

The Use of Nutrient Credits in Virginia

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Overview of Existing Programs

- Significant Point Source Trading and Stormwater Offsets

What's a Credit in Virginia?

- "Point source nitrogen (or phosphorus credit" means the difference between (i) the waste load allocation for a permitted facility specified as an annual mass load of total nitrogen, and (ii) the monitored annual mass load of total nitrogen discharged by that facility, where clause (ii) is less than clause (i), and where the **difference is adjusted by the applicable delivery factor and expressed as pounds per year of delivered total nitrogen load.**"
- "Nonpoint nutrient offset" means **nutrient reductions certified as nonpoint nutrient offsets** under the Chesapeake Bay Watershed Nutrient Exchange Program (§ 62.1 – 44.19:12 et seq.).



GVPDES WPTNTPDNTCBWV

or

“Nutrient Trading Regulation”

**General VPDES Watershed Permit for Total
Nitrogen and Total Phosphorus Discharges and
Nutrient Trading in the Chesapeake Bay
Watershed in Virginia (9 VAC 25-820-10)**

**(James, York, Rappahannock, Potomac/Shenandoah,
Eastern Shore)**

Chesapeake Bay Watershed General Permit: Key Features

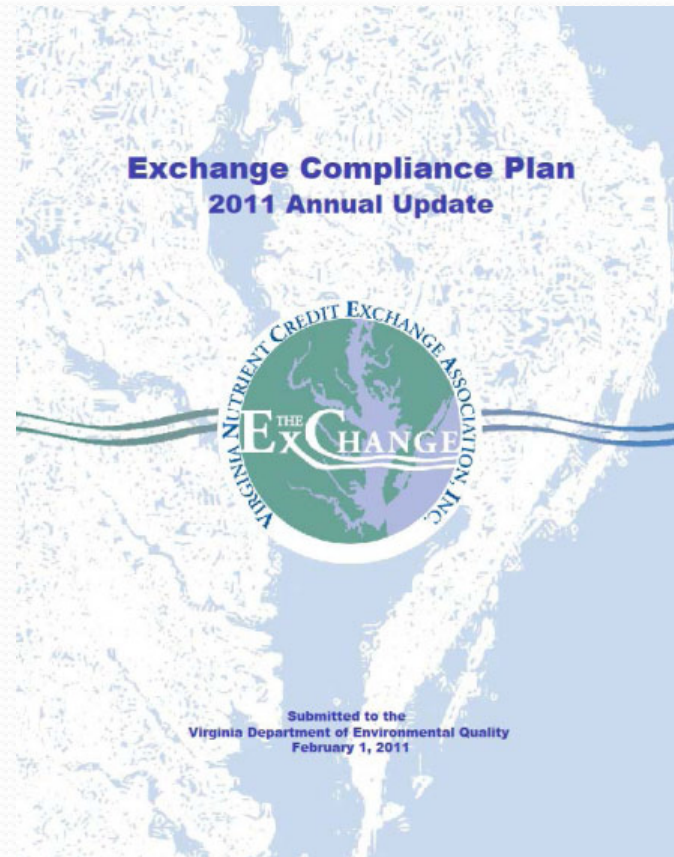
- Calendar year annual total N and total P load limits (“caps”) for **facilities and river basins** based on a policy of “stringent treatment at design capacity.”
- Presumed that point source credits will eventually disappear as facilities reach capacity
- **Point Source-to-Point Source trading** for existing facilities to meet load cap for each covered facility and each basin
- **Point Source-to-Nonpoint Source trading** reserved to accommodate new and expanding facilities that must offset entire load
- Approximately 165 facilities registered under the permit
- Trading confined to major basins except for Eastern Shore

Nutrient Credit Exchange Association

VA Nutrient Credit Exchange Association

<http://www.theexchangeassociation.org>

- Voluntary membership in non-stock Corporation created by General Assembly to facilitate the trading program
- 105 facility members
- Facilitates trades, compliance
- Sets prices for credits among its members



Using Credits to Meet Stormwater Requirements (“offsets”)

10.1 – 603.8:1 Stormwater nonpoint nutrient offsets.

B. B. A VSMP authority is authorized to allow compliance with stormwater nonpoint nutrient runoff water quality criteria established pursuant to § 10.1 – 603.4, in whole or in part, through the use of the applicant's acquisition of nutrient credits in the same tributary.

