



Water Quality Trading for Working Lands

Resources for those that support
agricultural landscapes and
conservation

NATIONAL NETWORK ON WATER QUALITY TRADING

A REPORT FROM THE SPRING 2017 DIALOGUE

Table of Contents

Executive Summary.....	1
Agenda & Objectives.....	2
Dialogue Summary and Takeaways	5
Next Steps: Continuing the Conversation.....	8
Appendix I: Spring 2017 Dialogue Participants.....	9
Appendix II: Conveners Bios	10

Executive Summary

Water quality trading (WQT) is a market-based approach that allows permitted point sources to work with others offsite such as agricultural landowners to achieve clean water goals. While WQT can provide a new source of revenue for working lands there are a number of program complexities that may deter agricultural landowners from participating. *Trusted Intermediaries* – local entities such as conservation districts, cooperative extension agents, private businesses, crop advisors, and other third party practitioners – can be valuable participants in implementing water quality trading by bridging the trust gap between landowners and programs. Trusted intermediaries may be challenged to participate in WQT however, as it is still a relatively nascent and evolving field.

The focus of the Spring 2017 Dialogue was on how trading program developers and administrators can support trusted intermediaries in their role of supporting agricultural landowner engagement in water quality trading. The objectives of the Dialogue were to identify the varying roles and capacity that trusted intermediaries hold in WQT and identifying processes and resources that could help them confidently participate in trading programs.

Over the two days of March 8th and 9th workshop participants discussed the various roles and challenges that trusted intermediaries - particularly conservation districts- face in participating in WQT programs. Dialogue participants explored strategies for reducing the cost of participation and considerations for intermediaries making decisions whether to participate in WQT.

Key takeaways from the panels and discussion sessions include:

- Broad recognition by participants that water quality trading is just one of several programs and responsibilities that intermediaries are likely to have and that an overarching challenge for many of these organizations is capacity.
- Rather than a significant revenue source, landowners are likely to see water quality trading as another potential program to address management issues. The more closely aligned with other stewardship programs, the lower the cost to intermediaries to implement and landowners to participate.
- Water quality trading program developers need to balance complexity with practicality to support landowner and intermediary engagement.

The information resulting from the Dialogue workshop will be incorporated into a report and resources being developed by the National Association of Conservation Districts (NACD) and American Farmland Trust (AFT) as part of a 2015 Conservation Innovation Grant (CIG) award through USDA-NRCS.

Agenda & Objectives

Objectives

1. Expand the depth of understanding of the potential roles and resource needs of intermediary organizations in implementing water quality trading programs;
2. Identify tasks and tools where trading program design can be aligned to create efficiencies with existing conservation programs; and
3. Develop options and considerations for engaging trusted intermediaries early in the program development process.

Agenda

Dialogue Day 1 – March 8

8:30 – 8:50am	<u>Introductions</u> An introduction to the National Network on Water Quality Trading, objectives for the two days, and event logistics. <i>Presenters:</i> Neil Crescenti, Willamette Partnership
8:50 – 9:30am	<u>Framing the Issue</u> Agricultural landowners and producers often look to <i>trusted intermediaries</i> - cooperative extension agents, conservation district staff, technical service providers, and crop advisors - for assistance when considering program participation. How can water quality trading program developers and administrators support those that support agricultural landowners to ensure participation? <i>Presenters:</i> Neil Crescenti, Willamette Partnership Bill Berry, NACD Mark Kieser, Kieser and Associates
9:30 – 10:30am	<u>The Role of Intermediaries Session I</u> Trusted intermediaries can play a number of formal and informal roles in the implementation of water quality trading. What are these different roles? What capacities do they require? And what do these intermediaries consider before taking on such roles? <i>Presenters:</i> Brian Brandt, American Farmland Trust Bill Berry, NACD
10:30 – 11:00am	<u>Networking Break</u>

