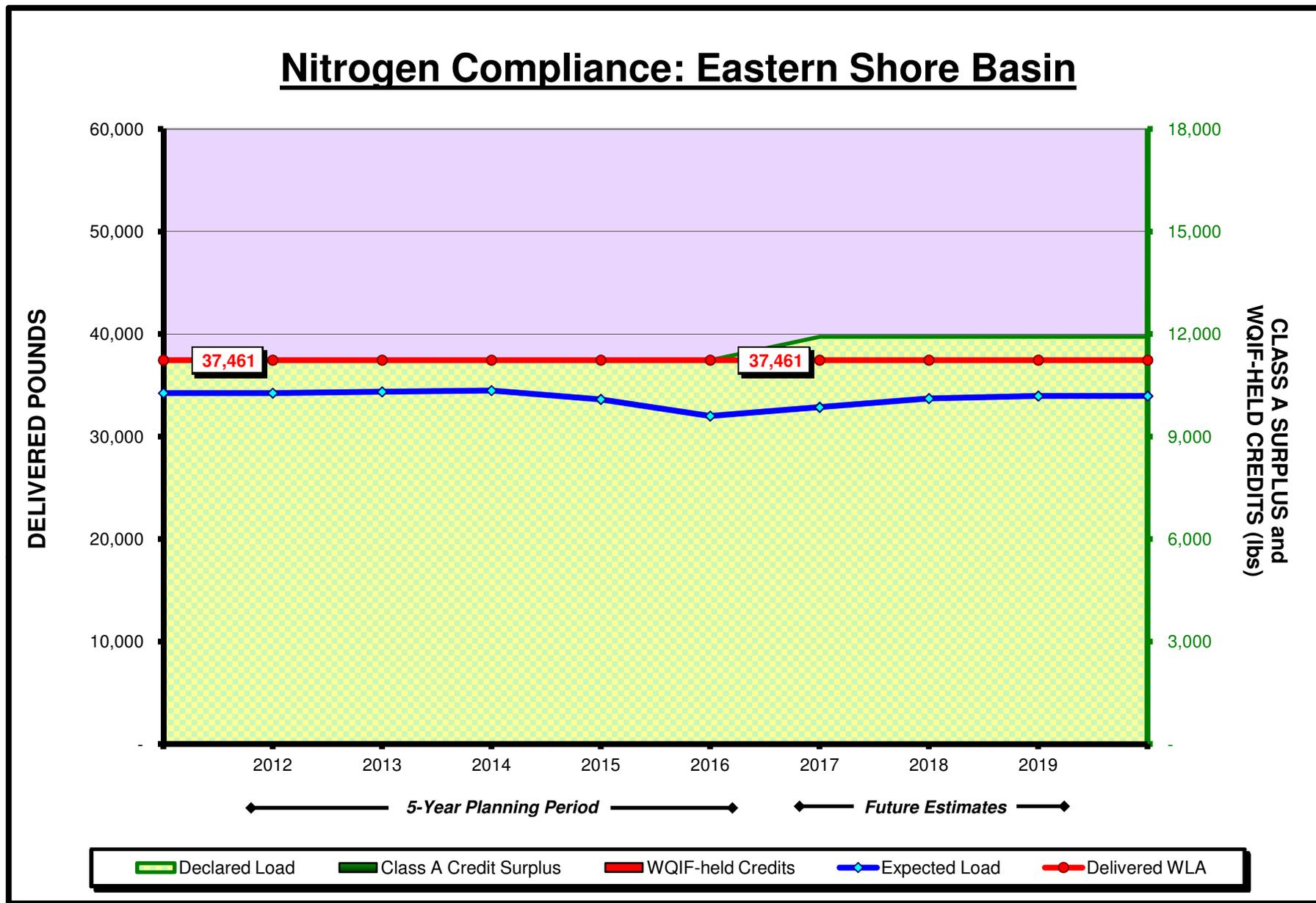
Eastern Shore Basin Exchange Compliance Plan



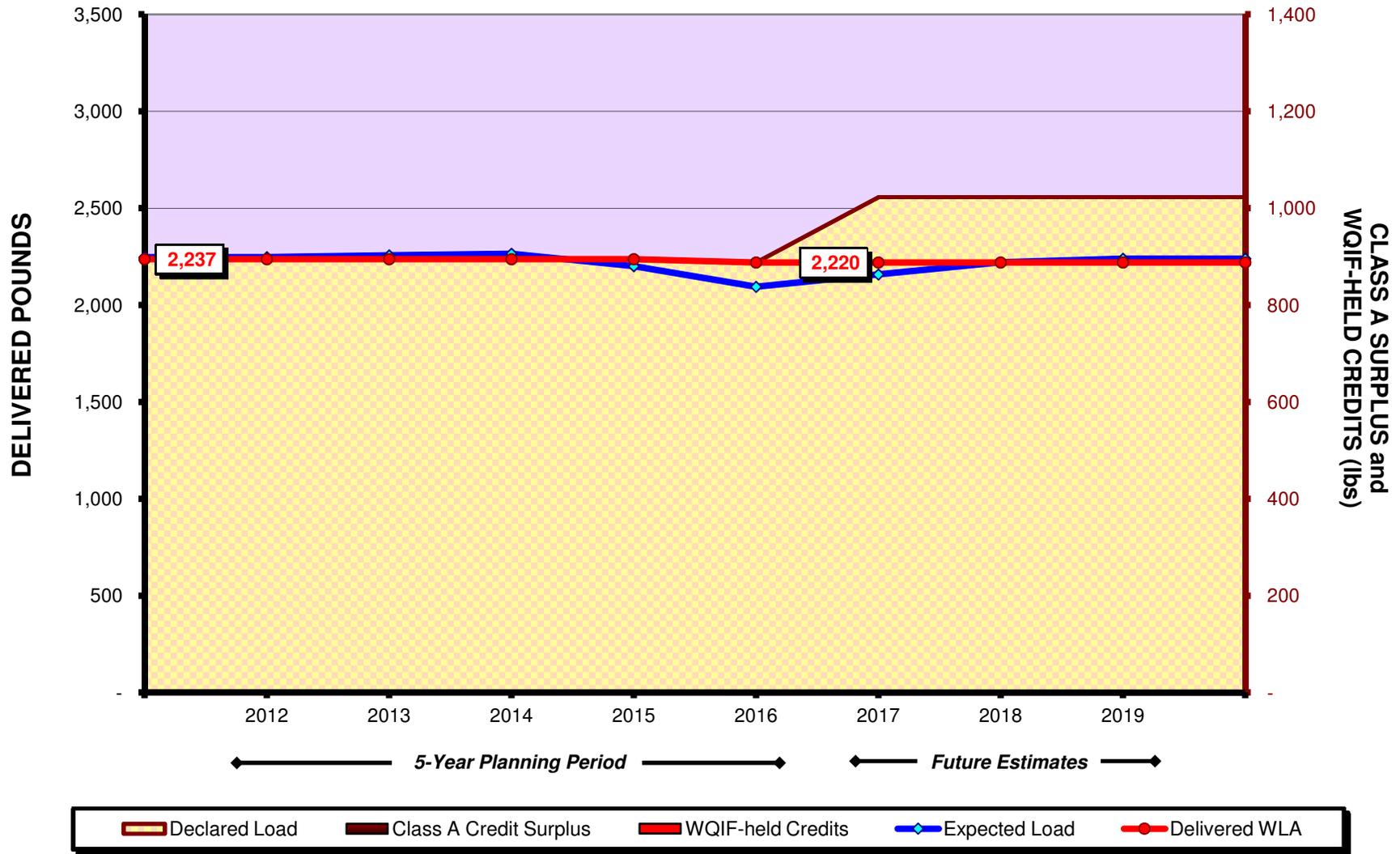
Consistent with similar disclosures made in conjunction with the original Exchange Compliance Plan dated July 31, 2007, and each annual update thereafter, Credit forecasts for the Eastern Shore basin continue to indicate a potential lack of Credit availability from facilities located within the Eastern Shore basin. 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 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.



