

## NACWA Perspectives on Water Quality Trading and the National Network's *Options and Considerations* Guide

NACWA was an active participant in the National Network dialogue on water quality trading. This document shares some perspectives on how the clean water community may find water quality trading and the new *Options and Considerations* Guide helpful.

Since passage of the Clean Water Act (CWA) in 1972, the United States has made significant progress in cleaning its rivers, lakes, and estuaries. Investment in wastewater treatment plants to meet the CWA's requirements and controls on other point sources of pollution have been responsible for much of this improvement. Yet there is still a long way to go toward achieving the goals of the Act. More than half of the country's waterbodies are not meeting the water quality standards established for them under the CWA to provide clean drinking water, recreation, fish and wildlife habitat, and other designated uses. This has turned the Nation's attention to alternative tools and approaches to address the remaining water quality challenges. Conservation practices with land managers and restoration of natural systems are starting to make progress in many places. Water quality trading (WQT) is a tool that is increasingly being used to provide clean water utilities and other CWA-regulated sources with a flexible compliance alternative and a way to potentially achieve broader watershed improvements at lower cost.

### What is Water Quality Trading?

Trading is an approach to meeting water quality goals that provides one source of a pollutant an alternative to installing onsite technology or practices by working with other sources offsite to generate equal or greater pollutant reductions instead. When designed well and combined with other efforts in the watershed, WQT can help achieve water quality goals in a way that is beneficial for clean water utilities, landowners, communities, and the environment.

### How Does it Work?

A *buyer* (e.g., a pollution source such as a clean water utility) purchases water quality improvements, or credits, from a *seller* (e.g., a farmer or landowner) that reduces pollutants beyond what they would otherwise be required to do. In essence, sources with high costs for reducing pollution purchase equal or greater pollution reductions from sources with lower costs. The cost difference provides the economic incentive for trading to occur. For example, farmers implement conservation practices like planting cover crops during the winter that reduce nutrients leaving their field generating a credit. A permitted source such as a clean water utility buys the resulting credits to meet its regulatory requirement in lieu of installing treatment technology to reduce its discharge of nutrients. The transaction reimburses the farmers for their costs while improving the overall health of the river, all for a smaller investment of resources than would have been required had the clean water utility chosen to install technology.

## Who Plays What Roles in a Trading Program?

One of the most challenging but ultimately rewarding aspects of WQT is that many stakeholders must get involved during program design and implementation to make it successful. Key actors include: *Buyers/Permittees*—usually regulated point sources (e.g., municipal and industrial wastewater utilities and facilities) and corporations involved in achieving sustainability goals; *Sellers*—usually farmers, ranchers or landowners who can generate credits by implementing improvements on current land or facilities; *Aggregators*—sellers that pool a number of credits together from multiple projects by landowners or farmers; *Permitting authorities/Regulators*—under the CWA water quality agencies set water quality standards and issue permits; *Third Parties*—a variety of actors playing roles such as developing programs, verification, and monitoring.

## What Are the Potential Benefits of WQT?

The core benefit of WQT is achieving improvements in water quality at a lower cost than would have been incurred through a more traditional regulatory compliance approach, which for clean water utilities would likely involve building expensive treatment technology. In addition, the types of practices farmers, ranchers, and landowners implement to generate credits can often have ancillary benefits, such as habitat improvement, that far exceed the monetary value of the credit. For utilities serving growing cities in particular, trading can also provide a more flexible way to anticipate and meet the demand for growth, where credits can be used to offset increased discharges that may exceed current permit limits.

## WHY SHOULD CLEAN WATER UTILITIES CARE?

WQT is a voluntary approach that can help a clean water utility meet its compliance obligations often at lower cost when compared to traditional treatment approaches. Trading can also provide greater watershed-scale water quality benefits than might be realized by installing technology at the treatment plant. Trading is also seen as an important tool to ensure meaningful engagement from sources of pollution in the watershed that have historically not been regulated. Innovative approaches like trading can leverage limited resources, improve water quality, and help accelerate progress toward achieving the goals of the CWA.

## What Role do Clean Water Utilities Play?

Utilities are often the purchasers of credits, but in some cases, as with trading programs among clean water utilities, a utility can also generate credits. As a buyer, a clean water utility must consider how engaged they will be in finding, constructing, and/or overseeing credit generation projects. There are a number of other considerations a clean water utility must evaluate, but ultimately, the success of WQT programs hinge on the willingness of buyers like clean water utilities to engage and purchase credits.

