

OVERVIEW:

National Network on Water Quality Trading

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Why a National Network on Water Quality Trading?

Water quality trading (WQT) programs continue to emerge across the country as permittees seek cost-effective compliance alternatives and interested stakeholders seek to accelerate the pace and scale of water quality improvements to meet the goals of the Clean Water Act. WQT programs are still developing, but a considerable base of experience has been assembled on how to build trading programs that are effective and gain support from multiple stakeholders. Successful WQT programs maintain transparency in their methods, ensure real and verifiable pollutant reductions, track and verify projects and credits throughout their lifecycle, rely on sound science, and establish clear lines of responsibility.

Establishing a national community of WQT practitioners to articulate shared principles, core trading program design elements, recommendations for implementing and operating trading programs, and lessons learned from experience, will improve consistency and integrity across WQT programs.¹ The information will make it easier to establish WQT programs, provide greater transparency about what WQT programs hope to accomplish, and help WQT programs meet their clean water goals.

Purpose:

The purpose of the National Network (“Network”) is to establish a national dialogue on how water quality trading can best contribute to clean water goals. That includes providing options and recommendations to improve consistency, innovation, and integrity in water quality trading.

¹ The Network has chosen to focus first on point-nonpoint trades. The Network will discuss trades with urban stormwater (MS4, industrial, and construction) and NPDES-permitted wastewater facilities. Trades include both offsets for future growth and crediting against current discharges. Future effort may turn to point-point or other forms of trading.

What does the Network do?

The Network is structured as a facilitated dialogue between those stakeholders who are central to making WQT programs work (agriculture, permitted point sources, state water quality agencies, environmental groups, and practitioners). The Network dialogue was designed to accomplish the following:

- Articulate shared principles for guiding the development and operation of WQT programs;
- Define a range of reasonable options for each program element needed to support a successful WQT program; and
- Capture the debate and diversity of viewpoints around each program element to provide new and evolving programs with the pros and cons associated with different choices they might face.

Ultimately, approval of trading programs and their elements is up to the stakeholders engaged in those programs and the relevant state and federal regulatory agencies. The Network provides insights and support tools to aid in the development of successful WQT programs.

Who is currently involved in and coordinating the Network?

The Network’s strength is derived in part from its diversity of experience and viewpoints. Thus, all Network participants are free to maintain their own individual positions on any issues or documents discussed or published by the Network as a whole. The following organizations are currently contributing as Network participants:

Network Participants	
American Farmland Trust	National Association of Clean Water Agencies
Association of Clean Water Administrators	National Association of Conservation Districts
Chesapeake Bay Foundation	National Milk Producers Federation
Electric Power Research Institute	The Freshwater Trust
Environmental Defense Fund	The Ohio Farm Bureau Federation
Kieser & Associates, LLC	Troutman Sanders
Maryland Department of Agriculture	US Water Alliance
Mississippi River Water Quality Collaborative	
Technical Advisor	
US Department of Agriculture	
Coordinators	
Willamette Partnership	World Resources Institute

Willamette Partnership and World Resources Institute act as the Network coordinators by organizing meetings, facilitating discussions, and documenting options and best practices. The US Department of Agriculture (USDA) and US Environmental Protection Agency (EPA) serve as technical advisors to the Network.

Outcomes from the National Network

The Network identified a need to consolidate information on WQT programs into a form that new and evolving programs could leverage to reduce start-up costs and inform ongoing management decisions. Over the course of 18 months, participants engaged in a series of dialogues to identify key trading program components and distill experiences from existing programs into a range of options for designing, operating, and improving WQT programs over time. The results of this dialogue include published two documents, released June 2015:

- ***Building a Water Quality Trading Program: Options & Considerations***: This robust reference walks through guiding principles and the 11 key elements considered in trading program design, with examples, options, and clear pros and cons to help stakeholders evaluate if WQT is the right fit for a particular watershed and meet the scientific, social, and ecological realities of their local watershed. It captures several decades of experience in trading programs from the standpoint of broad stakeholder groups and reflects two years of conversations, workshops, surveys and line-for-line feedback from 18 participating organizations that make up the National Network.²
- **Executive Summary**: A concise summary of *Building a Water Quality Trading Program*, intended for decision makers and designed to encourage greater feedback and discussion from broader stakeholder groups.

² The contributors to the National Network engaged in an extensive dialogue to develop this publication as a comprehensive, contextual, balanced, and robust collection of information on different, representative water quality trading programs. Practitioners from new and evolving water quality trading programs may look to this document as an important source of information as they build and update their trading programs.