Phosphorus Compliance: Eastern Shore Basin



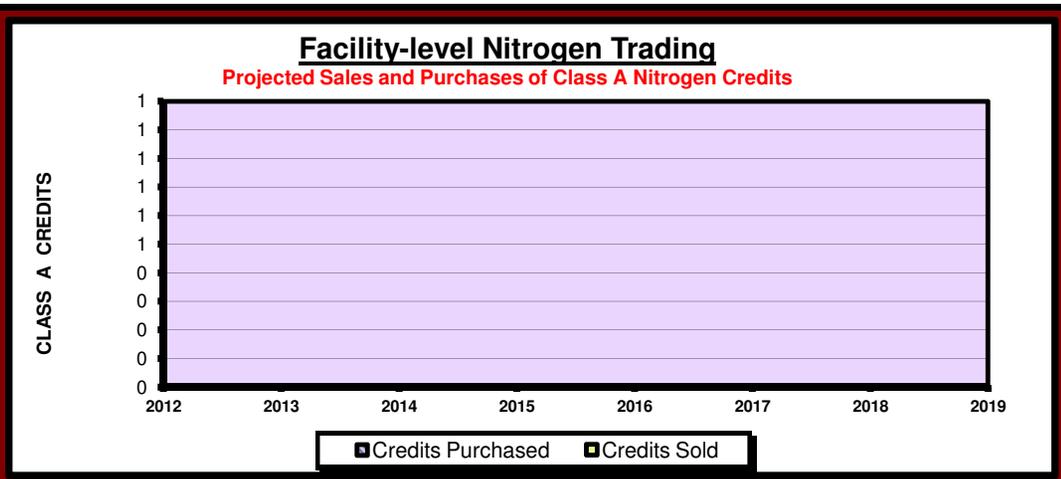
Eastern Shore Basin

Supplemental Information for Individual Facilities



NITROGEN FACILITY SUMMARY

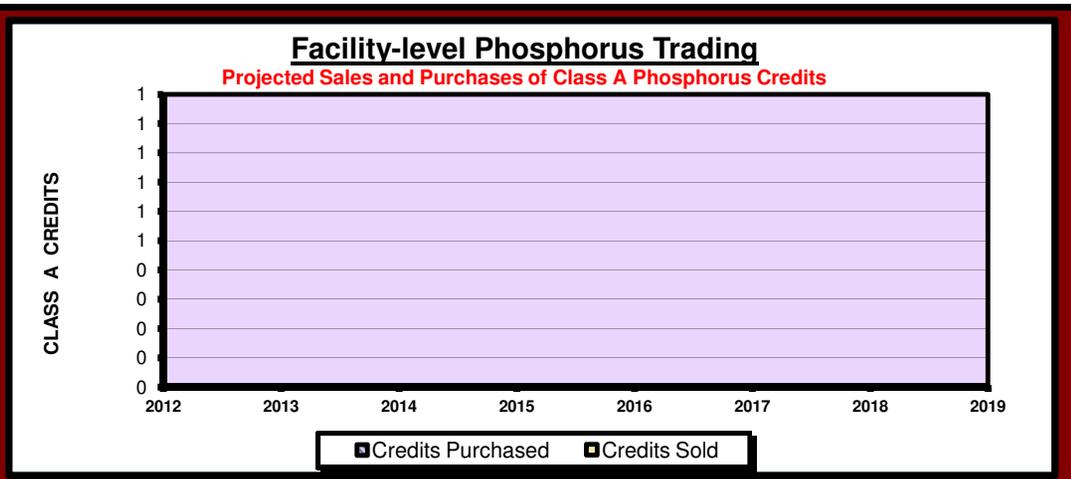
Cape Charles
 EASTERN SHORE Trading Basin



Loading & Credit Summary	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.25	0.25	0.25	0.25	0.50	0.50	0.50	0.50
Projected Flow (mgd)	0.16	0.16	0.17	0.18	0.19	0.21	0.23	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)	1,949	1,949	2,071	2,193	2,315	2,558	2,802	3,046
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	1,949	1,949	2,071	2,193	2,315	2,558	2,802	3,046
Delivered WLA	3,046	3,046	3,046	3,046	3,046	3,046	3,046	3,046
Expected Credits (delivered)	1,097	1,097	975	853	731	488	244	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	1,097	1,097	975	853	731	488	244	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	1,097	1,097	975	853	731	488	244	0

PHOSPHORUS FACILITY SUMMARY

Cape Charles
 EASTERN SHORE Trading Basin



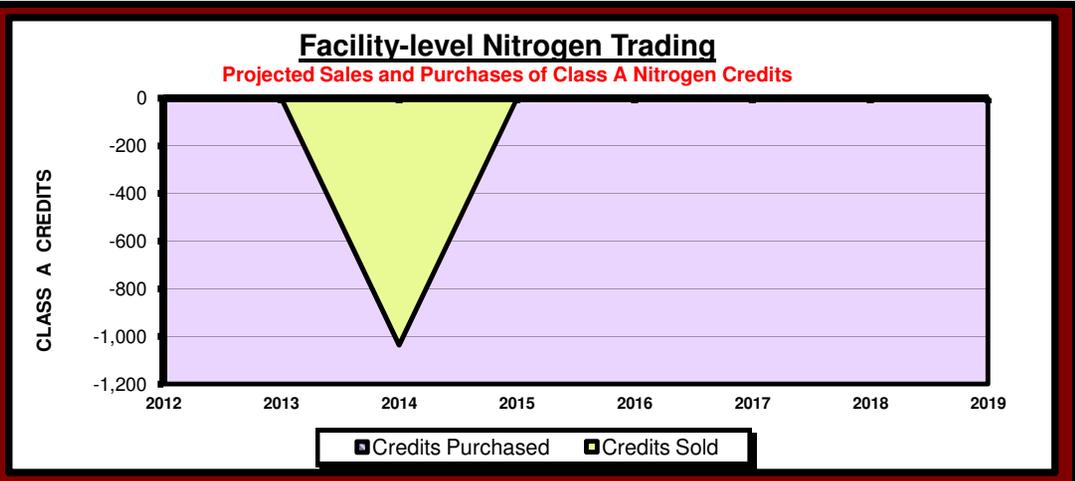
Loading & Credit Summary

Design Flow (mgd)	0.25	0.25	0.25	0.25	0.50	0.50	0.50	0.50
Projected Flow (mgd)	0.16	0.16	0.17	0.18	0.19	0.21	0.23	0.25
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)	146	146	155	164	174	192	210	228
Delivery Factor	1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.99
Expected Load	146	146	155	164	172	190	208	226
Delivered WLA	228	228	228	228	226	226	226	226
Expected Credits (delivered)	82	82	73	64	54	36	18	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	82	82	73	64	54	36	18	0
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	82	82	73	64	54	36	18	0

