COMMONWEALTH OF VIRGINIA

Department of Environmental Quality

Subject: Guidance Memo No. GM21-2007

To: Water Permitting Division Staff

From: Melanie D. Davenport, Director, Water Per

Melanie D. Davenport

Date: January 3, 2022

Summary:
The purpose of this guidance is to provide clarification on the requirements of 9VAC25-900-91: Exchange of Credits (Section 91). This guidance applies to all Stormwater construction general permittees (CGP) regulated under the Stormwater Management Act: Article 2.3 (§ 62.1-44.15:24 et seq.) of Chapter 3.1 of Title 62.1 of the Code of Virginia. and land-disturbing activities regulated under the Chesapeake Bay Preservation Act: Article 2.5 (§ 62.1-44.15:67 et seq.) of the Code of Virginia utilizing nonpoint source phosphorus credits to satisfy phosphorus loading requirements in accordance with 9VAC25-870-69 and 9VAC25-870-51. This guidance supersedes provisions on TMDLs and impaired waters contained in the Virginia Soil and Water Conservation Board's Guidance Document on Stormwater Nonpoint Nutrient Offsets approved on July 23, 2009 and the Virginia Soil and Water Conservation Board's Guidance Document on Utilization of Nonpoint Nutrient Offsets approved on November 10, 2011.

Electronic Copy:
Once effective, an electronic copy of this guidance will be available on:

- The Virginia Regulatory Town Hall under the Department of Environmental Quality (http://www.townhall.virginia.gov/L/gdocs.cfm?agencynumber=440);
- The department's website at https://www.deq.virginia.gov/Programs/Water/PermittingCompliance/PollutionDischargeElimination/NutrientTrading.aspx

Contact Information:
Please contact Sara Felker, Office of VPDES Permits, (804) 659-2671, sara.felker@deq.virginia.gov, with any questions regarding the application of this guidance.

Certification:
As required by Subsection B of § 2.2-4002.1 of the APA, the agency certifies that this guidance document conforms to the definition of a guidance document in § 2.2-4101 of the Code of Virginia.

Disclaimer:
This document is provided as guidance and, as such, sets forth standard operating procedures for the agency. However, it does not mandate or prohibit any particular action not otherwise required or prohibited by law or regulation. If alternative proposals are made, such proposals will be reviewed and accepted or denied based on their technical adequacy and compliance with appropriate laws and regulations.

Effective Date: February 3, 2022 **Initials:** *ABII*

Overview

1. Definitions

Disclaimer: Some definitions provided in this guidance are not defined in the Code of Virginia and have been included to provide clarification and do not change the meaning of any definitions in the Code of Virginia.

"Applicable Impaired Waters" means streams and reservoirs included in the latest an Environmental Protection Agency (EPA) approved 305(b)/303(d) Integrated Water Quality Assessment Report with impairments for dissolved oxygen, benthic community, nutrients, or chlorophyll-a as specified in 9VAC25-900-91.B.3; excludes impairments with existing, non-nutrient TMDLs or those likely due to natural causes.

"Assessed Waters" means streams and reservoirs that were evaluated and included in the latest EPA-approved 305(b)/303(d) Integrated Water Quality Assessment Report.

"Construction General Permit" or "CGP" means General Permit for Discharges of Stormwater from Construction Activities Authorization to Discharge under the Virginia Stormwater Management Program (9VAC25-880-70).

"Impaired Waters" or "Impaired Waterbody" means waters included in the latest EPA-approved 305(b)/303(d) Integrated Water Quality Assessment Report that do not meet one or more water quality standards.

"Land Disturbing Activity" or "LDA" means a manmade change to the land surface as defined in § 62.1-44.15:24 and § 62.1-44.15:51 and of the Code of Virginia, except that the term shall not include those exemptions specified in § 62.1-44.15:34 and § 62.1-44.15:51 of the Code of Virginia regulated under the Stormwater Management Act in accordance with § 62.1-44.15:24.

"Local Nutrient TMDL Area" means an area subject to a TMDL for total nitrogen and/or total phosphorus, other than the Chesapeake Bay TMDL, as delineated by an EPA-approved TMDL report.

"Nutrient Credit-Generating Project" or "Nutrient Bank" means a project developed to reduce the load of nitrogen and phosphorous nonpoint source pollution in order to generate nutrient credits for certification pursuant to 9VAC25-900.

"Total Maximum Daily Load" or "TMDL" means a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards and an allocation of that amount to the pollutant's sources. A TMDL includes wasteload allocations (WLAs) for point source discharges, and load allocations (LAs) for nonpoint sources or natural background or both, and must include a margin of safety (MOS) and account for seasonal variations.

“Unassessed Waters” means streams and reservoirs that were not assessed in the latest EPA approved 305(b)/303(d) Integrated Water Quality Assessment Report.

“Upstream” means any area that drains to a specific point; e.g., upstream of where a LDA’s discharge reaches assessed waters or applicable impaired waters.

"Virginia Stormwater Management Program" or "VSMP" means a program approved by the Soil and Water Conservation Board after September 13, 2011, and until June 30, 2013, or the State Water Control Board on and after June 30, 2013, that has been established by a VSMP authority to manage the quality and quantity of runoff resulting from land-disturbing activities and shall include such items as local ordinances, rules, permit requirements, annual standards and specifications, policies and guidelines, technical materials, and requirements for plan review, inspection, enforcement, and evaluation consistent with the requirements of § 62.1-44.15:27.

"VSMP Authority" means an authority approved by the State Water Control Board after September 13, 2011, to operate a Virginia Stormwater Management Program or the Department of Environmental Quality (DEQ). An authority may include a locality as set forth in § 62.1-44.15:27 of the Code of Virginia; state entity, including DEQ; federal entity; or, for linear projects subject to annual standards and specifications in accordance with subsection B of § 62.1-44.15:31 of the Code of Virginia, electric, natural gas, and telephone utility companies, interstate and intrastate natural gas pipeline companies, railroad companies, or authorities created pursuant to § 15.2-5102 of the Code of Virginia.

“Watershed” means an area of land that drains all the streams and rainfall to a common outlet such as the outflow of a reservoir, mouth of a bay, or any point along a stream channel.

2. Introduction

In 2005, the state legislature created the Chesapeake Bay Watershed Nutrient Credit Exchange Program to allow Virginia’s point and nonpoint sources of nutrient pollution in the Chesapeake Bay watershed to meet required nutrient reductions through trading (VA Code § 62.1-44.19:14 et seq). Credits generated through this program are also transferable in accordance with the Virginia Nonpoint Source Nutrient Credit Program (§ 62.1-44.15:35) and the Virginia Soil and Water Conservation Board's Guidance Document on Stormwater Nonpoint Nutrient Offsets approved on July 23, 2009.

On September 1, 2020, new regulations on the certification of nutrient credits (9VAC25-900) became effective. This guidance document clarifies Section 91 of the regulation regarding where credits may be used for regulated land disturbing activities (LDA). This guidance document also provides instruction on how to use the Nutrient Trading Data Viewer, which is a GIS web application developed for the public to utilize for determining the requirements of 9VAC-900-91 are met for credit use.

There are three scenarios for which guidance is provided: (1) the LDA does not drain to applicable impaired waters and is not located in a local nutrient TMDL area (standard credit use), (2) the LDA occurs in a local nutrient TMDL area, and (3) the LDA drains to applicable impaired waters, but is not located in a local nutrient TMDL area.

The impaired waters dataset used by DEQ in determining whether local water quality provisions apply is based on the most recent, EPA-approved 305(b)/303(d) Integrated Water Quality Assessment Report. This biannual report includes a list of waterways that do not meet water quality standards. For each stream and reservoir included in this list, only those with impairments for dissolved oxygen, benthic community, nutrients, or chlorophyll-a were considered "applicable impairments." Impaired waterways in areas with existing, non-nutrient TMDLs or those likely due to natural causes, were excluded from the list of applicable impairments.

