

B. Project Brief

Title: Multi-State Agency Guidance for Water Quality Trading: State agencies building shared trading policies & tools for the Pacific Northwest and beyond

Start date: September 1, 2012

End date: September 30, 2015

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Purpose. Stakeholders across the country recognize the need for common regulatory guidance and tools for water quality trading that reflect the last 9 years of experience (Selman et. al., 2009). What's needed now is a region to go first, with state agencies coming together to agree on a system that achieves real water quality improvements and is structured in a way other states can easily join on, building toward larger and larger scales.

Funding from the NRCS Conservation Innovation Grant Program will be used to fund and support Oregon Department of Environmental Quality (ODEQ), Idaho Department of Environmental Quality (IDDEQ), Washington Department of Ecology (Ecology), and USEPA in the development of a "Joint Regional Water Quality Trading Agreement" (Joint Regional Agreement) on regulatory guidance to guide quality assurance standards for projects, project verification, credit calculation and registration procedures, common accounting infrastructure, and to provide clear and consistent guidance on water quality trading in Oregon, Washington, and Idaho. The Joint Regional Agreement will provide needed alignment and consistency among trading programs while maintaining essential state flexibility to address unique

circumstances. Just like the 2003 EPA Water Quality Trading Policy generated growth in trading programs, this kind of multistate agreement can drive the next leap in water quality improvement by giving potential buyers increased confidence to work with producers, potential sellers certainty on what will count as a credit, and local watersheds the ability to lower start-up time and costs by easing transfer of innovation across state lines.

In addition to standardizing program elements in the three-state area, partners will coordinate with water quality trading programs currently under development in the Ohio River Valley, California, and Colorado in an effort to create consistent, multi-state program elements and cooperate toward using shared infrastructure – including a shared credit registration system. The Joint Regional Agreement will be structured, both legally and substantively, in a way that will allow additional states to “sign on” to the agreement with limited need for adaptation, substantially increasing the pace and ease of transfer to other areas of the country interested in ensuring project quality and transparency in water quality trading programs. Basically, a seed for multi-state guidance that can grow from the states up to larger and larger scales and a model for the multi-state coordination that will be needed in coming years as agencies seek to address water quality issues at whole basin scales such as the Mississippi, Columbia, and Colorado.

By improving regulatory consistency, increasing confidence of buyers and suppliers of water quality improvements, and providing the seed for multi-state guidance, the work completed under this proposal will set the stage to accelerate non-point restoration activities far beyond what would be possible otherwise.

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Project Area/Location. This project will span Oregon, Washington and Idaho. The market procedures developed through this project will provide a blueprint for other states seeking to standardize regional market activity. In addition, partners will coordinate with water quality trading programs currently under development in the Ohio River Valley, California, and Colorado in an effort to create consistent, multi-state program elements and cooperate toward the use of shared infrastructure.

Project Summary. Under this proposal, Oregon Department of Environmental Quality, Idaho Department of Environmental Quality, Washington Department of Ecology, and USEPA will come together to create a common and secure set of procedures and guidelines that will ensure quality and transparency in trading programs – giving buyers, sellers, and the public the confidence to participate.

State agencies in cooperation with EPA will lead most of the components of this project with The Willamette Partnership working closely with agencies providing support in coordination, facilitation, and document management. The project overall will use Willamette Partnership’s proven Counting on the Environment process to coordinate science and policy work across state lines and stakeholder interests. A working group of state water quality agency leads, USEPA Region 10, and The Freshwater Trust will review and discuss the recommendations made from technical groups focusing on the science and measurement of water quality improvements and the policy and protocol issues needed to support trading. The Willamette

Partnership will actively facilitate these groups through a series of in-person and telephone meetings over the course of the project period. The Partnership will also work with the agencies to conduct other needed stakeholder processes with producers, utilities, environmental groups, and others to complete guidance. Throughout the project, project partners will actively participate in national conversations on the regulatory guidance and common tools needed to support water quality trading.