2012	2013	2014	2015	2016	2017	2018	2019	
Planning Period					Future Estimates (non-binding)			
0.25	0.25	0.25	0.25	0.50	0.50	0.50	0.50	
0.16	0.16	0.17	0.18	0.19	0.21	0.23	0.25	
0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	
146	146	155	164	174	192	210	228	
1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.99	
146	146	155	164	172	190	208	226	
228	228	228	228	226	226	226	226	
82	82	73	64	54	36	18	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	
82	82	73	64	54	36	18	0	
0	0	0	0	0	0	0	0	
82	82	73	64	54	36	18	0	

NITROGEN FACILITY SUMMARY

Onancock
 EASTERN SHORE Trading Basin

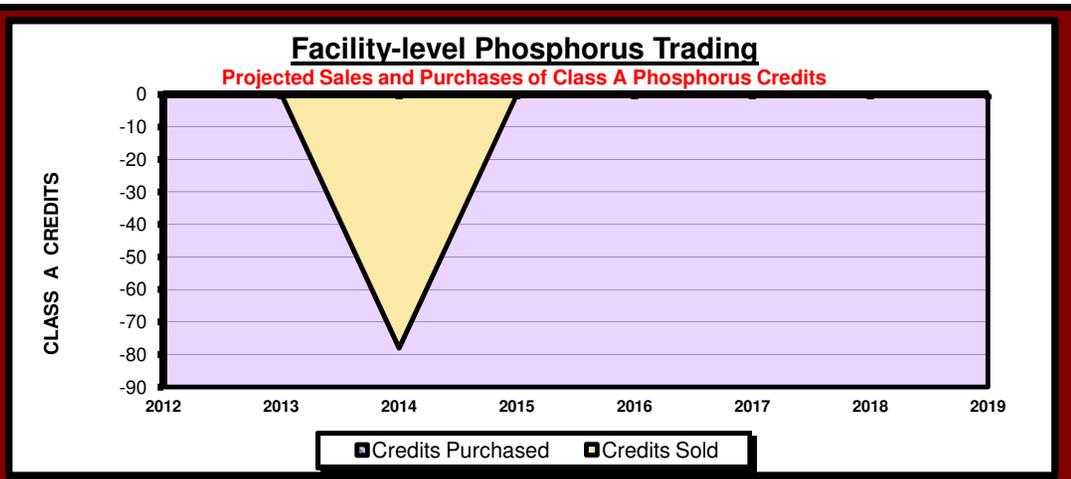


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	0.57	0.58	0.58	0.50	0.55	0.60	0.65	0.65
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)	6,944	7,066	7,066	6,091	6,700	7,309	7,918	7,918
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	6,944	7,066	7,066	6,091	6,700	7,309	7,918	7,918
Delivered WLA	9,137	9,137	9,137	9,137	9,137	9,137	9,137	9,137
Expected Credits (delivered)	2,193	2,071	2,071	3,046	2,437	1,828	1,219	1,219
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	2,193	2,071	2,071	3,046	2,437	1,828	1,219	1,219
Class A Credit Sales (Purchases)	0	0	1,036	0	0	0	0	0
Expected Class B Credits	2,193	2,071	1,035	3,046	2,437	1,828	1,219	1,219

PHOSPHORUS FACILITY SUMMARY

Onancock
 EASTERN SHORE Trading Basin

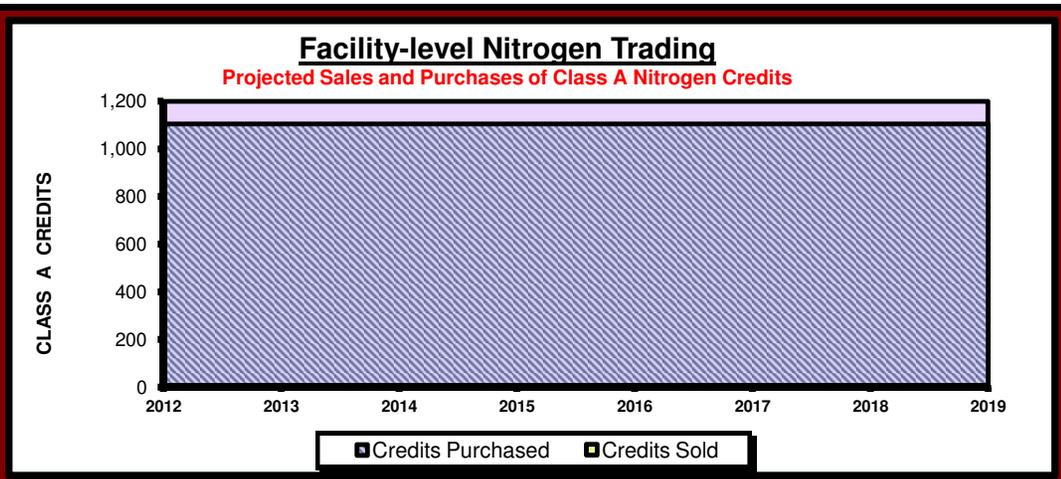


Loading & Credit Summary

	2012	2013	2014	2015	2016	2017	2018	2019
	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)	0.57	0.58	0.58	0.50	0.55	0.60	0.65	0.65
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)	521	530	530	457	503	548	594	594
Delivery Factor	1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.99
Expected Load	521	530	530	457	497	543	588	588
Delivered WLA	685	685	685	685	678	678	678	678
Expected Credits (delivered)	164	155	155	228	181	135	90	90
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	164	155	155	228	181	135	90	90
Class A Credit Sales (Purchases)	0	0	78	0	0	0	0	0
Expected Class B Credits	164	155	77	228	181	135	90	90