3. Types of Credit Use

Standard Credit Use

LDAs are eligible for "standard credit use" if (1) they are not located in a local nutrient TMDL area, and (2) the first assessed stream segment downstream of the LDA does not have an applicable impairment. For LDAs that meet these conditions, Virginia Code § 62.1-44.15:35.F. allows the use of NPS credits generated in the same or adjacent 8-digit hydrologic unit code (HUC) within the same tributary of the LDA. Only if it is determined that no credits are available in the same or adjacent 8-digit HUC within the same tributary may the credits be acquired anywhere within the same tributary of the LDA. Under no circumstance may a LDA use credits generated in a separate tributary. The following webpage provides a printable map of Virginia's tributaries and 8-digit HUCs:

https://ribits.ops.usace.army.mil/ords/f?p=107:150:1783629166740::NO::P150_DOCUMENT_ID:76749

Local Nutrient TMDL Credit Use

For LDAs located in the Chesapeake Bay watershed, this section only applies if the local nutrient TMDL is more stringent than the Chesapeake Bay TMDL (i.e., has a higher required percent nitrogen and/or phosphorus reduction requirement for developed lands; see Table 4.2 for Chesapeake Bay TMDL reductions). If the local nutrient TMDL is less stringent than the Chesapeake Bay TMDL, the credit use should follow the same rules for standard credit use. For areas outside of the Chesapeake Bay watershed, this section applies regardless of the stringency of the local nutrient TMDL.

For LDAs located within a local nutrient TMDL area, the LDA's discharge must be traced downstream to limits of the local nutrient TMDL area. If the LDA's discharge reaches applicable impaired waters within the local nutrient TMDL area, then credits may only be acquired upstream of where the LDA's discharge reaches the applicable impaired waters in accordance with 9VAC25-900-91.B.1. If a LDA is located in a local nutrient TMDL area and does not drain to applicable impaired waters within the local nutrient TMDL area, then the LDA

may follow the same rules for standard credit use (same or adjacent 8-digit HUC within the same tributary).

Impaired Waters Credit Use

If the LDA is located outside of a local nutrient TMDL area, then the LDA's discharge must be traced downstream to the first assessed waterbody. If the first assessed waterbody has an applicable impairment, then credit acquisition shall be made in accordance with the following hierarchy as specified within 9VAC25-900-91.B.3:

a. Upstream of where the discharge reaches impaired waters, if credits are available;

b. Within the same 12-digit HUC, if credits are available;

c. Within the same 10-digit HUC, if credits are available;

d. Within the same 8-digit HUC and within the same tributary, if credits are available;

e. Within an adjacent 8-digit HUC and within the same tributary, if credits are available; or

f. Within the same tributary.

The impaired waters hierarchy does not apply when DEQ determines through issuance of a VPDES permit that local water quality cannot be protected unless exchange of credits are restricted to upstream of where the discharge reaches impaired waters.

NOTE: Additional locality-based trading restrictions adopted in accordance with § 62.1-44.15:35.C. and/or 9VAC25-870-69.C.2 may apply to any of the above-described credit uses. The VSMP authority should be contacted prior to credit purchase or use.

4. Determining What Type of Credit Use is Allowable

Credit use areas that meet the requirements of Section 91 shall be determined by the VSMP authority in accordance with 9VAC25-870-69. In order for the VSMP authority to verify potential credit use meets Section 91 requirements, the stormwater plan submittal must contain a letter of credit availability from an approved nutrient bank with available credits in compliance with 9VAC25-870-55.B.7. An affidavit of credit sale must be acquired from the bank that issued the letter of credit availability prior to land disturbance in accordance with 9VAC25-870-69.C.1.

Determining if a Local TMDL is Stricter than the Chesapeake Bay TMDL

For credit use within a local TMDL in the Chesapeake Bay Watershed, it may be necessary to determine whether the local TMDL is stricter than the Chesapeake Bay TMDL in accordance with 9VAC25-900-91.B.1. In the example below, the Revised TMDL Report for Blacks Run and Cooks Creek (Table 4.1) requires a 73.2% reduction in phosphorus from developed lands. In this example, the required phosphorus reductions for the Blacks Run and Cooks Creek for developed lands (73.2%) are greater than both the impervious (16%) and pervious (7.25%) required phosphorus reductions from developed lands for the Chesapeake Bay TMDL (Table 4.2). A LDA in Blacks Run or Cooks Creek where the discharge reaches a waterbody with an applicable impairment within the local nutrient TMDL area may only use credits generated upstream of where the LDA's discharge reaches the applicable impaired waters.

Table 4.1: Reductions in Phosphorus Needed to Clean Up Blacks Run and Cooks Creek

Phosphorus Source	**% Reduction in Phosphorus Loads Needed**	
	Blacks Run	***Cooks Creek***
Crop, Pasture, and Hay	73.2%	73.2%
Forest, Trees, Shrubs, Wetland, Barren	0%	0%
Developed Areas*	73.2%	73.2%
Streambank Erosion	73.2%	73.2%
Permitted Urban Areas (MS4)	73.2%	73.2%
Other Permitted Sources**	0%	0%

Table 4.2: Chesapeake Bay TMDL Reductions for Developed Lands

L2 Scoping Reductions for Chesapeake Bay TMDL		
Surface	Total Nitrogen	Total Phosphorus
Impervious	9%	16%
Pervious	6%	7.25%

Note: Percent reductions required from developed lands for local nutrient TMDLs may not necessarily be displayed in the TMDL report and additional calculations may be needed to determine the percent reductions required from developed lands. Please visit https://www.deq.virginia.gov/water/water-quality/tmdl-development/approved-tmdls for copies of TMDL reports. DEQ's Regional TMDL Coordinator should be contacted for copies of any TMDL reports not available on the webpage and for any questions regarding additional calculations needed to determine if a local nutrient TMDL is stricter than the Chesapeake Bay TMDL. Contact information for DEQ Regional TMDL Coordinators and the TMDL Modeling Coordinator can be found here: https://www.deq.virginia.gov/water/water-quality/tmdl-development.

Determining if a Nutrient Bank is Upstream of a LDA

For LDAs that occur in a local TMDL area, or those subject to the hierarchy in 9VAC25-900-91.B.3, it may be necessary to determine whether a nutrient bank is upstream of where the discharge of the LDA reaches impaired waters. In the following example, a LDA located in the southern portion of the watershed discharges to an unassessed tributary of a waterway with an applicable impairment (Figure 4.1). In this example, the streams generally flow from right to left.

Nutrient Bank A in the northern portion of the watershed discharges to a tributary of the applicable impaired waters stream segment, but reaches the impaired water segment downstream of the LDA's point of confluence with the impaired stream. Bank A is not considered upstream of the LDA.

Nutrient Bank B in the eastern portion of the watershed discharges to a stream segment that flows into the applicable impaired waters upstream of the LDA's point of confluence with the impaired stream. Bank B is considered upstream of the LDA.

If this LDA occurs in a local TMDL area, or is subject to the hierarchy in 9VAC25-900-91.B.3, the LDA must purchase credits from Bank B and cannot purchase credits from Bank A.

