

Financing Agricultural Conservation Easements with Nutrient Credit Trading

Nutrient credit trading is a cost-effective way of reducing nutrient pollution in the Chesapeake Bay watershed. By 2010, states in the watershed must meet U.S. EPA requirements for nutrient reduction, and a nutrient credit trading program can be used as a way to reduce nitrogen flows into streams and rivers. Rather than traditional bricks-and-mortar solutions, developers and publicly owned treatment works (POTWs) can meet reduced nutrient flow requirements by purchasing nutrient credits from farmers instituting “best management practices” (BMPs). Evergreen is working with county farmland preservation programs and non-profits (NP) to:

- **use cash and seller financing to purchase agricultural conservation easements with imbedded structural BMPs;**
- **sell the resulting nutrient credits to POTW operators; and**
- **use annual proceeds from the sale of the nutrient credits to fund the acquisition of the easements, thus preserving more farmland.**

This outline describes how a county farmland preservation program, working with a non-profit land conservation organization (NP), can use cash and 15-year installment purchase agreements (IPAs) to purchase agricultural conservation easements with imbedded structural BMPs. The county would sell nutrient credits created by the BMPs to POTW operators through Red Barn Trading Company and Evergreen Conservation Finance (Red Barn/Evergreen). The county and/or NP would pay interest on and annual principal of the IPAs from annual nutrient credit payments by POTW operators, retaining a portion for stewardship and enforcement costs.

Nutrient Credits

POTW operators are being required by the Pennsylvania Department of Environmental Protection (DEP) to upgrade their facilities, and limit facility expansion, in order to reduce nutrient flows into the Chesapeake Bay. DEP has encouraged POTW operators to purchase nutrient credits from entities such as farms as a lower cost alternative to construction. Despite the lower annual costs, POTW operators have been reluctant to buy credits because of uncertainty regarding long-term future availability and price.

Imbedding structural BMPs in agricultural conservation easements provides an alternative for nutrient credits that is both enforceable and attractive to landowners. Using IPAs and upfront cash, a county or NP would buy easements on farms that mandated maintenance of structural BMPs. The county or NP would offer the nutrient credits generated by imbedded BMPs to POTW operators through Red Barn/Evergreen. Red Barn/Evergreen would also retain a right of first refusal to buy other kinds of environmental credits that might be sold in the future (credits for greenhouse gases, wetland mitigation credits, water quality credits as in Carroll County, Maryland).

Purchase Price

The county or NP would pay fair market value for an easement, with cash paid at closing sufficient to cover the cost of the structural BMPs and with the balance paid in a 15-year IPA through a conduit such as the New Garden General Authority. Annual principal payments and semi-annual interest on the IPA would be paid from the sale of nutrient credits. Unlike in a typical nutrient credit sale, interest payments to the seller over the 15 years would be exempt from federal and Pennsylvania state income taxes, just like interest on a municipal bond. Principal payments would be subject to pro rata capital gains tax on the sale of the easement. If a landowner sold his/her deed-restricted property before the end of the IPA's term, he/she would assign the principal and interest payments to the new buyer so that there was an incentive to keep the BMPs in place. The purchase price for the land would reflect this additional income stream.

Marketing of Nutrient Credits

As the county was acquiring easements with imbedded BMPs, Red Barn/Evergreen would meet with regional investment banking firms that underwrite municipal bonds for POTW capital projects in Pennsylvania. Red Barn/Evergreen would discuss the sale of nutrient credits to the underwriters' POTW clients, demonstrating the cost-effectiveness of credits in lieu of bonds for sewage treatment plant facility upgrades and expansions, particularly after new regulatory limits are imposed by DEP in 2010. Red Barn/Evergreen and the municipal bond underwriters could be compensated for nutrient credits sold by a commission on the present value of the credit payments agreed to by POTW operator. Red Barn/Evergreen would use the county farmland preservation program's track record in acquiring and stewardship of agricultural conservation easements and Red Barn's experience as the leading nutrient-credit aggregator in the Commonwealth to assure that nutrient credits would be delivered annually. The price of the nutrient credits to the POTW operators would be negotiable based on the projected cost of building and operating the upgrade/expansion, but would be designed to be less expensive to the operator even after commissions and payments to the county or NP and landowners implementing BMPs.

Financial Model and Additional Issues

Evergreen has analyzed the revenues to a landowner for the sale of an agricultural conservation easement with imbedded structural BMPs and resulting nutrient credits, and the expenses to a POTW operator for acquiring nutrient credits as an alternative to a facility upgrade. The analysis indicates that a farmland preservation program's purchases of easements with imbedded structural BMPs could be funded by annual payments from POTW operators at a significantly lower cost to sewer system users than the POTW selling bonds to build and then subsequently operating a facility upgrade.

Contact Evergreen Conservation Finance for information on how a nutrient credit trading program could provide counties and non-profits with significant revenues to buy agricultural conservation easements and steward/enforce easements:

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