NITROGEN FACILITY SUMMARY

Shore Health Services
 EASTERN SHORE Trading Basin

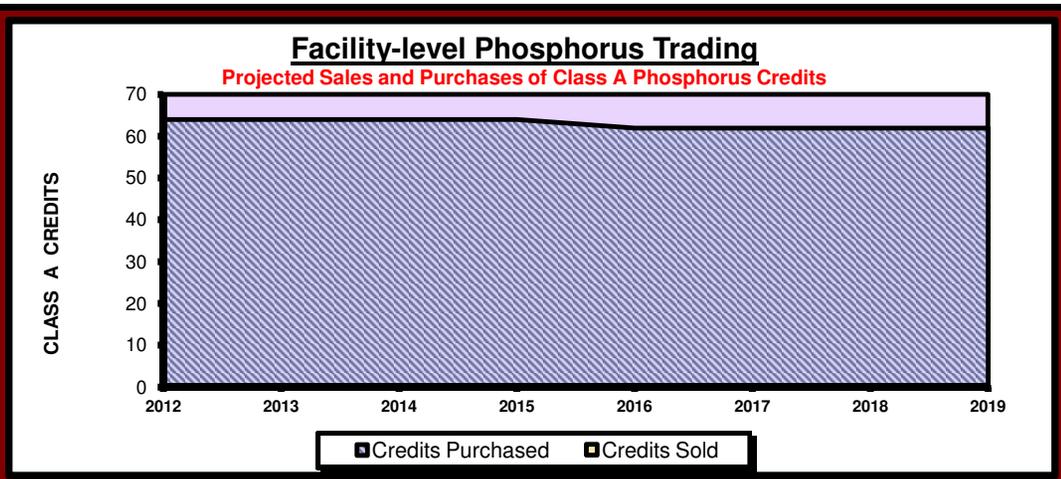


Loading & Credit Summary	
Design Flow (mgd)	0.10
Projected Flow (mgd)	0.05
Projected Avg. Annual Concentration (mg/L)	16.96
Discharged Load (end of pipe)	2,324
Delivery Factor	1.00
Expected Load	2,324
Delivered WLA	1,218
Expected Credits (delivered)	(1,106)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(1,106)
Class A Credit Sales (Purchases)	(1,106)
Expected Class B Credits	0

2012	2013	2014	2015	2016	2017	2018	2019
Planning Period					Future Estimates (non-binding)		
0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
16.96	16.96	16.96	16.96	16.96	16.96	16.96	16.96
2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2,324	2,324	2,324	2,324	2,324	2,324	2,324	2,324
1,218	1,218	1,218	1,218	1,218	1,218	1,218	1,218
(1,106)	(1,106)	(1,106)	(1,106)	(1,106)	(1,106)	(1,106)	(1,106)
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
(1,106)	(1,106)	(1,106)	(1,106)	(1,106)	(1,106)	(1,106)	(1,106)
(1,106)	(1,106)	(1,106)	(1,106)	(1,106)	(1,106)	(1,106)	(1,106)
0	0	0	0	0	0	0	0

PHOSPHORUS FACILITY SUMMARY

Shore Health Services
 EASTERN SHORE Trading Basin

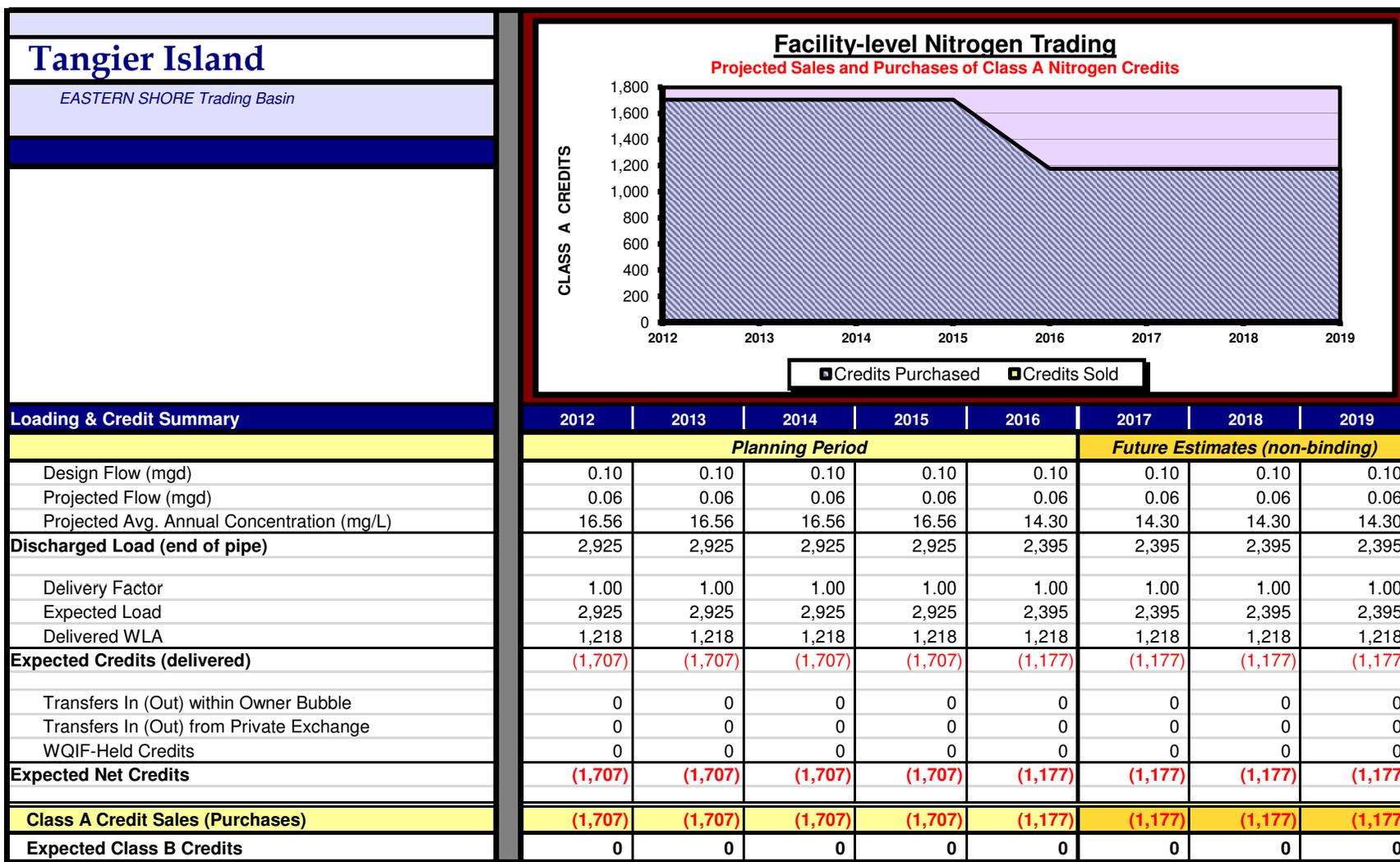


Loading & Credit Summary

Design Flow (mgd)	0.10
Projected Flow (mgd)	0.05
Projected Avg. Annual Concentration (mg/L)	1.13
Discharged Load (end of pipe)	155
Delivery Factor	1.00
Expected Load	155
Delivered WLA	91
Expected Credits (delivered)	(64)
Transfers In (Out) within Owner Bubble	0
Transfers In (Out) from Private Exchange	0
WQIF-Held Credits	0
Expected Net Credits	(64)
Class A Credit Sales (Purchases)	(64)
Expected Class B Credits	0