## Challenges:

Trading programs must strike a balance between providing certain expectations on what counts as a credit and sufficient flexibility to meet water quality requirements in a way that makes sense for a given utility. Some of the critical issues for utilities include:

- Securing assurances from permitting authorities that credits will count toward meeting CWA obligations;
- Evaluating the number of credits that will be needed and when;
- Defining permit conditions that specify pollutants, trading areas, and timing of credits that match with discharge limits; and

Helping stakeholders understand what liability the point source permittee holds, and how that translates into expectations for project review and tracking.

### Getting Involved:

Ultimately, clean water utilities interested in water quality trading will need to embrace the collaborative nature of the process and build relationships with buyers, sellers, regulatory agency officials and other stakeholders. This will help to ensure that all involved parties can have candid conversations about the long-term goals of the program.

## NATIONAL NETWORK AND THE OPTIONS & CONSIDERATIONS GUIDE

The National Network on Water Quality Trading (Network) was established in 2013 to discuss WQT challenges and develop information resources for those interested in building trading programs to meet clean water goals. Much like the collaboration that is required in establishing and implementing a water quality trading program, the Network's 18 initial participants represent a diversity of agricultural operations, wastewater utilities, environmental groups, regulatory agencies, and practitioners delivering trading programs. NACWA remains an active participant in the National Network.

Since 2013, the Network has focused on identifying common trading issues and the options, considerations, and examples important to building a trading program. The Network's dialogue has been captured in the publication, *Building a Water Quality Trading Program: Options and Considerations*<sup>1</sup>. The document focuses on trading programs where permitted clean water or stormwater utilities

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### <sup>1</sup> DISCLAIMER:

The contributors to the National Network engaged in an extensive dialogue to develop this document, *Building a Water Quality Trading Program*. National Network contributors believe that it represents 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 represent a consensus opinion, endorsement, or particular recommendation from any one National Network contributor. It seeks to cover 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. This document 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.

purchase water quality credits from nonpoint sources (often agriculture) and provides essential tools for new and evolving WQT programs.

While a WQT program should be designed to be consistent with the 2003 U.S. EPA Trading Policy and the CWA, the options and considerations document provides additional guiding principles for successful programs. The Network has identified 11 elements common to many trading programs that should at least be considered when designing and implementing WQT programs. For each of these elements, there is no “one size fits all solution.” Instead, there are considerations that make different options more or less viable under different conditions. In-depth presentation and discussion of these key elements along with references to existing WQT programs makes up the bulk of the *Building a Water Quality Trading Program* publication. National Network participants immediately recognized that trading programs are built to fit the unique ecological, social, and other conditions of a watershed, and emphasized the importance of sensitivity to local needs. *Building a Water Quality Trading Program* therefore does not provide explicit recommendations. It provides options and considerations to help facilitate easier and more consistent decision-making across a range of new and evolving trading programs.

Interest is growing in trading programs across the nation. Several states are contemplating new statewide trading statutes or rules, and more wastewater utilities are using trading approaches. However, not everyone is persuaded that trading programs are being designed in ways that are consistent with the CWA and other environmental goals. Further growth in trading, and its success in improving water quality, depends on:

- Clear and consistent documentation of assumptions and decisions underlying trading program development and operations;
- Serious consideration of watershed science and goals in guiding the practical workings of trading programs;
- Incorporation of WQT into a suite of water quality protection goals and tools; and
- Regular, informative communications to the public to build confidence that progress is being made toward clean water goals in a timely way.

New and emerging trading programs can use the *Building a Water Quality Trading Program* document to help meet some of these future challenges.

## THE NATIONAL NETWORK DOCUMENT AT A GLANCE - CRITICAL ISSUES FOR CLEAN WATER UTILITIES

The National Network document focuses on the work needed *after* a trading program has been found feasible—there is a need to reduce pollutant discharges, there are enough possible credit sellers, and there is enough agency and stakeholder support for trading to move forward.

The Building a Water Quality Trading Program document provides extensive information on a range of issues of particular interest to clean water utilities. Below is just a sample of the information

contained in the document that will help utilities explore the balance between regulatory certainty and flexibility to prioritize investments where it makes the most economic and ecological sense.

## How Does Trading Get Built into Permit Requirements?

Section 1 of the National Network document discusses how trading gets built into regulatory documents (*see* Section 1.1.1.), as well as the elements that need to be considered for inclusion in a permit-specific trading plan (*see* Section 1.3.1.).

### What Are the Options:

Section 1.3. discusses some of the trading elements to consider including in a permit, how to reference a watershed trading framework that might apply to multiple utilities, and which permit sections to include different information on trading.

### What the Network Discussed:

Much of the Network's debate over building trading into a state's regulatory program centered on providing the same level of consistency with the CWA as other treatment options. (*see* Section 1.1.2.)