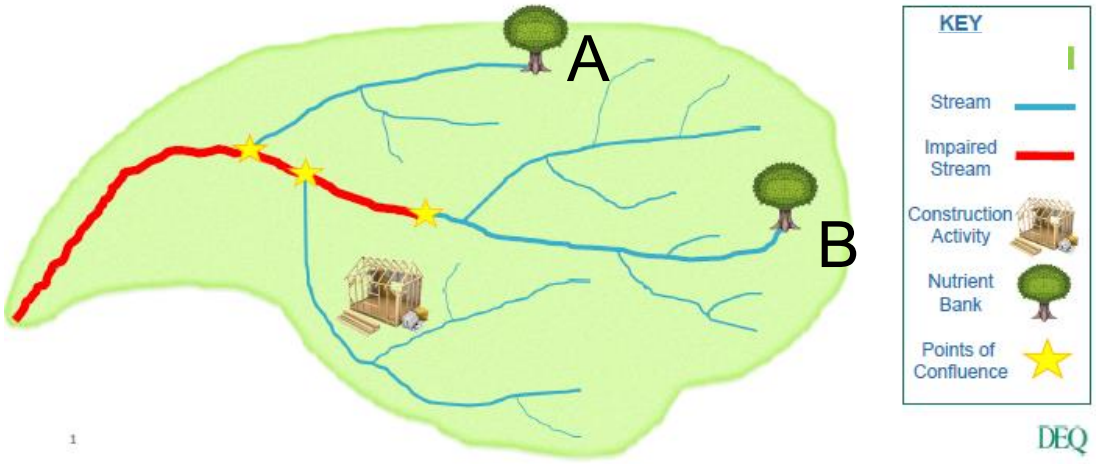

Figure 4.1. An example showing nutrient banks and their relationship to the LDA. The stream and its tributaries generally flow from right to left.

The following flow chart may be used for determining which credit use scenario applies to an LDA:

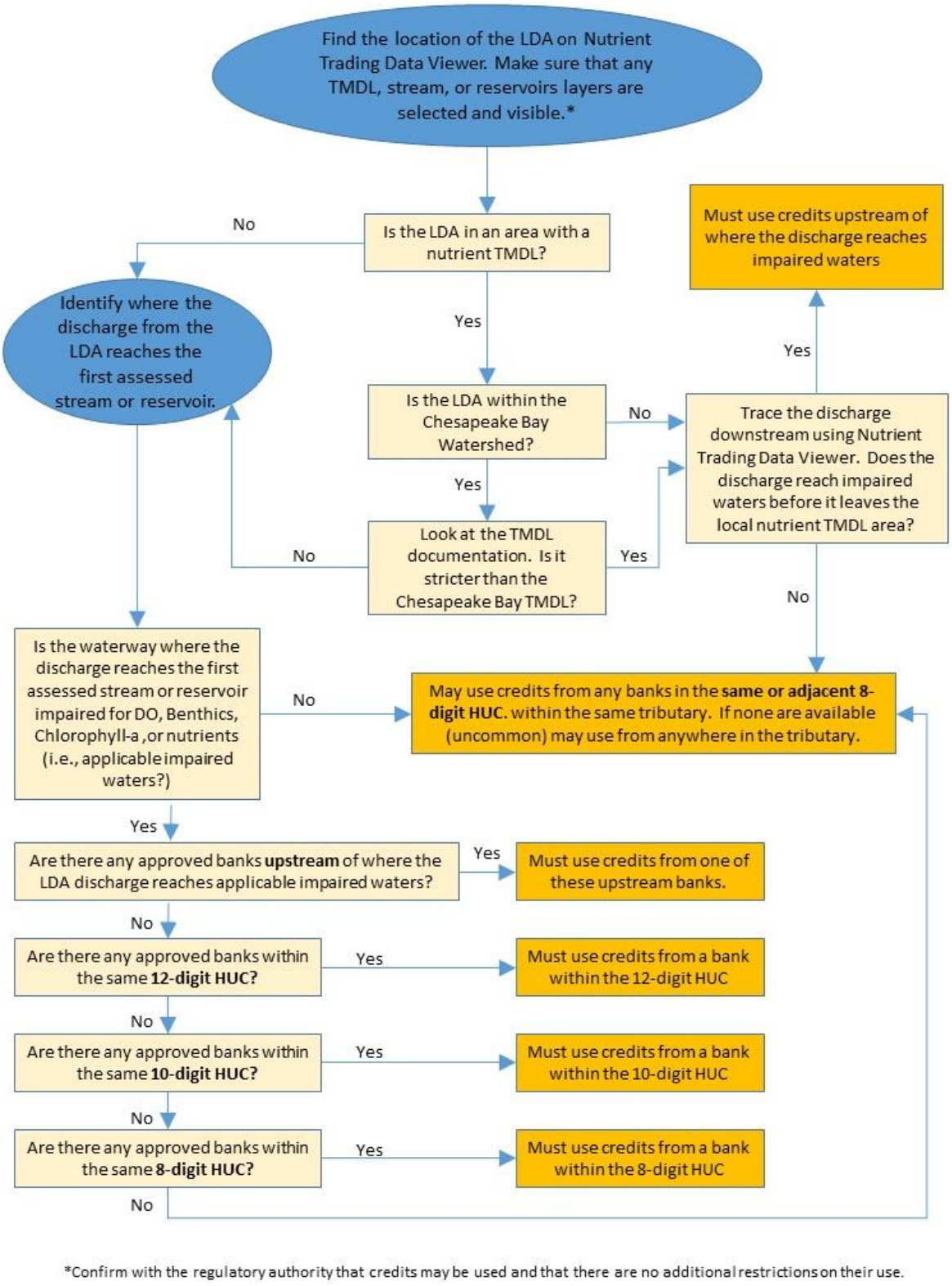

Figure 4.2: Credit Use Flowchart

5. Nutrient Trading Data Viewer

To help stakeholders determine the applicability of Section 91, DEQ has developed the Nutrient Trading Data Viewer that is available to the public at:

https://vadeq.maps.arcgis.com/apps/webappviewer/index.html?id=227927eefaf64c47853c081760077216

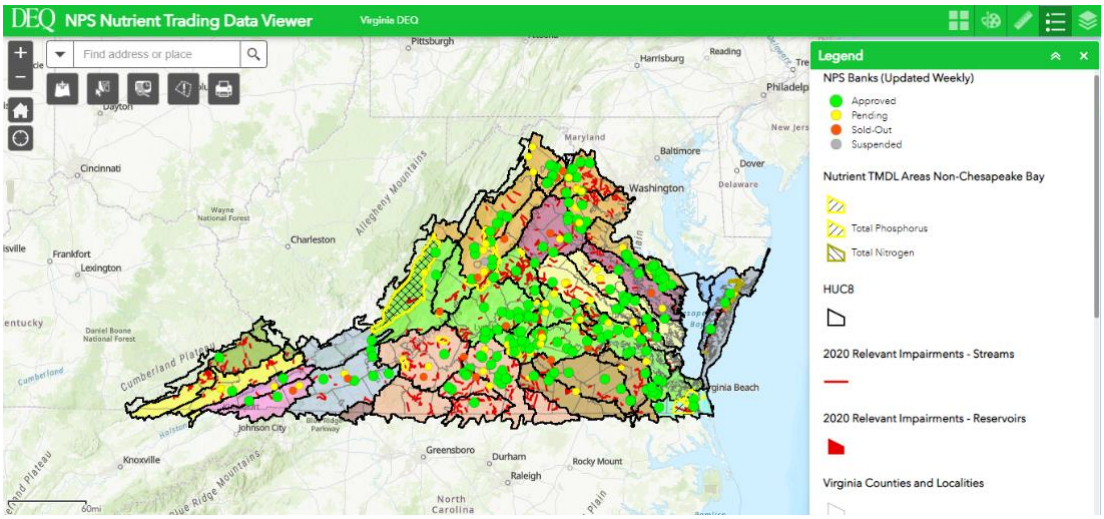

Figure 5.1: Nutrient Trading Data Viewer at a Glance

Data Layers

The Nutrient Trading Data Viewer (above) contains all the GIS data layers needed for determining where a LDA may acquire credits after the project has been determined to be eligible to use credits by the VSMP authority. Data layers include:

- Nutrient Bank Locations: approved (green dots), pending approval (yellow dots), and sold out (red dots) nutrient banks.
- Hydrologic Units Codes (HUCs): for 8-digit HUCs (black lines), 10-digit HUCs (orange lines), and 12-digit HUCs (purple lines).
- Applicable Impaired Waters: for applicable impaired streams (red lines) and reservoirs (red polygons).
- Assessed Waters: for streams (thick dark blue line) without applicable impairments and reservoirs (dark blue polygons) without applicable impairments.
- Unassessed Waters: for unassessed streams (thin light blue line) and reservoirs (light blue polygons).
- Local Nutrient TMDL Area: for all local nutrient TMDLs (yellow outline with black hatched polygons).
- Major River Basins: for all Virginia basins (various colored polygons).