<p>11:00 – 12:00pm</p>	<p><u>The Role of Intermediaries Session II: Panel discussion on experience</u></p> <p>During this panel discussion we will hear from several different intermediaries and landowners on their experience in water quality trading programs, the challenges, opportunities, and what resources might help organizations in these roles.</p> <p><i>Facilitator</i> Mark Kieser, Kieser and Associates</p> <p><i>Panelists</i> John McDonald – Tualatin SWCD Kari Wester – Sonoma RCD TJ Mascia – RES Doug Beretta – Berreta Family Dairy</p>
<p>12:00 – 1:00pm</p>	<p>Lunch (provided)</p>
<p>1:00 – 1:45pm</p>	<p><u>The Role of Intermediaries Session III: Making the business case</u></p> <p>What information do intermediaries need to make decisions about participating in water quality trading programs? This facilitated brainstorming session will explore this and other questions to help intermediaries in the decision making process.</p> <p><i>Facilitator</i> Brian Brandt, American Farmland Trust</p>
<p>1:45 – 2:30pm</p>	<p><u>Integrating Conservation Programs</u></p> <p>Water quality trading is just one voluntary conservation programs that farmers can engage in and intermediaries are responsible for implementing. Planning and projects associated with water quality trading likely rely on similar processes and resources to other programs. What are the opportunities to align these procedures to improve efficiencies and landowner engagement?</p> <p><i>Presenters</i> Thomas Hedt – NRCS, California State Office Neil Crescenti – Willamette Partnership Tom Werhi – NACD Board Member/Placer County Conservation District</p>
<p>2:30 – 3:00pm</p>	<p>Networking Break</p>
<p>3:00 – 4:30pm</p>	<p><u>Tools and Resources to Assist in the Planning Process</u></p> <p>A number of tools and resources are available to help agricultural producers and intermediaries develop conservation management plans, as well as participate in water quality trading. How can these efforts be aligned? Can water quality tools have broader applications? How can the two advance soil and water conservation efforts?</p> <p><i>Presenters</i> Mindy Selman – USDA Office of Environmental Markets Aaron Lauster – NRCS –National Sustainable Agriculture Keith Paustian – Colorado State University</p>
<p>4:30pm</p>	<p>Adjourn for the Day</p>

Dialogue Day 2 –March 9

8:30 – 9:00am	Welcome and thoughts from yesterday
9:00 – 9:30am	<u>Engaging Intermediaries in the Program Design Process</u> There are many factors that will influence intermediary entities in their decision to participate in water quality trading. In this session we'll explore some of those factors and hear several examples that demonstrate the variance in program development experience. <i>Presenters</i> Jim Klang – Kieser and Associates
9:30 – 10:00am	Break
10:00 – 11:00am	<u>Engaging Intermediaries in the Program Design Process – Group discussion</u> What options and considerations are there for program developers to include intermediaries in the program design process? <i>Facilitator</i> Jim Klang – Kieser and Associates
11:00 – 12:00pm	Summary Thoughts, Next Steps, and Closing Remarks
12:00pm	Adjourn Workshop

Dialogue Summary and Takeaways

The following themes emerged from the presentations and panels of the March Dialogue workshop.

Intermediaries will have varying levels of organizational capacity, skills, and financial resources to participate in water quality trading.

Trusted intermediaries can play a number of different roles in the implementation of a water quality trading program. The most formal role would be as program administrator, whose functions may include project review and certification, auction administration, and credit tracking. In the most informal role, intermediaries support WQT by providing assistance sharing information with landowners and doing project design. There are a number of factors that are likely to influence an intermediary's decision to participate in a water quality trading program and the potential roles and responsibilities they are willing to take on. These include:

- *Staff and resource capacity* to administer programs, complete documentation, and other tasks associated with water quality trading.
- *Technical knowledge and skillsets* to design projects and run quantification models.
- *Willingness to take on liability and financial risk* associated with project performance and transactions.
- *Socio-political landscape within the watershed* and the organization's ability to navigate the middle space between agriculture, municipalities, conservation interests, and the public.
- *Scale* of the trading program and the geographic extent to which an intermediary may have the capacity and jurisdictional ability to operate.

Dialogue participants suggested several strategies that may help address these factors based on their experience in water quality trading including:

- *Use multiple parties* to fill the various roles associated with water quality trading. This will reduce the resource burden on any one organization and may increase political acceptance of the program.
- *Develop a network of intermediaries* to create peer support and redundancy. Where one individual conservation district may not have the necessary skills or knowledge, a group of districts may pool their collective resources to deliver a program.
- *Regulatory agencies should play a support role* by assisting intermediaries with responsibilities such as version control of quantification tools, education and outreach, and public communications.

Make water quality trading just another stewardship program.

