

## **Conservation Innovation Grants- Water Quality Credit Trading Awardees: Fiscal 2012**

Below is a list of the fiscal 2012 Conservation Innovation Grants (CIG) Water Quality Credit Trading awardees. The information includes the project location, the amount of funding, the project title and a brief description.

### **Chesapeake Bay Watershed Projects**

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#### **Alliance for the Chesapeake Bay, Inc (PA, MD, VA) \$437,756**

##### *Facilitating Forest-based Offsets in Water Quality Trading*

This project proposes to harmonize state and local agency forest mitigation and trading requirements to ease adoption by agricultural producers, aggregators and credit buyers like developers. The project will test and refine market infrastructure, so it is immediately useful for landowners, public programs and credit buyers. It will also complete 8-10 forest-based practice pilot projects with Environmental Quality Incentives Program-eligible producers in southern Maryland to test forest protocols and market infrastructure. The project will also assist local governments in meeting the nutrient and sediment goals in their Watershed Implementation Plans by simplifying the implementation of forest based offsets and credits and easing their workload by establishing the Chesapeake Forests Offset Bank.

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#### **Borough of Chambersburg (PA) \$112,050**

##### *Local Utilization of Agricultural Credits Program*

The purpose of the program is to provide credit aggregation, inter-basin trading and baseline and threshold compliance barrier solutions relating to the Pennsylvania Nutrient Trading Program by creating an aggregation program for credits generated by cover crop and conservation tillage best management practices (BMPs) and with education and outreach targeted to the Commonwealth's Plain Sect agricultural operators. The Program will develop and implement a three-year local program to aggregate credits generated through agricultural BMPs, cover crop and no-till/conservation tillage practices on farms in three counties covering two watersheds.

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#### **Chesapeake Bay Foundation (VA, PA) \$700,880**

##### *Operationalizing Water Quality Trading in the Chesapeake Bay*

This project proposes to conduct outreach to roughly 200 Environmental Quality Incentives Program-eligible farmers in Virginia and Pennsylvania to determine eligibility for participation in trading and Agricultural Certainty programs, if applicable. The project will assess the potential for the supply of credits from agricultural producers using in-place state policies for establishing the agricultural baseline. It will also compare policies for setting the trading baseline in Pennsylvania and Virginia and the practice-based resource management plan approach in Virginia with performance-based approaches using the multi-state trading tool. The results can be used to inform state policies on these issues, to link these policies with compliance with the total maximum daily load requirements, and to facilitate multi-state trading opportunities. The project will seek feedback from producers as

and state policymakers on the multi-state trading tool to help improve the tool and add features that are consistent with ongoing and future developments in state trading policies and user needs.

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**Commonwealth of Virginia, Department of Conservation & Recreation (VA) \$600,000**

*Building the Infrastructure for Expanded Use of Nutrient Credits in Virginia*

This project proposes to establish the administrative framework and infrastructure for an expanded use of nutrient credits in Virginia.

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**Maryland Department of Agriculture (MD) \$500,000**

*Fostering a Sustainable Marketplace for Agricultural Water Quality Credits and Offsets for Intrastate and Interstate Trading*

This project proposes to conduct an analysis of credit demand. The funds will also provide tools and guidelines to assist county planning and permitting entities to work with developers in assessing offset requirements.

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**National Projects**

**American Farmland Trust (IL, IN, KY, OH, PA, WV) \$221,364**

*Coupling Precision Agriculture with Water Quality Credit Trading*

This project proposes to develop, test and refine the first-ever quantification protocol for crediting precision agriculture variable rate technology practices in water quality credit trading programs. The project will use data from universities, John Deere and Trimble to compare crop uptake budgets with the amount of nutrients applied and use modeling at the farm-field level and some edge-of-field monitors to account for the fate of excess nutrients. The resulting quantification protocol will be tested and refined with farmers during one-and-one-half growing seasons and also vetted with state permitting agencies in Ohio, Indiana and Kentucky.