The Nutrient Trading Data Viewer also features an address search bar located at the top left

corner of the map for identifying project locations. The data viewer also features several base map settings such as topographic and aerial imagery base maps. For displaying the topographic base-map to estimate where a site drains, the Major River Basin layer can be turned off by unchecking the layer in the layer key menu on the right. The base map settings can be adjusted by clicking on the window icon in the top right corner.

Data layers for the Nutrient Trading Data Viewer will be updated regularly as needed. Updates may include the following: Addition of newly certified banks, removal of sold-out banks, biannual updates to the EPA-approved 303(d) impaired waters list, removal of impairments determined not applicable by DEQ according to 9VAC25-900-91.C.2, and addition of newly EPA-approved local nutrient TMDLs.

All of the above updates could affect the credit use area of a LDA and whether a particular nutrient bank can service a LDA. It is recommended that the Nutrient Trading Data Viewer be used by credit sellers and users prior to writing or receiving a letter of credit availability and applicability should be determined at the time stormwater management plans are initially submitted for review. Updates affecting a nutrient bank's service area are not retroactively applied to LDAs that have already submitted stormwater management plans for review and contain a letter of credit availability or affidavit of credit sale dated prior to any changes to the Nutrient Trading Data Viewer.

6. Credit Use Examples

Example 1: Standard Credit Use

In the example below (Figure 6.1), the LDA's discharge can be traced to a nearby, unassessed stream.

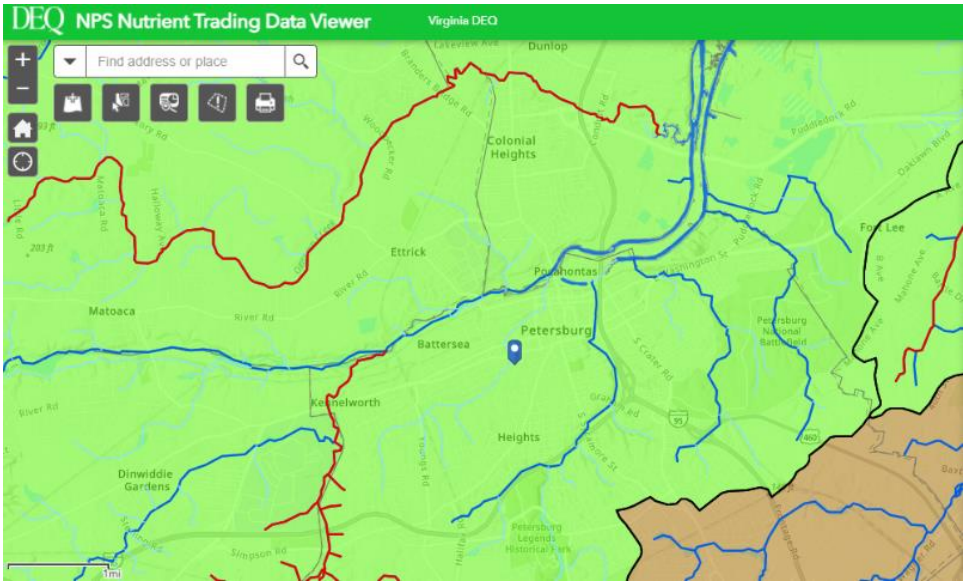

Figure 6.1: Standard Credit Use LDA Close-up. The LDA is indicated with a blue marker.

The unassessed stream then drains to the assessed Appomattox River segment (Figure 6.2).

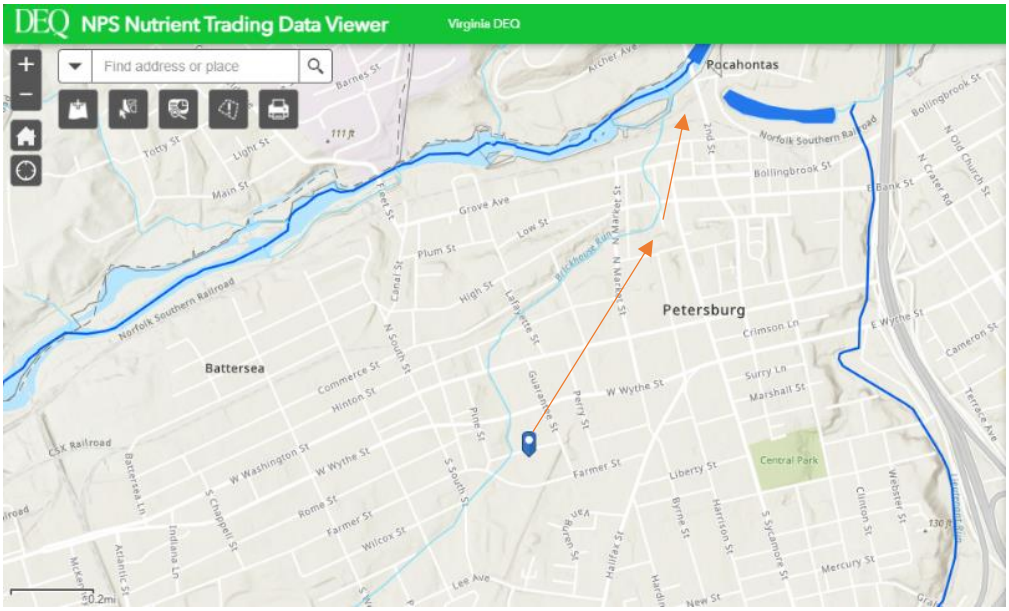

Figure 6.2: Standard Credit Use LDA Downstream Tracing. The LDA is indicated with a blue marker and the arrows indicate the flow path of the discharge from the LDA.

Because the first assessed stream the LDA's discharge reaches (Appomattox River) does not have an applicable impairment, this LDA may use standard nutrient credit acquisition from any approved nutrient banks (green dots) in the same or adjacent 8-digit HUC in the James River basin (blue highlighted 8-digit HUCs below in Figure 6.3).

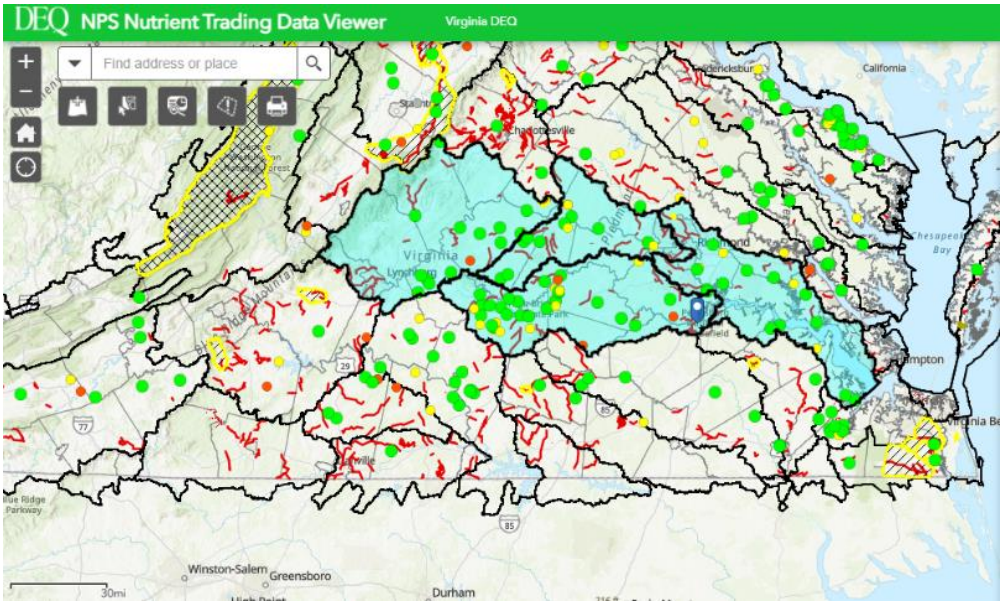

Figure 6.3: Standard Credit Use with Purchasing Area Highlighted in Blue

Example 2: Local Nutrient TMDL Area Credit Use with Applicable Impaired Waters

In the following example (Figure 6.4), the LDA is located in a local nutrient TMDL area (indicated by the black hatched area). Because the LDA's discharge can be traced downstream

to a stream segment of the South River with an applicable impairment (indicated by the red line stream), the credits may only be acquired from a nutrient bank upstream of where the LDA's discharge reaches the applicable impaired waters in compliance with 9VAC-900-91.B.1:2.