### What Utilities Should Look For or Consider:

Utilities will want to ensure some flexibility in their permits to make minor adjustments to their trading program requirements. At the same time, there needs to be enough information included in the permit or an associated trading framework to provide regulatory agencies, environmental groups, and others with the confidence they know how trading will work and that there are provisions to ensure credits are real. This balance of detail and flexibility will be important for utilities to consider and help other stakeholders understand.

## Who is Eligible to Participate?

Ideally, trading programs should seek to include as many utilities that – and landowners who – can generate credits as possible to ensure a robust demand and supply of credits. Section 3 describes the minimum pollution reduction and other eligibility requirements buyers (*see* Section 3.1.) and sellers (*see* Section 3.2.) need to meet before participating in trading.

### What Are the Options:

Clean water utilities interested in buying credits need to meet technology-based effluent limits (TBELs) before purchasing credits, cannot create localized impacts, and need to be consistent with antibacksliding and antidegradation requirements (*see* Sections 3.1.1-3.1.5). Nonpoint source sellers will need to meet their baseline requirements (*see* Section 3.2.1.) prior to generating credits, which can affect the price or availability of credits for utilities.

### What the Network Discussed:

Most of the debate centered on nonpoint source baselines, and how to derive those baseline levels in situations with or without a TMDL. Figure 3.2.1. provides a decision tree for identifying some of the options around setting nonpoint source baselines.

#### What Utilities Should Look For or Consider:

Eligibility criteria are important go-no-go conditions that are important to understand to see whether trading is appropriate. Nonpoint source baseline levels, if set too high, can increase credit prices or reduce the supply of credits. If set too low, and a utility's waste load allocation is dependent on nonpoint source load allocations being met, there could be risk of water quality goals not being met. Utilities should think about the timing of when these baselines levels need to be met, and how that timing matches with the credit needs for the utility.

#### How Do I Know Credits Are Real?

Clean water utilities carry most of the liability to ensure the projects generating their credits are installed and functioning as planned. At the end of the day, they must ensure that their permit requirements are being met. This means there must be a way to review how credits are quantified and how projects are implemented and maintained.

#### What Are the Options and What the Network Discussed:

Section 8 discussed a series of options around project review. There are options for what gets reviewed, at what frequency, and what happens if a project is not meeting performance expectations (*see* Sections 8.1 and 8.2). Options are also included for how to track and make information available on projects (*see* Sections 8.4. and 8.5.). Section 11 discusses considerations for whether permittees, agencies, or third parties perform one or more of the functions associated with project review and tracking.

#### What Utilities Should Look For or Consider:

Clean water utilities carry the most liability, and have every incentive to closely review and track the projects they use for compliance. Utilities need to consider the information they need and that other stakeholders will want in order to assess trading program performance. Depending on the frequency and intensity of project review, costs can be a factor.

#### How is Compliance Determined?

In many cases, compliance determinations may not be that different between trading and other treatment alternatives, but utilities will want to know how to stay in compliance.

#### What Are the Options:

Section 9 discusses options around compliance, and whether a regulatory agency may need a different enforcement process for trading.

#### What the Network Discussed:

Network participants were pretty consistent in what constituted permit compliance. They felt that existing compliance and enforcement processes in states made sense to apply to trading.

#### What Utilities Should Look For or Consider:

Utilities want to be clear about what constitutes a permit violation. There is a lot of detail needed to support trading, and stakeholder groups may want much of the information to go out for public review and be incorporated into the permit. There also needs to be a good

discussion about when additional detail put into a permit could overly burden the adaptive management of a program (*see* Section 10).

### What Roles Should a Utility Play in Trading?

In trading programs across the country, utility staff have built trading programs, implemented credit generating projects themselves, conducted project review and reporting, and adaptively managed their programs. Each role requires different skills and capacities.

#### What Are the Options:

Section 11 describes options for when it may make sense for permittees, agency staff, or third parties to perform certain roles in a trading program.

#### What the Network Discussed:

For the most part, Network participants thought permittees, agencies, or third parties could fulfill different roles. Particularly for project review and tracking, some groups wanted to ensure some protections against possible conflicts of interest between whoever is implementing projects and whoever is confirming those projects are functioning as proposed.

#### What Utilities Should Look For or Consider:

Some utilities may want to oversee most aspects of a trading program. Utilities retain most of the liability, so extensive involvement can make sense. Alternatively, many utility staff do not have the expertise or capacity to work with diverse agriculture operations and the many types of best management practices (BMPs). Utility staff should also spend time determining what partners they need to implement a successful trading program.