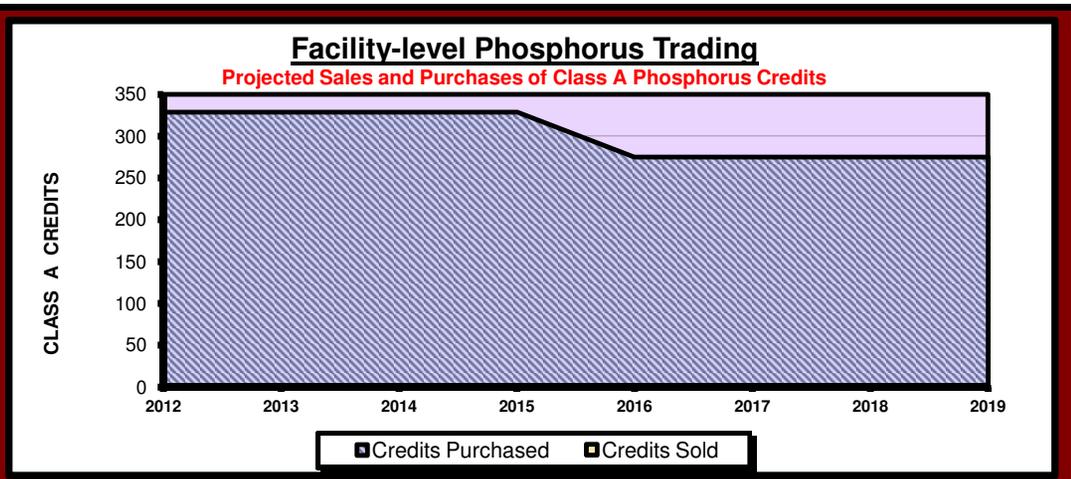
	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Projected Flow (mgd)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Projected Avg. Annual Concentration (mg/L)	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Discharged Load (end of pipe)	155	155	155	155	155	155	155	155
Delivery Factor	1.00	1.00	1.00	1.00	0.96	0.96	0.96	0.96
Expected Load	155	155	155	155	149	149	149	149
Delivered WLA	91	91	91	91	87	87	87	87
Expected Credits (delivered)	(64)	(64)	(64)	(64)	(62)	(62)	(62)	(62)
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	(64)	(64)	(64)	(64)	(62)	(62)	(62)	(62)
Class A Credit Sales (Purchases)	(64)	(64)	(64)	(64)	(62)	(62)	(62)	(62)
Expected Class B Credits	0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY



PHOSPHORUS FACILITY SUMMARY

Tangier Island
EASTERN SHORE Trading Basin

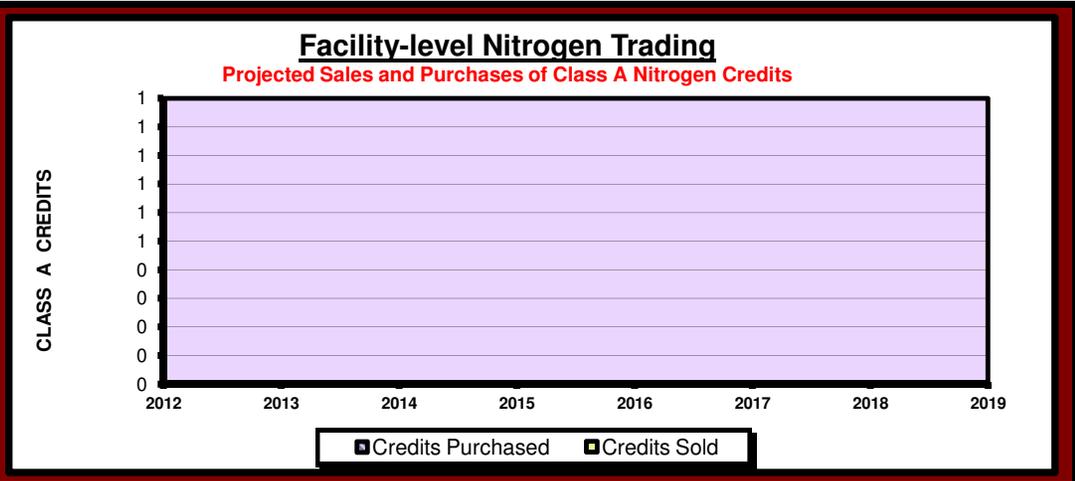


Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

2012	2013	2014	2015	2016	2017	2018	2019
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
2.38	2.38	2.38	2.38	2.25	2.25	2.25	2.25
420	420	420	420	377	377	377	377
1.00	1.00	1.00	1.00	0.96	0.96	0.96	0.96
420	420	420	420	362	362	362	362
91	91	91	91	87	87	87	87
(329)	(329)	(329)	(329)	(275)	(275)	(275)	(275)
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
(329)	(329)	(329)	(329)	(275)	(275)	(275)	(275)
(329)	(329)	(329)	(329)	(275)	(275)	(275)	(275)
0	0	0	0	0	0	0	0

NITROGEN FACILITY SUMMARY

Tyson Foods-Temperanceville
 EASTERN SHORE Trading Basin

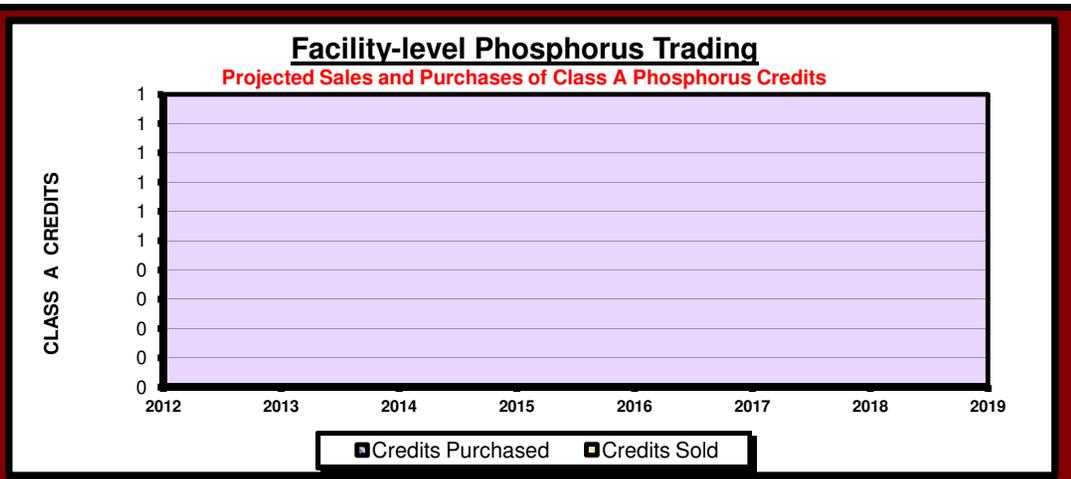


Loading & Credit Summary	
Design Flow (mgd)	
Projected Flow (mgd)	
Projected Avg. Annual Concentration (mg/L)	
Discharged Load (end of pipe)	
Delivery Factor	
Expected Load	
Delivered WLA	
Expected Credits (delivered)	
Transfers In (Out) within Owner Bubble	
Transfers In (Out) from Private Exchange	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

