



AgBrief

Nutrient Trading Program

Office of Resource Conservation

March 2015



Maryland farmers, wastewater treatment plants, and stormwater systems must control the amount of nutrients -- nitrogen, phosphorous, and sediment -- that run from their operations into the Chesapeake Bay watershed under the U.S. Environmental Protection Agency's Total Maximum Daily Load (TMDL) requirements. Once a farmer has met those requirements, s/he can choose to implement additional best management practices (BMPs) to reduce nutrient run off even more and generate credits for doing so. The farmer can then sell those credits to an entity that is having difficulty meeting its nutrient reduction obligations. The price of those credits being bought and sold is based on regular market factors – in other words, the price is what the market will bear and what the seller is willing to sell them for. **This buying and selling of credits is called nutrient trading, and it can provide farmers with a new source of revenue.**

The Maryland Department of Agriculture (MDA) and the Maryland Department of the Environment (MDE) are the lead agencies responsible for developing a comprehensive nutrient trading policy and administering the Maryland Nutrient Trading Program.

Maryland's Nutrient Trading Program has three major goals:

1. To offset new or increased discharges;
2. To provide economic incentives for all sources within a watershed to reduce nutrient and sediment runoff; and
3. To achieve greater environmental benefits than those that would be realized through existing regulatory and conservation programs.

Trades can take place between

1. Point sources, usually wastewater treatment plants;
2. Point and nonpoint sources, such as a wastewater treatment plant and a farming operation; or
3. Nonpoint sources, such as agriculture and urban stormwater sites or systems.



Each of these types of trades has different requirements and nuances. This AgBrief focuses on farms and agricultural operations, and how they can generate and sell credits.

Generating Credits on the Farm (a.k.a Agricultural Nonpoint Source Trading)

For a farm to generate nutrient credits that can be sold, it must first meet all its baseline requirements for nutrient reduction called for by the TMDL for the watershed segment where the farm is located. If a local TMDL is in place, the farm must meet the more stringent of the two. The farm must also be in compliance with all federal, state, and local laws, and regulations.

Once a farm meets its baseline requirements, it can install additional BMPs to generate credits. Such BMPs include converting crops, planting cover crops, reducing fertilizer applications, installing grass or forest buffers and wetlands, etc.

These practices must be built and operated according to USDA's Natural Resource Conservation Service's (NRCS) standards and specifications, then inspected and certified. Credits will be generated once the BMP is installed and



functioning as designed and approved. Each practice will be verified annually by a third-party reviewer to ensure the practice is being maintained properly.

Landowners or farmers cannot use BMPs funded by federal or state cost-share or mitigation banking programs to generate credits during the contractual lifespan of the BMP and cannot generate credits by taking and retiring farmland. **Trades cannot cause or contribute to violations of water quality standards.** All reductions must result in a net decrease in nutrient loads and be consistent with trading policy requiring the application of a 10 percent retirement ratio to every transaction.

The Nutrient Trading Calculation Tool

To participate in the agricultural nonpoint source component of the program, landowners, farmers, or aggregators will use a web-based nutrient trading calculation tool to determine baseline eligibility and credit generation potential. The tool is accessible to anyone at: www.mdnutrienttrading.com.

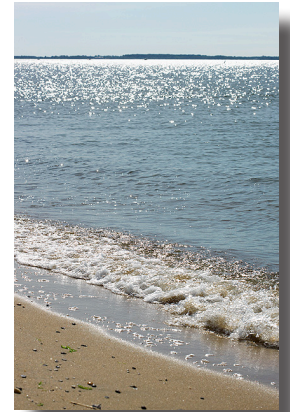
Each Soil Conservation District in Maryland has personnel who are trained to use the on-line calculation tool and can perform an on-farm assessment of credit generation capacity for farmers interested in the program.

Once credits have been certified and approved, they can be posted on the Nutrient Trading Program’s **Marketplace**, where participants can post and exchange information with potential buyers on credit availability, credits desired, quantity, and price. To enable effective management and transparency, the website includes a **Trading Registry** to catalogue all registered credits and completed trades.

Who Buys These Credits?

Possible buyers of the credits generated by farmers include wastewater treatment plants, developers, and local jurisdictions – buyers who may find it less expensive to pay producers to implement conservation practices than to install enhanced treatment technologies or pay a fee in lieu to secure an offset.

For instance, to achieve their nutrient reduction requirements under the Chesapeake Bay TMDL, wastewater treatment plants are required to reduce their discharges to state of the art technology and to maintain those levels. New wastewater dischargers and existing dischargers of any size that want to grow beyond these nutrient loading limits will have to do so through other mechanisms. One of these mechanisms could be acquiring nonpoint-source discharge credits or offsets.



How to Participate in the Nutrient Trading Program

Farmers and landowners interested in participating in Maryland’s Nutrient Trading Program should contact their local Soil Conservation District.

Resources

- **Watch a short video** about the Nutrient Trading Program here: <https://www.youtube.com/watch?v=66SPedZRKbc> (Or search for “Maryland Nutrient Trading” on YouTube)
- **See the Nutrient Trading Program** website at: www.mdnutrienttrading.com



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