Guidance will seek a three-tiered structure that establishes consistent regulatory authorities and processes in Tiers I and II, but allows individual state flexibility for the specific mechanics of trading in Tier III:

- **Tier I Regulatory Guidance:** Legal authorities, guiding principles, minimum program requirements, and appropriateness of trades in compliance and “pre-TMDL” scenarios based on EPA’s 2003 Water Quality Trading Policy, but updated based on lessons learned and new information from current trading activity.
- **Tier II Standard Operating Procedures:** Common processes and mechanics shared across trading programs including standard crediting procedures and common infrastructure as well as standard language, process steps, and considerations to be included in TMDLs and NPDES permits to support trading. Standard operating procedures will also explore considerations for baseline and other eligibility requirements, project quality guidelines, credit verification, monitoring and registration/reporting.
- **Tier III State Specific Addenda:** Elements of trading that are unique to the ecological, economic, and socio-political needs of each state. State-specific appendices will include unique baseline procedures, credit calculation methodologies, discounting and ratio factors, minimum quality standards for allowable conservation practices, etc.

With cooperation from all three state regulatory agencies and U.S. EPA Region 10 assured the likelihood of project success is very high and the timing is ideal. All three state water quality agencies are co-applicants and have had experience working together on multiple environmental standards and guidance documents. The Willamette Partnership has a long history of working constructively in lock step with regulatory agencies and over the last five years has helped lay the foundation for Oregon’s active water quality trading program by developing credible standards and protocols and building broad consensus and support from public and private partners.

The groundwork has been laid to build the Joint Regional Agreement, but such coordination will take a substantial and sustained effort to be done in a way that creates operational standards for credibility and transparency, while maintaining local, state-specific control of trading programs. NRCS Conservation Innovation Grant Program funding for the development of Joint Regional Guidance on water quality trading in Oregon, Washington, and Idaho has the potential advance the pace, scope and effectiveness of water quality improvements in the Pacific Northwest and beyond.

C. Project Description

1. Project background

History. Since the first water quality trading discussions began in Wisconsin's Fox River in 1981, programs throughout the U.S. have struggled to deliver on their potential to improve water quality conditions. Since USEPA issued its 2003 Water Quality Trading Policy and other guidance¹, 72 programs have been initiated in the U.S. Of those only 14 have producers actively delivering credits that point sources can use for compliance (Branosky, 2012). The missing elements in many of these programs was active engagement from state water quality agencies – creating the regulatory guidance, common standards to ensure high quality projects, credible and transparent performance monitoring procedures, and specific steps required to create and sell or buy credits. The 2003 EPA guidance spurred interest in trading, but without a body of transactions, trading will not be able to make that next leap.

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The Pacific Northwest has that body of transactions, and is ready to scale, but needs updated and coordinated guidance from state water quality agencies. Just like the 2003 EPA guidance generated growth in trading programs, we feel that the next jump will come from state water quality agencies generating joint regional agreements that give potential buyers confidence to work with producers, potential sellers certainty on what will count as a credit, and local watersheds the ability to lower start-up time and costs by easing transfer of innovation across state lines.

Despite the limited transaction record, interest in water quality trading among states, nonprofits, and federal agencies remains high because the ecological benefits and economic efficiencies are so attractive. However, before trading can become a common compliance alternative to meet Clean Water Act requirements, regulatory agencies, regulated point sources, nonpoint sources, the public, and producers need confidence that the processes and procedures used to guide trading programs are credible, agreed upon, and secure.

Under this proposal, state agencies that regulate surface-water quality - Oregon Department of Environmental Quality, Idaho Department of Environmental Quality, Washington Department of Ecology – and USEPA will come together to create a common and secure set of procedures and guidelines that will ensure quality and transparency in trading programs and give buyers, sellers, and the public the confidence to participate.

Oregon, Idaho and Washington state water quality agencies have all established some form of regulatory guidance on trading related to water quality² and all have varying levels of

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¹ USEPA has also issued other guidance (Water Quality Trading Assessment Handbook, 2005 and Water Quality Trading Toolkit for Permit Writers, 2007, and USDA has developed guidelines for trading in general in 2011 and is working on guidelines to help water quality programs launch that will be published in 2012. This collective set of guidance provides a good foundation to work from, but it's missing the specificity and formal endorsement from collections of states within regions to support water quality trading at scale.