	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Design Flow (mgd)	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Projected Flow (mgd)	1.10	1.10	1.10	1.10	1.00	1.00	1.00	1.00
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)	20,101	20,101	20,101	20,101	18,273	18,273	18,273	18,273
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	20,101	20,101	20,101	20,101	18,273	18,273	18,273	18,273
Delivered WLA	22,842	22,842	22,842	22,842	22,842	22,842	22,842	22,842
Expected Credits (delivered)	2,741	2,741	2,741	2,741	4,569	4,569	4,569	4,569
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	2,741	2,741	2,741	2,741	4,569	4,569	4,569	4,569
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	2,741	2,741	2,741	2,741	4,569	4,569	4,569	4,569

PHOSPHORUS FACILITY SUMMARY

Tyson Foods-Temperanceville
 EASTERN SHORE Trading Basin



	2012	2013	2014	2015	2016	2017	2018	2019
	Planning Period					Future Estimates (non-binding)		
Loading & Credit Summary								
Design Flow (mgd)	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Projected Flow (mgd)	1.10	1.10	1.10	1.10	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)	1,005	1,005	1,005	1,005	914	914	914	914
Delivery Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expected Load	1,005	1,005	1,005	1,005	914	914	914	914
Delivered WLA	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142
Expected Credits (delivered)	137	137	137	137	228	228	228	228
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	137	137	137	228	228	228	228
Class A Credit Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	137	137	137	137	228	228	228	228

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. With the exception of internal references, this section is unchanged from the Exchange Compliance Plan 2011 Annual Update.

7.1 Schedule of Compliance

This Section 7.1 is updated significantly in response to 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).

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.

The new Watershed General Permit reissued and effective January 1, 2012 includes new compliance schedules for York/Phosphorus and James/Nitrogen as reflected in this 2012 Annual Update.

7.2 Initial Upgrade Delays Despite Participant's Best Efforts

The focus of the Exchange Compliance Plan is on achieving initial compliance. A large number of concurrent nutrient removal upgrades are required as is evident from the Exchange Compliance Plan set forth above. Similar activities are underway throughout the Chesapeake Bay region in other states. All of these construction projects are occurring at a period where the general construction market (not only wastewater treatment) is in a period of very high demand for professional engineers, skilled and unskilled labor, and critical materials. Prices are

increasing sharply. State government is 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), have voiced reluctance to commit to sell Class A Credits because compliance with the initial compliance schedule deadlines is 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 does not intend to impose its otherwise generally applicable credit shortfall policy under these circumstances. This means that in a shortfall situation in the startup years, there is a risk that Buyers waiting on Credit availability may not have Credits available through The Exchange, if one or more linchpins are 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 upgrades included in the Capital Project Schedules for the five river basins 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 recent 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 Percentage – The percentage of Expected Net Credits that is selected by a Participant for use in calculating and specifying the quantity of Class A Credits that the Seller 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 elect a Class A Pledge Percentage ranging from zero (0) to one hundred (100) percent for each year of the Planning Period, such percentage to be determined in the discretion of the Participant. Such election 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 the quantity of Class A Credits calculated by multiplying the Participant's Expected Net Credits by its chosen Class A Pledge Percentage. The quantity of Class A Credits that results from this calculation 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 make this election by specifying a Class A Pledge Percentage 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 (ISSUED: JUNE 30, 2009)

<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	Mar. 7	Exchange	5.3
Distribute Credit Exchange Confirmation Forms to Sellers	Mar. 15	Exchange	5.4(a)
Distribute Invoices to Buyers	Mar. 15	Exchange	5.4(b)
Submit Credit Exchange Confirmation Forms to Nutrient Exchange	April 15	Sellers	5.4(a)
Invoice Payments Due from Buyers	May 1	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

ATTACHMENT B

CREDIT PRICE SCHEDULE (ISSUED: AUGUST 5, 2011)

Compliance Year	Reconciliation Year	Class A Credit Purchase Price (\$/Credit)		Price Status (Firm or Estimate)
		<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

* Evaluation of alternative pricing methodologies is pending. Results of such evaluation leading to proposed pricing methodology revisions, if any, will be presented to Participants for consideration and input.

**ATTACHMENT C
FACILITY DATA CHECKLIST FOR 2012 EXCHANGE COMPLIANCE PLAN ANNUAL UPDATE**

Participant (Owner) Name: _____

Facility Name: _____

Designated Representative (or Alternate) Name: _____

Contact Phone: _____

Contact Email: _____

(please enter information only in cells with blue text)

NITROGEN Data Checklist	5th year				Estimates Beyond 5-year Planning Period			
	2016	2017	2018	2019	2016	2017	2018	2019
Projected Flow (mgd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Projected mg/L (avg. annual)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
End-of-Pipe Pounds	0	0	0	0	0	0	0	0
Delivery Factor ¹	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Delivered Pounds	0	0	0	0	0	0	0	0
Delivered WLA ¹	0	0	0	0	0	0	0	0
Expected Credits	0	0	0	0	0	0	0	0
Adjustments In (Out) ²	0	0	0	0	0	0	0	0
Net Expected Credits	0	0	0	0	0	0	0	0
Pledge Percentage ³	0%	0%	0%	0%	0%	0%	0%	0%
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

PHOSPHORUS Data Checklist	5th year				Estimates Beyond 5-year Planning Period			
	2016	2017	2018	2019	2016	2017	2018	2019
Projected Flow (mgd) ⁴	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Projected mg/L (avg. annual)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
End-of-Pipe Pounds	0	0	0	0	0	0	0	0
Delivery Factor ¹	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Delivered Pounds	0	0	0	0	0	0	0	0
Delivered WLA ¹	0	0	0	0	0	0	0	0
Expected Credits	0	0	0	0	0	0	0	0
Adjustments In (Out)	0	0	0	0	0	0	0	0
Net Expected Credits	0	0	0	0	0	0	0	0
Pledge Percentage ³	0%	0%	0%	0%	0%	0%	0%	0%
Class A Sales (Purchases)	0	0	0	0	0	0	0	0
Expected Class B Credits	0	0	0	0	0	0	0	0

1 - Facility-specific Delivery Factors and Delivered WLAs as shown on DEQ's revised Watershed General Permit Registration List.

2 - Adjustments include either positive or negative credit amounts that reflect private exchanges, bubble exchanges, or WQIF-held credits

3 - If showing positive value for Net Expected Credits, select a Pledge Percentage to produce desired Class A Credit sale.