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**Electric Power Research Institute, Inc (OH, KY, IN) \$1,000,000**

*A Credit Trading Registry for the Ohio River Basin Water Quality Trading Project*

The project objectives are to provide proven, innovative, financial grade market infrastructure and services configured for the Ohio River Basin and its stakeholders. The infrastructure required to establish an effective water market trading program will be tailored to the requirements of the relevant market programs and its jurisdictions. The infrastructure component in the Ohio River basin will represent a forward move in the evolution in each state's water quality credit tracking and trading capabilities.

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**Moody County Conservation District (SD, MN) \$403,000**

*Central Big Sioux River Water Quality Trading Program Development*

The purpose of the project is to develop a water-quality trading program for the Central Big Sioux River Watershed (CBSRW) project area that would facilitate implementation of best management practices for sediment and bacteria. The methods developed will then be used to develop water-quality trading programs in other parts of the Big Sioux River Basin and other river basins throughout the region.

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**North Carolina State University (MN, IA, IL, IN, OH, NC) \$169,792**

*Development, Evaluation, and Demonstration of Simple Tools for Nitrogen Credit Trading System Involving Drainage Water Management*

The overall goal of this project is to develop, evaluate and demonstrate the use of simple tools to quantify the impacts of drainage water management on the reduction of nitrogen losses from subsurface drained cropland. These tools are essential for any water quality credit trading system that involves the use of drainage water management. The success of this system hinges upon a credible estimate of the nitrogen credit from this best management practice.

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**Sotoyome Resource Conservation District (CA) \$567,777**

*Developing a Water Quality Credit Trading Framework for California Agriculture in a Market with Demand*

This project proposes to establish crediting rates using the Nutrient Tracking Tool (NTT) and other accepted credit calculation methods (if not currently available in NTT) and integrate other credit calculators used into NTT where possible and appropriate. The project will also define administrative, regulatory and eligibility requirements of credit sellers and establish and refine infrastructure for certification and monitoring for traded credits. It will also assess future supply and demand for the Laguna water quality credit trading market and verify and track certified nutrient load reductions using project-established protocols and a simple, on-line marketplace registry developed for and maintained by the Sotoyome Resource Conservation District. These actions will optimize ease of market participation for sellers and future buyers.

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**Vermont Agency of Agriculture, Food & Markets (VT) \$781,226**

*The Lake Champlain Phosphorous Trading Initiative*

The project goals are to establish and implement an innovative, flexible, cost-effective water quality trading initiative to achieve net reductions in phosphorus loadings into Lake Champlain. The project will involve and improve collaboration among point sources (publicly owned waste water treatment facilities and municipalities) and nonpoint sources (farming sector) and identify cost-effective solutions for achieving phosphorus load reductions. It will also provide incentives to achieve phosphorus reductions from point sources and non-point sources and spur producers to implement best management practices beyond the regulatory requirements by using a nutrient trading model. The project will also achieve other benefits, including enhanced ecosystem function, improved soil management at the farm, improved economic viability of the farming sector and greater food security.

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**Willamette Partnership (OR, WA, ID) \$1,589,751**

*Multi-State Agency Guidance for Water Quality Trading (Joint Regional Water Quality Trading Agreement): State Agencies Building Shared, Regional Trading Policies for the Pacific Northwest and Beyond*

The primary objective of this effort is to secure multi-state consensus and Environmental Protection Agency support for a Joint Regional Agreement that will include: multi-state agency guidance; general restoration project and best management practices quality standards; credit tracking procedures; and accounting methods for “credits” that can be used in water quality trading for nutrients (nitrogen and phosphorus) and temperature in Oregon, Washington and Idaho. All three of these states and Environmental Protection Agency have some form of guidance or framework in place to inform water quality trading, providing a strong foundation from which to develop a Joint Regional Agreement.