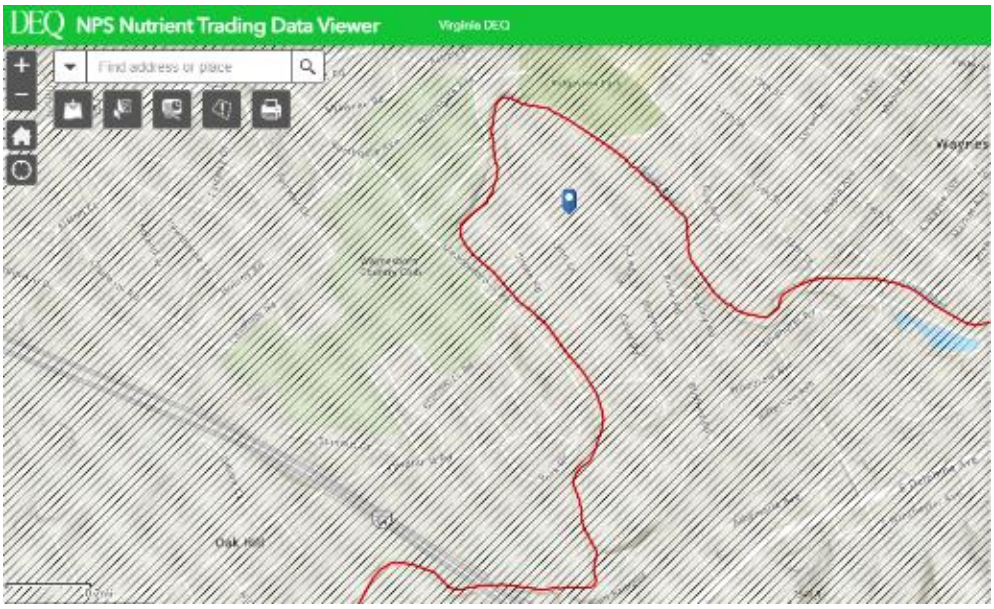

Figure 6.4: Local Nutrient TMDL Area Credit Use LDA Close-up. The LDA is indicated with a blue marker.

One approved bank (the green dot) and one sold out bank (the red dot) are located upstream of where the project's discharge meets applicable impaired waters, so credits may only be acquired from the approved bank upstream (see Figure 6.5 below). If no credits are available upstream of where the LDA's discharge reaches applicable impaired waters, then the LDA cannot use credits and should consult with the VSMP authority to discuss alternatives.

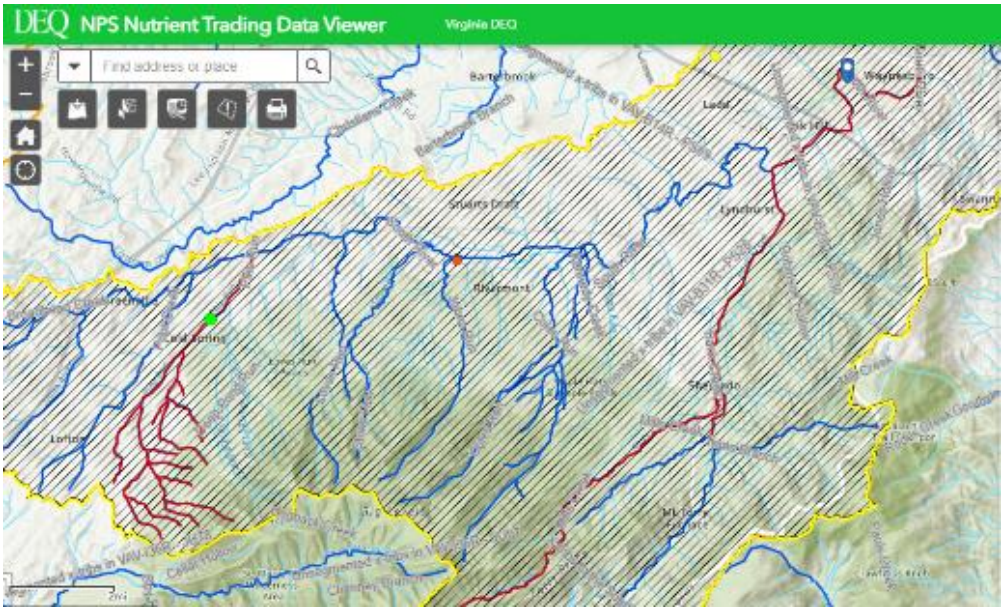

Figure 6.5: Local Nutrient TMDL Area Credit Use Upstream Banks. The LDA is indicated with a blue marker.

Example 3: Local Nutrient TMDL Area Credit Use without Applicable Impaired Waters

In the following example below (Figure 6.6), the LDA is located in a local nutrient TMDL area and the LDA's discharge can be traced downstream to an unassessed tributary (Dry Creek) of an assessed stream segment of the Jackson River.

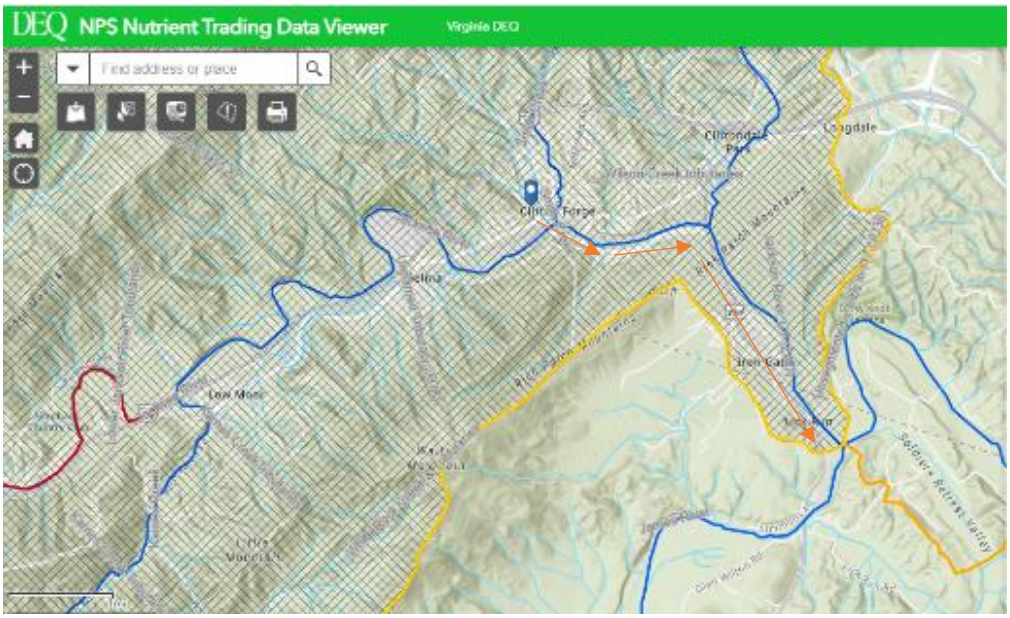

Figure 6.6: Local Nutrient TMDL Area Credit Use LDA Close-up. The LDA is indicated with a blue marker and the arrows indicate the flowpath of the discharge from this site.