3 - If showing negative value for Net Expected Credits, the purchase of a like number of Class A Credits will be specified in the Compliance Plan and Pledge Percentage should be set to 100%.

4 - Projected flows for the phosphorus credit forecast are set equal to those used to generate the nitrogen credit forecast

After completing the checklist, please save the file according to the following format: Participant Name-Facility Name dd-mm-year.xls and email back to CODY.STANGER@CH2M.COM (please note only one 'r' in last name)

ATTACHMENT D

COMPLIANCE DEADLINE STATEMENT (ISSUED: JUNE 30, 2009)

FACILITY (OR OWNER BUBBLE) NAME: _____

PART II. TOTAL NITROGEN COMPLIANCE

A. 2007 Compliance Deadline Statement Required by 9 VAC 25-820-40 A 2

Compare 2005 discharged TN load to TN WLA. Would permittee have complied with its TN WLA for calendar year 2005 if its TN WLA had been in effect for that year?

_____ NO (*proceed to II.B. Implementation Schedule for TN*)

_____ YES (*permittee must check Option 1 or Option 2*):

_____ Option 1: Permittee hereby requests TN WLA to be effective as of January 1, 2007 (9 VAC 25-820-40 A 2 b) (*PART II Complete; Proceed to PART IV. TOTAL PHOSPHORUS COMPLIANCE*), or

_____ Option 2: Permittee declares that an additional capital project(s) is needed to ensure continued compliance with the TN WLA through the applicable compliance schedule deadline for the tributary (9 VAC 25-820-40 A 2 a). (*Note: Checking Option 2 does not preclude use of credit purchase as means of compliance under II.B.*) Explanation: _____

(proceed to II.B. Implementation Schedule for TN)

B. Implementation Schedule for TN

1. Does permittee anticipate requiring TN credit purchase to comply?

_____ NO _____ YES (If yes, compliance is required upon expiration of tributary compliance schedule deadline and nitrogen credit availability. This requirement for compliance also applies if permittee plans to comply by a combination of TN credit purchase and capital project.)

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)	_____

PART IV. TOTAL PHOSPHORUS COMPLIANCE

A. 2007 Compliance Deadline Statement Required by 9 VAC 25-820-40 A 2

Compare 2005 discharged TP load to TP WLA. Would permittee have complied with its TP WLA for calendar year 2005 if its TP WLA had been in effect for that year?

_____ NO (*proceed to III.B. Implementation Schedule for TP*)

_____ YES (*permittee must check Option 1 or Option 2*):

_____ Option 1: Permittee hereby requests TP WLA to be effective as of January 1, 2007 (9 VAC 25-820-40 A 2 b) (*Stop Here/Part IV Is Complete*), or

_____ Option 2: Permittee declares that an additional capital project(s) is needed to ensure continued compliance with the TP WLA through the applicable compliance schedule deadline for the tributary (9 VAC 25-820-40 A 2 a). (*Note: Checking Option 2 does not preclude use of credit purchase as means of compliance under IV.B.*) Explanation: _____

(proceed to IV.B. Implementation Schedule for TP)

B. Implementation Schedule for TP

1. Does permittee anticipate requiring TP credit purchase to comply?

_____ NO _____ YES (If yes, compliance is required upon expiration of tributary compliance schedule deadline and nitrogen credit availability. This requirement for compliance also applies if permittee plans to comply by a combination of TP credit purchase and capital project.)

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)	_____

End of Facility Appendix

ATTACHMENT E

SELLER'S CREDIT EXCHANGE CONFIRMATION FORM

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 [INSERT DATE].
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

*And send a copy by email to:
info@theexchangeassociation.org*

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 reverse side 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

DEPARTMENT OF ENVIRONMENTAL QUALITY

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

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

TDD (804) 698-4021

www.deq.virginia.gov

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.



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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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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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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.

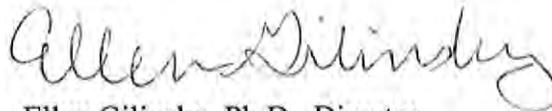
With respect to the Eastern Shore Basin, we share your concern that the basin is not large enough to provide ample trading partners. As you know a legislative change would be required to open up the Eastern Shore market to include purchases from the Potomac and Rappahannock Basins.

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.

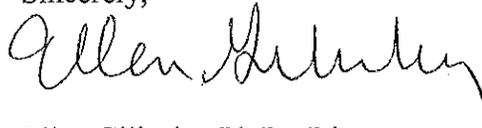
We share your concern with the completion of so many projects on such a tight timeline. However, at this early date it is not possible to determine how quickly individual construction projects will proceed and what the actual capabilities of the upgraded facilities will be. For instance, after a year 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



The following table provides an update on the availability of funding from the Water Quality Improvement Fund (WQIF) for eligible point source nutrient removal technology upgrades. This table was prepared by staff of the Water Division of the Virginia Department of Environmental Quality.

The table indicates the reimbursement status of 57 executed WQIF grant agreements as of October 27, 2011. The status is as follows: (1) current grant amounts totaling approximately \$654.1 million, (2) grants paid to date in the approximate amount \$488.8 million, (3) grants remaining to be paid in the amount of \$165.4 million, (4) an estimated WQIF balance of \$64.6 million, and (5) an estimated shortfall of \$100.8 million pending further appropriations. In addition, there are two pending grant requests in the total amount of \$42.5 million.

WQIF - Shortfall Estimate for Signed Agreements (as of 10/27/11)