This document does not, however, represent a consensus opinion, endorsement, or particular recommendation from any one National Network contributor. It covers the broad range of topics related to water quality trading to assist local stakeholders to develop and implement trading programs that meet local needs and conditions. It does not create any binding requirements or standards of practice. Ultimately, stakeholders, state regulators, and/or U.S. EPA will clarify those requirements that apply to any particular trading programs or trading program participants.

How is the Network funded?

The National Network is grateful for seed funding provided by the Electric Power Research Institute (EPRI) and USDA that covers the gathering of options and initial dialogue between the diverse network participant stakeholders. Additional funders are welcome and would enable a broader engagement of stakeholders in conversation about what WQT trading programs might look like and the range of options that not only fosters consistency and integrity, but also embraces flexibility and innovation.

For more information, please contact the Network coordinators:

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Building a Water Quality Trading Program

Summary of Contents

The National Network publication, *Building a Water Quality Trading: Options & Considerations*, is organized around a set of common water quality trading program elements. The contents of these sections include:

➤ Introduction, Vision, & Guiding Principles

This Section introduces the National Network on Water Quality Trading, provides a common vision and goals of water quality trading programs, and lays out a set of guiding principles to anchor water quality trading program decisions.

➤ Section 1: Policy & Regulatory Instruments to Support Trading

Water quality trading programs linked to Clean Water Act compliance, need to be incorporated into relevant federal and state regulatory instruments. Those regulatory instruments, often a National Pollution Discharge Elimination System (NPDES) permit, need to be clear and enforceable and provide opportunities for the public to review and comment on the details of a trading program.

➤ Section 2: Trading Basics: Who, Where, What, & How

This section describes the basic elements that must be identified in a trading program to define who may participate, where trades can occur, what can be traded, and the actions that can generate credits (how).

➤ Section 3: Trading Eligibility

This Section explains the basic eligibility requirements that credit Buyers and credit Sellers need to meet, and discusses how programs can set baseline levels of pollution reduction and other ways to demonstrate additional water quality benefit that states and water quality trading programs must address.

➤ Section 4: Quantifying Water Quality Benefits

There are several approaches and several scales for quantifying water quality benefits. This Section explores the three main approaches to quantifying water quality benefits: modeling, pre-determined rates, and direct monitoring. Quantifying water quality at the field, reach, and watershed scales is also discussed.

➤ Section 5: Managing Risk & Uncertainty

Managing risk and uncertainty is an important part of many trading program design decisions. This Section focuses on one of the most common risk management tools—trading ratios, but also discusses other ways to manage risk and incorporate risk management throughout a trading program.

➤ **Section 6: Credit Characteristics**

This Section discusses the essential characteristics of a credit in a water quality trading program, including how long a credit is good for (credit life); the property rights, accounting, and tax treatment of credits; and other financial considerations.

➤ **Section 7: Project Implementation & Assurance**

Trading participants need to be confident that when implemented, credit-generating projects deliver their anticipated water quality benefits. This Section describes mechanisms to screen projects for eligibility (project site screening), provide design, construction, and maintenance quality standards (BMP guidelines), articulate project design and management plans, and document pre and post project site conditions. This Section also provides options for ensuring a project is maintained (project stewardship) and protected (legal protection) for the life of the project.

➤ **Section 8: Project Review, Certification, & Tracking**

Trading programs need a way to confirm projects are performing as promised. This Section discusses how a program can confirm a credit-generating project is implemented, credits have been calculated accurately, and performance expectations are being met. This Section also discusses the process for certifying, issuing, and tracking credits from their generation through credit sales and usage.

➤ **Section 9: Compliance & Enforcement**

Since many water quality trading programs are used as part of compliance with the Clean Water Act, this Section discusses options for ensuring compliance and enforcing obligations in a water quality trading program.

➤ **Section 10: Program Improvement & Tracking**

This Section discusses processes for improving the ability of a given trading program to meet its goals in an effective and efficient manner. New science and experience on the ground can help programs improve quickly, but buyers and sellers need predictable processes and timing for program improvement. This Section includes options for improving quantification methods, approving new BMPs, and evaluating overall program effectiveness.

➤ **Section 11: Roles, Responsibilities, Transaction Models, & Public Participation**

Trading programs provide an opportunity for regulatory agencies, permittees, and third parties to work together in administering different aspects of a trading program. This Section discusses roles, responsibilities, and skill sets needed to run different parts of a water quality trading program. The Section also explores different transaction models and some guidelines for involving the public in trading program design and operations.