Since the first assessed waters do not have an applicable impairment, the LDA's discharge must be traced downstream to limits of the local nutrient TMDL area in accordance with 9VAC25-900-91.B.1:2. In this example the LDA's discharge does not reach applicable impaired waters downstream and within the local nutrient TMDL area, so credits may be acquired anywhere in the same or adjacent 8-digit HUC (highlighted in blue in Figure 6.7), and is treated as a "standard nutrient credit use" acquisition in accordance with 9VAC-900-91.A.

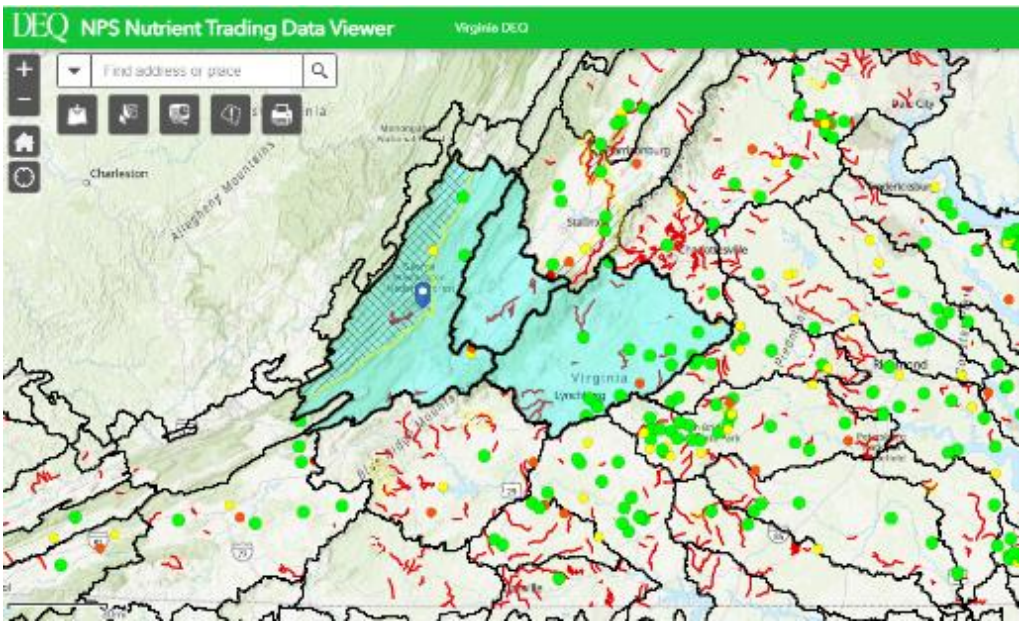

Figure 6.7: Local Nutrient TMDL Credit Use with Purchasing Area Highlighted in Blue.

Example 4: Applicable Impaired Waters Credit Use

In the following example (Figure 6.8), the LDA is not located in a local nutrient TMDL area, and the LDA's discharge can be traced downstream to an unassessed tributary of applicable impaired waters (Cub Run), so the impaired waters hierarchy must be applied in accordance with 9VAC25-900-91.B.3.

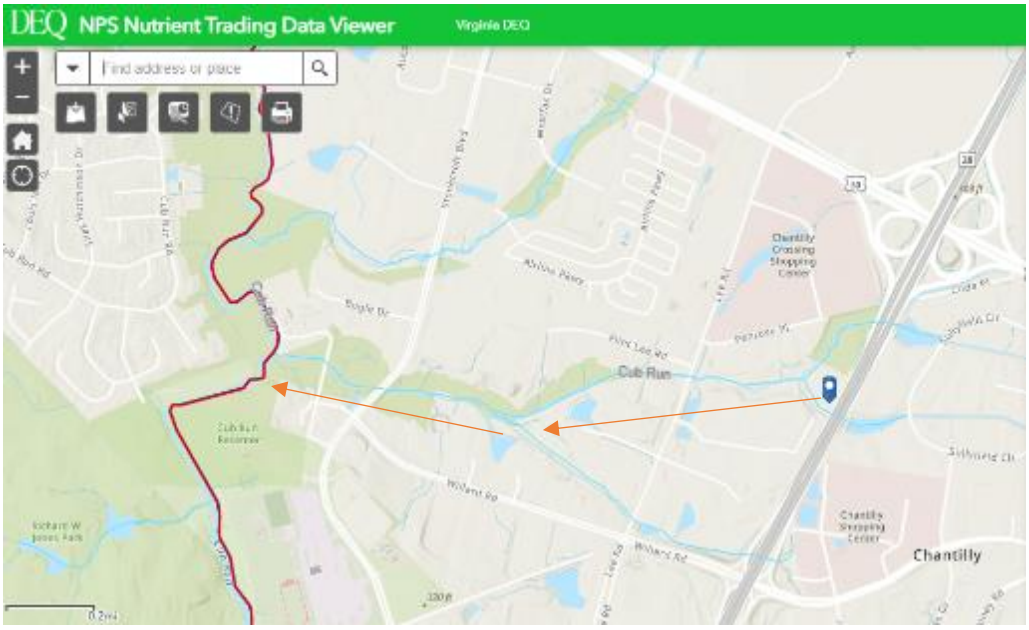

Figure 6.8: Applicable Impaired Waters Credit Use Downstream Tracing. The LDA is indicated with a blue marker and the arrows indicate the flow path of the discharge from the LDA.

By applying the hierarchy, it is determined that no nutrient banks are available upstream from where the project's discharge reaches applicable impaired waters or within the same 12-digit

HUC (highlighted in blue in Figure 6.9).

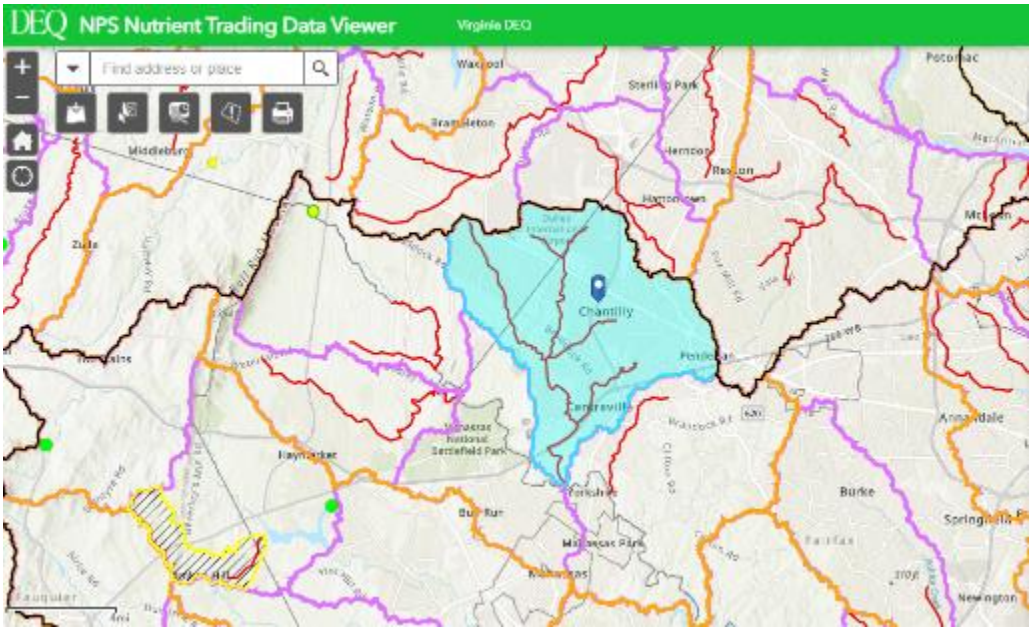

Figure 6.9: Applicable Impaired Waters Credit Use 12-Digit HUC Highlighted in Blue.