H. ... use credits certified as perpetual credits pursuant to Article 1.1:1 (§10.1 – 603.15:1 et seq.).

Transactions to Date – Point Source

POINT SOURCE TO POINT SOURCE (DEQ)

- Credits Purchased 629,587 lbs of N and 145,283 lbs of P
- Credits Used 272,824 lbs of N and 78,891 lbs of P
- 32 of 107 exchange members have purchased credits
- 3 non-exchange members have acquired credits from other non-exchange members

Status of Nonpoint Source Credits

Note: some credits not available pending Declaration of Restrictions and Financial Assurance

Projects Approved or In Process	Total Credits Released – Nitrogen/ Phosphorus	Total Credits Used or Retired - Nitrogen/ Phosphorus	Credits Available – Nitrogen/ Phosphorus	
14	3961.2/1320.2	133.11/28.9	3828.13/1285.4	

Expanding the Use of Nutrient Credits in Virginia – Overview

Chesapeake Bay TMDL Phase I Watershed Implementation Plan (WIP)

- Called for Study of Nutrient Credit Exchange to determine whether expansion would be beneficial to WIP implementation
- Key issues for review by the study committee identified in WIP
- General Assembly adopted SJR 334 which called on Secretary of Natural Resources to study expansion and report in 2012

Report Submitted January, 2012

REPORT OF THE
SECRETARY OF NATURAL RESOURCES

**Proposed Expansion of the
Use of Nutrient Credits in
Virginia Pursuant to Senate
Joint Resolution 334 (2011)**

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA



SENATE DOCUMENT NO. 6

COMMONWEALTH OF VIRGINIA
RICHMOND
2012

Nutrient Credit Act – Key Provisions

1. Credit Evaluation and Certification

- Clear Regulatory Authority granted to DCR for certifying nonpoint source credits from traditional or nontraditional practices
- DEQ continues to certify point sources and operate existing trading program under the watershed general permit
- Regulations to establish process for submittal, approval of credits
- Enforcement and penalties prescribed
- Certified Credits could be “perpetual” or “term”; code establishes uses
- Credits may be “bundled” for sale
- **Virginia Nutrient Credit Registry** created: Only certified credits on the registry; only credits on the registry may be used to meet permit requirements

Expansion Framework

2. New Credit Uses

- Wastewater: Existing law and permit requirements remain in place; new and expanding facilities may use certified credits.
- Stormwater :
 - Existing Construction offset program remains in place
 - MS4 may acquire credits for compliance from point sources or nonpoint source
 - MS4's may collectively meet allocations through voluntary partnerships
- Other Sources/purchasers:
 - Industrial Stormwater, CAFO
 - Unregulated entities

Use of compliance credits contingent on waste load allocations or load reductions assigned in permits and such use subject to approval by relevant Board or Agency

Expansion Framework

3. Baselines

Baselines will be established by regulation based on this statutory guidance:

Urban: Comply with VSMP regulations and level of effort for urban lands contained in the TMDL Phase I WIP

Agriculture: Level of Effort contained in the TMDL Phase I WIP

Land Conversion: Based on pre-conversion land use and WIP level of reductions for that land use

Other practices: Determined by relevant agency

Expansion Framework

4. Additional Elements

- Financial assurance required
- Conversion of wetland and stream banks to nutrient possible (no ability to sell both types)
- 5% of registered credits “retired” for water quality improvement
- Reporting requirements established

Local Water Quality Provisions

- Stormwater Offsets: “No applicant shall use nutrient credits....in contravention of local water quality-based limitations”
- Watershed General Permit: “This section shall not be construed to limit or otherwise affect the Board's authority to establish and enforce more stringent water quality-based effluent limitations for total nitrogen or total phosphorus in individual permits where those limitations are necessary to protect local water quality. The exchange or acquisition of credits pursuant to this article shall not affect any requirement to comply with such local water quality-based limitations.”
- Nutrient Trading Act:
 - regulations shall “provide that the option to acquire nutrient credits for compliance purposes shall not eliminate any requirement to comply with local water quality requirements.”
 - “This section shall not limit or otherwise effect... the authority to establish and enforce more stringent water quality based limitationwhere those limitations are necessary to protect local water quality.
 - “The exchange or acquisition of credits....shall not affect any requirement to comply with such local water quality-based limitations”

Summary of “Policy”

- Use of credits tied to permits with associated oversight and enforcement
- Permanent impact requires permanent credit
- Rigorous baselines (tied directly to WIP/TMDL levels of effort)
- 5% of certified credits are retired for water quality improvement
- Establishment of public/transparent credit registry: Only registered credits will be available for sale and to meet permit requirements
- Clear certification procedures to be established by regulation
- Public notice of plans for credit use and establishment of proposed credit-generating facility
- Regulatory establishment of operation and maintenance, financial assurance, and other requirements
- Agency or Regulatory Board approval of use of credits for compliance
- Statutory protections for local water quality

Current Events

- **Regulatory Process**



- **Study of trading ratio requirements (applicable only to new or expanding facilities) (DEQ)**



- **Ongoing work under current programs and authority (DEQ/DCR)**