Dialogue participants recognize that water quality trading programs often require a higher level of rigor than other voluntary programs, as is necessary to ensure transparency and defensibility in a regulatory atmosphere. However, in achieving these higher standards it is easy to forget that WQT is just one of the multiple programs and tools necessary to achieve watershed and clean water goals. Intermediaries are often working with many of those stewardship and cost share programs at the same time. In order to support their participation, WQT program developers should prioritize making the process straightforward and approachable, and recognize that the cost of program delivery needs to be balanced with other programs and responsibilities. During the course of discussions, participants noted several ways in which trading programs can be designed in a manner that make WQT more like the other stewardship programs that intermediaries frequently work within, reducing the transaction costs associated with program delivery. Potential options include:

- *Program developers need to provide the knowledge necessary for program delivery.* In order for intermediaries to be program champions, they need the right information to engage and support agricultural landowner participation. Developing educational documents that include language that is similar to other voluntary stewardship programs will make WQT information easier to understand and communicate.
- *Aligning water quality trading with other stewardship and/or cost share programs* to lower transaction costs. This may include matching forms to other programs, timelines for applications, and even gaining additional authority to manage and allocate funding.
- *NRCS Conservation planning can provide framework for delivery.* Many intermediaries and landowners are familiar with the NRCS conservation planning process, which is likely to have overlap with the steps of developing a water quality credit generating project. By aligning the two planning processes, there is also an opportunity to increase the number of participants and certified NRCS planners.

Balancing complexity with practicality in models/tools is critical for buy-in and implementation.

The models/tools used to quantify water quality improvement and credits are important elements of water quality trading programs and can aide in the more general conservation planning process. These tools typically need to be rigorous and transparent to be part of a regulatory compliance program and to gain stakeholder trust. They also need to be practical to apply, matching the capacity of program staff. Some considerations in balancing complexity and practicality in models/tools include:

- *More sophisticated planning and quantification tools can help to streamline processes, create opportunities for tracking progress on larger scales.* Utilizing existing datasets and tools such as spatial analysis, much of the planning process may be streamlined up front reducing time and costs associated with gathering and reviewing site information. Programming tools and data can also provide the opportunity to determine site specific project outcomes and how those fit within the context of the larger watershed.
- *Leverage existing planning tools* such as NRCS/USDA COMET-Farm. The tool, which is still in development, will provide end-users a straightforward and simple interface built upon a number of datasets and complex models on the backend. Such tools attempt to balance the complexity necessary to assess field scale effects while simplifying the skills necessary by the user. For

intermediaries, it can be a huge help to have agencies provide the training, model support, versioning for program models/tools.

- *Tools and resources that can address multiple programs beyond WQT will have greater utility.* Developing complex quantification and planning tools specific to one program may not be cost effective. To the extent that these tools can be utilized in multiple ways, such as the tracking and accounting of conservation programs more generally, the greater their utility and more likely they will be supported over time.

For producers, it's not all about the money.

A frequently cited benefit of water quality trading is that it provides the opportunity for additional revenue for agricultural landowners. Much like other voluntary stewardship and cost-share programs however, trading may be seen by landowners more as an opportunity to address farm operation issues and less as a revenue generator. WQT program developers need to think about how best to match programs with landowner needs. Some takeaways from the Dialogue's discussion of these issues include:

- *Design programs and projects so they are not solutions looking for a problem.* Water quality trading allows permitted dischargers to meet regulatory obligations, but trading must also meet the needs of credit generators such as agricultural landowners. Participants noted that a key part of conservation planning is first identifying a landowners objectives and then discussing potential solutions. Recognizing that WQT is just one option for landowners to utilize can help program developers design processes and resources that will aide in conservation planning and increase the potential for successful clean water outcomes.
- *Always try to drive down transaction costs.* If landowners see programs as too onerous or costly, they are less likely to participate. Trading is unlikely to be a significant revenue source for most landowners, so transaction costs need to be kept to a minimum. Participants noted that programs implementation processes won't be perfect the first time, so it is important that an adaptive management approach be included to continually strive to minimize transaction costs.
- *Knowledge and experience will impact transaction costs.* Thin markets can create additional transaction costs due to time lags and infrequency of implementing process steps. Clear documentation, capturing institutional knowledge and lessons learned, and redundancy in processes can help intermediaries maintain lower costs when there are low transaction volumes.

Next Steps: Continuing the Conversation

The information gathered from the workshop will be incorporated into a co-authored report by the National Association of Conservation Districts (NACD) and American Farmland Trust (AFT) as part of their 2015 CIG Project -*Enlisting Conservation Districts to Accelerate Participation in Environmental Markets*. As part of the workshop, Bill Berry of NACD and Brian Brandt of AFT facilitated a session to collect feedback from workshop participants on what information can be developed for conservation districts to evaluate their potential role within a water quality trading program, and what the best format of delivery might be. The feedback from participants will be used to develop a business case checklist that intermediary organizations can use to evaluate their participation and role within a water quality trading program.