One pending nutrient bank is located in the same 10-digit HUC, but no credits are available at this time (highlighted in blue in Figure 6.10).

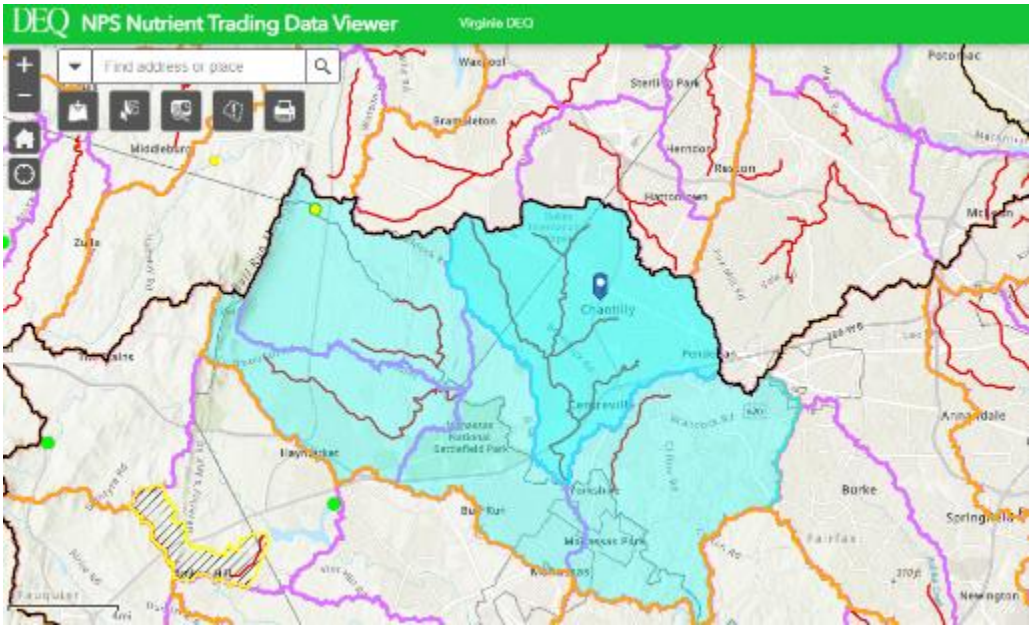

Figure 6.10: Applicable Impaired Waters Credit Use 10-Digit HUC Highlighted in Blue. No credits are available in this 10-digit HUC at this time.

Several approved banks are located in the same 8-digit HUC. This LDA may acquire credits from any of the approved banks located in the same 8-digit HUC (highlighted in blue in Figure 6.11). If no credits were available in the same 8-digit HUC, then the LDA would be eligible to

acquire credits generated in an adjacent 8-digit HUC within the same tributary in accordance with 9VAC25-900-91.A.

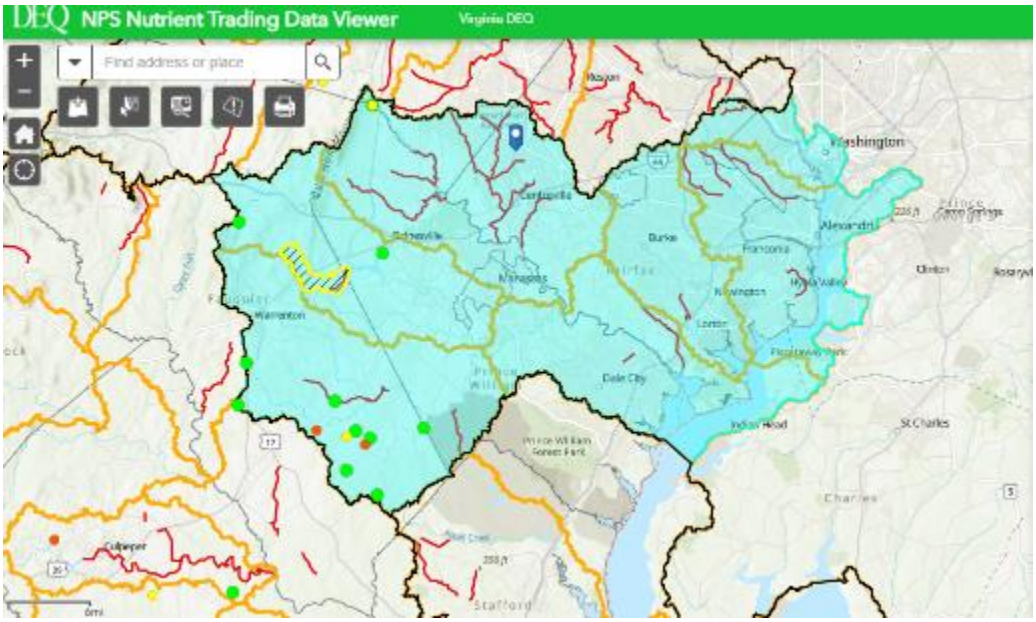

Figure 6.11: Applicable Impaired Waters Credit Use 8-Digit HUC Purchasing Area Highlighted in Blue.

7. Impairment Applicability Determination

In compliance with 9VAC25-900-91.C.2, the impaired waters hierarchy does not apply when it has been demonstrated to DEQ's satisfaction that the applicable impairment is not likely caused by nutrients. The conditions under which DEQ would make this determination are case-specific. In general, it should be demonstrated to DEQ's satisfaction that nutrient concentrations are below those considered to have a low probability of causing stress to the benthic assemblage (see Table 7.1 that is taken from DEQ Technical Bulletin WQA/2017-001; https://www.deq.virginia.gov/home/showpublisheddocument?id=4313).

Data from at least twelve monthly sampling events conducted over a 1-year period should show no total nitrogen (TN) concentrations greater than 1.0 mg/L and no total phosphorus (TP) concentrations greater than 0.05 mg/L. Median values for all recorded measurements should be below the levels at which no detectable risk of increased stress has been observed by DEQ (0.5 mg/L and 0.02 mg/L for TN and TP, respectively). Nutrient monitoring data for this evaluation may be obtained from the DEQ Water GIS Layer Data Hub at: https://geohub-vadeq.hub.arcgis.com/datasets/25f247e1e5e741b389392b6ff5f072f7_0?geometry=-94.906%2C34.412%2C-65.265%2C40.510. Nutrient monitoring data may also be obtained from the National Water Quality Monitoring Council Water Quality Portal at: https://www.waterqualitydata.us/portal/.

Other sources of preexisting data may be used, or new data may be collected from the water body of interest. Regardless of the data source, data selected as representative of the impaired stream segment of interest should meet the following conditions: the data should be from the impaired stream segment of interest and the sampling locations should be representative of DEQ sampling history that led to the stream segment of interest being listed as impaired on the most

recent EPA approved 303(d) listing.

All data should be collected within the six most recent calendar years, with no substantive changes to the watershed land cover or potential sources of pollution to the impaired stream segment of interest. Additional sampling locations may be provided to supplement required DEQ sampling locations in order to provide a more robust dataset for the enhancement of the overall impairment applicability determination. All TN and TP data included in the evaluation should be produced by a laboratory certified for those parameters under the Virginia Environmental Laboratory Accreditation Program (VELAP; Virginia laboratories), the National Environmental Laboratory Accreditation Program (NELAP), or equivalent state accreditation program (laboratories in other states). Nutrient sample collection should follow DEQ Water Monitoring Standard Operating Procedures (SOP) or equivalent methods (https://www.deq.virginia.gov/home/showpublisheddocument/4826/637479691614670000).