Project	Hardship	Grant #	Grant Amount	Amt. Paid to-date	Balance	% Paid	Status	Amt. Owed (Pro-rating)
FWSA-Parkins Mill		440-S-07-01	\$9,165,797	\$9,165,797	\$0	100%	completed	\$0
Woodstock		440-S-07-02	\$12,026,426	\$11,936,228	\$90,198	99.3%	completed	\$90,198
Mt. Jackson		440-S-07-03	\$1,801,311	\$1,801,311	\$0	100%	completed	\$0
Warrenton		440-S-07-04	\$3,342,122	\$3,342,122	\$0	100%	completed	\$0
Purcellville		440-S-07-05	\$5,042,427	\$4,926,228	\$116,199	98%	completed	\$116,199
ACSA-Middle River		440-S-07-06	\$9,175,375	\$9,094,761	\$80,614	99%	completed	\$80,614
ACSA-Fishersville		440-S-07-07	\$10,348,919	\$9,928,694	\$420,225	96%	construction	\$0
Onancock	Yes	440-S-07-08	\$4,605,945	\$4,301,978	\$303,967	93%	construction	
Arlington County		440-S-07-10	\$96,176,190	\$91,722,592	\$4,453,598	95%	construction	\$959,313
Dale Serv Corp #1		440-S-07-11	\$1,023,211	\$1,023,211	\$0	100%	completed	\$0
Dale Serv Corp #8		440-S-07-12	\$1,016,668	\$1,016,668	\$0	100%	completed	\$0
MSA-Lexington/Rockbridge	Yes	440-S-07-16	\$8,686,249	\$8,211,430	\$474,819	95%	construction	
Orange (Town)	Yes	440-S-07-17	\$8,231,950	\$7,848,041	\$383,909	95%	construction	
Culpeper (Town)		440-S-07-18	\$5,632,226	\$5,630,143	\$2,083	99.96%	completed	\$2,083
RWSA-Moores Creek		440-S-07-19	\$21,586,139	\$18,788,787	\$2,797,352	87%	construction	\$1,026,922
HRRSA-North River		440-S-07-21	\$26,360,983	\$26,229,596	\$131,387	99.5%	completed	\$131,387
Waynesboro	Yes	440-S-07-22	\$11,325,871	\$10,759,577	\$566,294	95%	construction	
Farmville		440-S-08-01	\$438,687	\$438,687	\$0	100%	completed	\$0
King George-Fairview Beach		440-S-08-03	\$330,493	\$330,493	\$0	100%	completed	\$0
King George-Dahlgren		440-S-08-04	\$1,010,441	\$1,010,441	\$0	100%	completed	\$0
Warsaw	Yes	440-S-08-05	\$4,877,901	\$4,294,632	\$583,269	88%	construction	
Luray	Yes	440-S-08-06	\$4,877,924	\$4,620,034	\$257,890	95%	construction	
Stafford County-Aquia (Ph 1)		440-S-08-07	\$1,857,407	\$1,857,407	\$0	100%	completed	\$0
Colonial Beach		440-S-08-08	\$6,086,322	\$6,086,322	\$0	100%	completed	\$0
LCSA-Broad Run		440-S-08-09	\$20,734,526	\$20,734,526	\$0	100%	completed	\$0
Tappahannock		440-S-08-10	\$4,551,827	\$4,551,827	\$0	100%	completed	\$0
FWSA-Opequon		440-S-08-11	\$11,185,089	\$10,988,619	\$196,470	98.2%	completed	\$196,470
FCWSA-Vint Hill		440-S-08-12	\$2,057,994	\$2,057,994	\$0	100%	completed	\$0
Middletown		440-S-08-13	\$276,098	\$276,098	\$0	100%	completed	\$0
PWCSA-Mooney		440-S-08-15	\$37,125,995	\$32,947,030	\$4,178,965	89%	construction	\$511,170
HRSD-Army Base		440-S-08-17	\$38,337,992	\$11,857,800	\$26,480,192	31%	construction	\$1,098,573
Town of Berryville	Yes	440-S-09-01	\$12,063,033	\$7,238,082	\$4,824,951	60%	construction	
City of Richmond		440-S-09-02	\$45,674,244	\$15,784,123	\$29,890,121	35%	construction	\$1,137,477
Alleghany Co-Lower Jackson	Yes	440-S-09-03	\$5,132,119	\$4,720,605	\$411,514	92%	construction	
Clark County SA-Boyce		440-S-09-04	\$1,595,796	\$1,595,796	\$0	100%	completed	\$0
HRSD-York River		440-S-09-05	\$29,783,374	\$27,743,508	\$2,039,866	93%	construction	\$453,048
Chesterfield Co.-Proctors Crk		440-S-09-06	\$16,562,146	\$12,435,681	\$4,126,465	75%	construction	\$1,201,211
Chesterfield Co.-Falling Crk		440-S-09-07	\$8,212,558	\$7,403,159	\$809,399	90%	construction	\$191,432
Fairfax-Noman Cole		440-S-09-08	\$30,634,285	\$4,100,498	\$26,533,787	13%	construction	\$0
Broadway		440-S-09-09	\$4,710,114	\$4,663,955	\$46,159	99.0%	completed	\$46,159
Craigsville	Yes	440-S-09-10	\$3,474,852	\$0	\$3,474,852	0%	design	
HRSD-Nansemond		440-S-09-11	\$22,494,778	\$21,232,635	\$1,262,143	94%	construction	\$541,954
Henrico Co.		440-S-09-13	\$8,584,821	\$7,944,654	\$640,167	93%	construction	\$179,658
FCWSA-Remington		440-S-09-14	\$3,486,221	\$3,064,658	\$421,563	88%	construction	\$162,451
Cape Charles	Yes	440-S-09-15	\$7,960,630	\$6,436,564	\$1,524,066	81%	construction	
ACSA - Stuarts Draft		440-S-09-17	\$3,377,054	\$3,249,911	\$127,143	96%	completed	\$127,143
Stafford Co-Little Falls Run		440-S-09-18	\$1,932,765	\$1,835,579	\$97,186	95%	construction	\$29,487
HRSD-King William		440-S-10-01	\$779,149	\$779,149	\$0	100%	completed	\$0
Rapidan SA-Wilderness		440-S-10-02	\$3,804,455	\$3,335,205	\$469,250	88%	construction	\$390,301
HRSD-James River		440-S-10-03	\$17,619,475	\$14,145,854	\$3,473,621	80%	construction	\$990,433
N Kent Co-Parham Landing		440-S-10-04	\$3,187,854	\$2,793,094	\$394,760	88%	construction	\$245,858
Town of Washington		440-S-10-05	\$416,214	\$416,214	\$0	100%	completed	\$0

WQIF - Shortfall Estimate for Signed Agreements (as of 10/27/11)

Project	Hardship	Grant #	Grant Amount	Amt. Paid to-date	Balance	% Paid	Status	Amt. Owed (Pro-rating)
Stafford Co.-Aquia (Phase 2)		440-S-10-06	\$5,756,907	\$4,547,658	\$1,209,249	79%	construction	\$547,752
ASA - Alexandria WWTP		440-S-10-07	\$37,766,339	\$4,055,789	\$33,710,550	11%	construction	\$235,582
Louisa Regional WWTP		440-S-10-08	\$1,987,252	\$1,462,056	\$525,196	74%	construction	\$215,639
UOSA		440-S-11-01	\$4,907,002	\$0	\$4,907,002	0%	design	\$0
Spotsylvania Co-Massaponax		440-S-11-02	\$2,934,912	\$0	\$2,934,912	0%	construction	\$0
57		Totals =	\$654,134,854	\$488,763,498	\$165,371,356	75%		\$10,908,514

Completed = 25

Ongoing Constr/Design = 32

Est. Bond Proceeds Balance (10/27/11) = \$64,591,177

Est. Shortfall for signed agreements = \$100,780,179

Hardship Grantees	Grant Amount	Amt. Paid to-date	Balance	% Paid
	\$71,236,474	\$58,430,943	\$12,805,531	82%

Pending Grant Projects:	Grant Request
Fairfax Co. Portion of Blue Plains	\$27,500,000
Loudoun Co. Portion of Blue Plains	\$14,980,000
	\$42,480,000

Est. Shortfall incl. pending agreements = \$143,260,179

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".

David K. Paylor

DKP:d1m