



# Fact Sheet

Commonwealth of Pennsylvania • Department of Environmental Protection

## NUTRIENT TRADING

### Introduction

The Chesapeake Bay is being impaired because of the increased nutrient loads coming from the Susquehanna and Potomac watersheds. These nutrient loads are also causing many local water quality impairments. As part of the Chesapeake Bay Agreement, by 2010, Maryland, Virginia and Pennsylvania all must achieve significant nutrient reductions from point and nonpoint sources.

### Why Nutrient Trading?

Trading is a voluntary, market-driven program that helps to identify and finance the most cost-effective solutions to removing pollutants from a watershed.

The projected high and expensive levels of treatment for point sources alone will not be enough to protect the Bay or solve all local water quality impairments. Nonpoint sources are a significant source of nutrient loads and can sometimes be addressed at less cost than building treatment plants, yet landowners have limited means to reduce these loads. Under trading, some funding can be redirected from expensive point source treatment to implement Best Management Practices (BMPs) that accomplish greater reductions at less cost.

### How does Nutrient Trading work?

Nutrient Trading allows one source to meet pollutant reduction goals by acquiring nutrient reduction credits from another source in their watershed. Credits are generated when a source reduces nutrient loadings to a greater extent than is required.

### Initial Nutrient Trading Program

The Department of Environmental Protection (DEP), in cooperation with many county conservation districts, is implementing an initial nutrient trading program, for two years, to make nutrient reduction credits available to the market.

The focus of this initial program is farmers in the Chesapeake Bay Basin who are meeting basic water quality protection requirements and are willing to implement additional BMPs that reduce nitrogen loadings.

During this initial program, DEP will also accept and review credit-generating proposals. Once a proposal is approved, those nutrient reduction credits are available for sale on the market by the entity that submitted the proposal.

### Who can Trade?

Existing and potential point source dischargers and nonpoint sources will be able to buy and sell credits under this initial program.

### What can be Traded?

Total nitrogen and total phosphorus reduction credits may be traded. Trading credits will be expressed in units of pounds per year.

### What can be done to generate a credit?

Technology and other improvements to wastewater treatment plants or other point sources may generate credits. Point source dischargers should be able to document that they are providing treatment beyond their required limits through analysis and discharge monitoring reports.

A nonpoint source should first ensure that they are meeting baseline compliance and second they are meeting minimum requirements that are referred to as 'threshold requirements'. The installation of BMPs, which are above these requirements, can generate credits for a nonpoint source.

### What BMPs will be accepted?

BMPs installed after January 2005 can be accepted. Accepted BMPs include buffers, fencing, cover crops, no-till, advanced nutrient management, and incineration. A source could also choose to implement any of the 24 BMPs established by the Chesapeake Bay Model that have approved efficiencies or use other

documents to show that they are reducing nutrients coming off of their land (such as a nutrient management budget sheet or monitoring to show the reductions).

### **Can a nonpoint source get paid to implement additional BMPs?**

During the initial two-year program, a nonpoint source can get paid for the implementation of BMPs if they contract with a participating conservation district where a BMP is or will be implemented. Upon agreement, that conservation district will submit the contract details to DEP who will register the credits to the exchange. Once the registered credits are sold, the nonpoint source will get paid for those credits.

### **How can County Conservation Districts help?**

The county conservation districts, working with the department during the initial nutrient trading

program, will have a checklist for baseline requirements. They can also calculate nutrient load reductions for BMPs to estimate the value of credits and can explain the terms for selling credits.

### **Where can more information on Nutrient Trading be found?**

You can contact your local county conservation district for additional information. DEP staff in the Water Planning Office, in consultation with the Department's Regional Offices, can also help provide answers, and can be contacted at (717) 772-4785.

For more information, visit DEP's Web site at [www.depweb.state.pa.us](http://www.depweb.state.pa.us), Keyword: "Nutrient Trading."