Laboratory analysis should be conducted using methods approved by USEPA or NELAP, with lower detection limits equal to or less than 0.1 mg/l for TN and 0.01 mg/l for TP. All new monitoring should be conducted under a Quality Assurance Project Plan (QAPP) and SOP that include additional duplicate and blank samples for quality assurance purposes, per DEQ SOP. The project QAPP and SOP should be approved by the DEQ Water Quality Monitoring Quality Assurance Officer prior to any sampling. For questions on acquiring data or on developing and submitting a QAPP and SOP, please contact the DEQ Water Quality Monitoring Quality Assurance Officer. Contact information for DEQ Water Quality Monitoring staff a can be found at: https://www.deq.virginia.gov/water/water-quality/monitoring

DEQ's Office of Water Quality Monitoring should be consulted prior to performing any study on impairment applicability to 9VAC25-900-91.C.

Table 7.1: Total Nitrogen and Total Phosphorus concentrations and associated probabilities of stress to stream benthic assemblages. See DEQ Technical Bulletin WQA/2017-001; https://www.deq.virginia.gov/home/showpublisheddocument?id=4313 for further explanation.

Probability of Stress to Benthic Assemblage	Total Phosphorus (mg/L)	Total Nitrogen (mg/L)
High	Greater than 0.10	Greater than 2.0
Medium	0.05-0.10	1.0-2.0
Low	0.02-0.05	0.5-1
None observed	Less than 0.02	Less than 0.5

If alternative proposals are made, such proposals will be reviewed and accepted or denied based on their technical adequacy and compliance with appropriate laws and regulations.

The impaired waters hierarchy does not apply when it has been demonstrated to DEQ's satisfaction that the use of credits would not reasonably be considered to cause or contribute to the applicable impairment in accordance with 9VAC25-900-91.C.2.b.

Impaired waters within an EPA approved local nutrient TMDL area are not eligible for an impairment applicability determination under 9VAC25-900-91.C.2. The exchange of credits within EPA approved local nutrient TMDL areas are subject to the requirements of 9VAC25-

900-91.B.1 and 2.

8. Roles and Responsibilities

Nutrient Credit Brokers, Nutrient Credit Users, and VSMP Authorities should use the Nutrient Trading Data Viewer to determine from which nutrient banks can provide credits to a LDA in accordance with 9VAC25-900-91.

Nutrient Credit Brokers

Nutrient credit brokers should use the Nutrient Trading Data Viewer prior to providing a credit user with a letter of credit availability to determine if the LDA is within the bank's service area. If the LDA occurs in a local nutrient TMDL area or drains to applicable impaired waters, the credit broker should inform the user of the conditions of 9VAC25-900-91. Brokers must report each sale's project name, permit number, coordinates, 8-digit HUC, and provide the affidavit of sale to DEQ using the Regulatory In-lieu fee Banking Information System (RIBITS) in accordance with 9VAC25-900-150.C.7.

If a credit sale is determined not to meet the conditions of Section 91, then the credit sale may be refunded at the seller's discretion. The seller should notify DEQ immediately if credits are refunded and provide a voided affidavit so the returned credits can be added back to the ledger on RIBITS by DEQ nutrient trading staff.

Nutrient Credit Users

Prospective nutrient credit users should determine if the LDA is located in a local nutrient TMDL area, identify where the site drains, and whether the discharge reaches applicable impaired waters using the Nutrient Trading Data Viewer. Credit users should provide the project coordinates and twelve-digit HUC to potential credit providers and the appropriate VSMP authority. Credit users should also check with the locality and VSMP authority to determine if credits may be used by the project and whether there are any additional trading restrictions implemented by the locality in accordance with § 62.1-44.15:35.C. A stormwater plan submittal with a letter of credit availability from a nutrient bank that meets the conditions of Section 91 shall be provided to the VSMP authority in accordance with 9VAC25-870-55.B.7.

Credit users should also provide the VSMP authority with a printout from the Nutrient Trading Data Viewer demonstrating that Section 91 conditions have been met at the time stormwater management plans are initially submitted for review. If a credit use is determined not to meet the conditions Section 91, then the credit user may request a refund and determine if any other nutrient banks can service the project using the Nutrient Trading Data Viewer.

Note: VSMP authorities may implement more stringent trading restrictions in accordance with § 62.1-44.15:35.C. A locality may also restrict trading to protect public water supplies from demonstrated adverse nutrient impacts. Please contact the locality directly to see if this applies.

Note: If the LDA is located in applicable impaired waters or a local nutrient TMDL area, upstream available credit supplies may be limited and letters of credit availability may not necessarily reserve credits needed for the LDA.

VSMP Authorities

VSMP authorities must determine whether the use of credits complies with the requirements of 9VAC25-870-69, 9VAC25-870-51, and any other lawfully imposed local restrictions. Prior to plan approval, the VSMP authority should review whether the LDA is subject to the provisions of Section 91 using the Nutrient Trading Data Viewer to determine if the specified nutrient bank that provided a letter of credit availability may provide credits for the LDA.

If credit use is determined not to meet the conditions Section 91, then the plan reviewer must require that credits be acquired from a nutrient bank that can service the LDA in accordance with 9VAC25-870-69. Final determination of where a LDA drains and eligibility to use nutrient credits shall be made in accordance with Section 91 by the VSMP authority in accordance with 9VAC25-870-69 unless it has demonstrated to DEQ's satisfaction that the applicable impairment is not likely caused by nutrients or the use of credits would not reasonably be considered to cause or contribute to the applicable impairment.

DEQ Staff

DEQ staff will track credit sales through RIBITS and verify ledger transactions match affidavits received. DEQ will evaluate applicable impairment studies to determine whether sufficient evidence is supplied to determine that an impairment is not likely caused by nutrients. DEQ will evaluate any studies that demonstrate the use of credits would not reasonably be considered to cause or contribute to the applicable impairment. DEQ will also maintain the data layers included in the Nutrient Trading Data Viewer.

9. Applicability

This guidance and the conditions of Section 91 are applicable to all NPS credit sales to CGP credit users on or after the effective date of Section 91 (January 1, 2021). This guidance is also applicable to NPS credits applied to land-disturbing activities regulated by the Chesapeake Bay Preservation Act (9VAC25-870-51.B.8), but not required to obtain CGP coverage. The impaired waters hierarchy (9VAC25-900-91.B.3) is not applicable to any stormwater plan submission with a letter of credit availability or affidavit of sale submitted prior to the effective date of Section 91 (January 1, 2021).

10. Resources

Nutrient Trading Data Viewer:
https://vadeq.maps.arcgis.com/apps/webappviewer/index.html?id=227927eefaf64c47853c081760077216

DEQ Water GIS Layer Data Hub for downloading Nutrient Trading Data Viewer layers:
https://geohub-vadeq.hub.arcgis.com/pages/c1ad79b7b58844f9b468f19c3907cac2

DEQ Nutrient Monitoring Data: https://geohub-vadeq.hub.arcgis.com/datasets/25f247e1e5e741b389392b6ff5f072f7_0?geometry=-94.906%2C34.412%2C-65.265%2C40.510

National Water Quality Monitoring Council Water Quality Portal: https://www.waterqualitydata.us/portal/

DEQ Technical Bulletin WQA/2017-001: https://www.deq.virginia.gov/home/showpublisheddocument?id=4313

DEQ Water Monitoring Standard Operating Procedures (SOP):

https://www.deq.virginia.gov/home/showpublisheddocument/4826/637479691614670000

RIBITS:

https://ribits.ops.usace.army.mil/ords/f?p=107:216:16895482735121::NO

Approved TMDL Reports:

https://www.deq.virginia.gov/water/water-quality/tmdl-development/approved-tmdls

DEQ TMDL staff contacts:

https://www.deq.virginia.gov/water/water-quality/tmdl-developmentWater Quality Assessment:

305(b)/303(d) Water Quality Assessment Integrated Report:

https://www.deq.virginia.gov/water/water-quality/assessments/integrated-report

DEQ Water Quality staff contacts:

https://www.deq.virginia.gov/water/water-quality/monitoring

8-Digit-HUC Map:

https://ribits.ops.usace.army.mil/ords/f?p=107:150:1783629166740::NO::P150_DOCUMENT_ID:76749