A common theme throughout the workshop was the funding and capacity needs of conservation districts to carry out all of their programs, not just water quality trading. From workshop conversations, participants identified the opportunity to develop and submit comments for the upcoming Farm Bill that can help support conservation districts in their efforts to deliver water quality trading and other programs to incentivize conservation stewardship on agricultural lands. The National Network along with National Milk Producers Federation, and the Dialogue participants will work to craft and submit Farm Bill recommendations over the coming months.

Appendix I: Spring 2017 Dialogue Participants

Workshop Organizers and Conveners		
Name	Organization Name	Email
Bill Berry	National Association of Conservation Districts	billnick@charter.net
Mark Kieser	Kieser and Associates	mkieser@kieser-associates.com
Neil Crescenti	Willamette Partnership	crescenti@willamettepartnership.org
Carrie Sanneman	Willamette Partnership	sanneman@willamettepartnership.org
Bobby Cochran	Willamette Partnership	cochran@willamettepartnership.org
Participants		
Participant Name	Organization Name	Email
Doug Beretta	Sonoma County Landowner	bdcowsmilk@comcast.net
Brian Brandt	American Farmland Trust	bbrandt@farmland.org
Kari Cohen	USDA NRCS	kari.cohen@wdc.usda.gov
Jimmy Daukus	American Farmland Trust (AFT)	jdaukas@farmland.org
Clay Detlefsen	National Milk Producers Federation	Cdetlefsen@nmpf.org
Chris Hartley	OEM	chartley@oce.usda.gov
Tom Hedt	NRCS California	thomas.hedt@ca.usda.gov
Alex Johnson	The Freshwater Trust	alex@thefreshwatertrust.org
Luana Kiger	NRCS California	luana.kiger@ca.usda.gov
Jim Klang	Kieser & Associates	jklang@kieser-associates.com
David Kuzmar	CA North Coast Regional Water Quality Control Board	david.kuzmar@waterboards.ca.gov
Harbans Lal	USDA - NRCS - WNTSC	Harbans.Lal@por.usda.gov
Aaron Lauster	NRCS-Strategic Natural Resources Initiatives	aaron.lauster@wdc.usda.gov
TJ Mascia	RES	tmascia@res.us
John McDonald	Tualitan Soil and Water Conservation District	johnniemac@frontier.com
Patrick McGuire	ACWA	mpmcguire@acwa-us.org
Keith Paustian	Colorado State University	Keith.Paustian@colostate.edu
Susan Payne	Maryland Department of Agriculture	susan.payne@maryland.gov
Frankie Savoy	RES	frankie@res.us
Mindy Selman	US Department of Agriculture, Office of Environmental Markets	mselman@oce.usda.gov
Tom Wehri	NACD Board Member	wehritom@gmail.com
Kari Wester	Sonoma Resource Conservation District	kwester@sonomarcad.org

Appendix II: Conveners Bios

Bill Berry, National Association of Conservation Districts

Bill Berry has worked as a contract communications specialist with NACD for 19 years. He has fielded NACD assignments in several areas, including conservation planning, ecosystem services, valuing conservation work, soil health and western forest health. He is currently working on developing tools to recognize the stewardship accomplishments of U.S. producers and better account for the full value of the ecosystem services their operations provide. Prior to joining NACD, Berry was an editor, columnist, and reporter with several daily newspapers in Wisconsin. He is the author of two books, on conservation and agriculture.

MARK S. KIESER, Kieser and Associates – Environmental Science and Engineering

Mark is Senior Scientist and Principal at Kieser & Associates, LLC and has over 28 years of environmental consulting experience in addition to three years of academic research on water resource issues. He has also played a prominent role in water quality trading program and policy development since 1995. Mr. Kieser led one of five EPA supported water quality trading projects in the U.S. in the mid-1990s and served on the state of Michigan Water Quality Trading Workgroup that developed the framework for Michigan's water quality trading rules; the first such rules in the U.S. He now leads a variety of trading projects focused on: watershed, state-wide and regional trading program development; agricultural credit banking schemes; urban stormwater; electronic water quality trading registries and infrastructure; restoration of natural flow regimes in Great Lakes tributaries; and, development of ecosystem service markets. Since 2001, Mr. Kieser has been serving as the Acting Chair of the Environmental Trading Network a non-profit clearinghouse for water quality trading program information.