² Oregon: <http://www.deq.state.or.us/wq/trading/trading.htm>

experience with program development and review. Oregon Department of Environmental Quality has nearly 10 years of experience with trading on “thermal load” that has resulted in more than 35 miles of streamside vegetation restored and with another 50 miles that will be required in NPDES permits in the next two years. In addition to substantially better ecological results, trading in Oregon has driven nearly \$20 million in new conservation funding to riparian revegetation actions and saved rate payers at just two facilities alone more than \$70 million dollars. Idaho has a nutrient trading program that was designed in 2000 and updated in 2010. USEPA Region 10 and Idaho included phosphorus trading provisions in the General Permit for Aquaculture sources that resulted in one trade so far, between two facilities in close proximity owned by the same operator, to enable greater operational flexibility. Washington created a water quality trading/offset framework in 2010 and is being asked to evaluate a number of trading programs related to nutrients and temperature.

Project Need. Stakeholders across the country recognize the need for common regulatory guidance and tools for trading that reflects the last 9 years of experience with trading (Selman et. al., 2009). What’s needed now is a region to go first. The guidance needs to A) standardize procedures and infrastructure that ensures credibility, transparency and performance over time, and B) maintain state specific flexibility to address issues unique to each state.

Guidance needs to come in three forms: 1) **Regulatory Guidance** - Consistent interpretation of authorities from the Clean Water Act, informed by EPA and state experience, that establish the legal grounding and guiding principles for trading; 2) **Standard Operating Procedures** – Standardized program operating procedures for generating and ensuring quality and transparent tracking of credits, and 3) **State Specific Addenda** - State-specific addenda defining unique quality standards for credit generating activities, state specific crediting methodologies and agency and third party roles.

Funding from the NRCS Conservation Innovation Grant Program will be used to fund and support Oregon Department of Environmental Quality (ODEQ), Idaho Department of Environmental Quality (IDDEQ), Washington Department of Ecology (Ecology), and USEPA in the development of a “Joint Regional Water Quality Trading Agreement” (Joint Regional Agreement). The Joint Regional Agreement will be used to guide quality assurance standards for projects, project verification, credit calculation and registration procedures, common accounting infrastructure, and to provide clear and consistent guidance on water quality trading in Oregon, Washington, and Idaho. The Joint Regional Agreement will be structured, both legally and substantively, in a way that will allow additional states to “sign on” to the agreement with limited need for adaptation. Basically, a seed for multi-state guidance that can grow from the states up to larger and larger scales—substantially increasing the pace and ease of transfer to other areas of the country interested in ensuring project quality and transparency in water quality trading programs.

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Washington: http://www.ecy.wa.gov/programs/wq/swqs/WQTradingGuidance_1010064.pdf

Idaho: <http://www.deq.idaho.gov/water-quality/surface-water/pollutant-trading.aspx>

Clear regulatory guidance is an essential element of water quality trading programs, but only eight states (ID, WA, OR, WI, CO, MI, OH, MN) have any current guidance at all. The Clean Water Act wrestles with a fundamental tension between a desire for national standards and the reality that watersheds need to be managed locally. The deliverables from this project will enable other states to quickly “sign on” to shared trading program elements, enabling state water quality agencies and stakeholders to focus on the challenges unique to their locale and speeding the ability of credit producers to participate in trading programs. State agencies in cooperation with EPA will lead most of the components of this project with The Willamette Partnership working closely with agencies providing coordination and facilitation support and document management support (see Figure 3.0 on page 7). The Partnership’s facilitation role was critical to successfully establishing a “General Crediting Protocol in Oregon” that was agreed to by 25 state and federal regulatory agencies and interest groups in December 2009.

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Dedicated Federal funding will enable state water quality agency staff to focus attention and coordinate effort to generate the regulatory structures needed to support credible and transparent trading at scale. Dedicated funding will also enable state agencies to participate in national discussions currently underway to standardize water quality trading elements. US EPA Region 10 staff will be actively engaged in this project, but no NRCS CIG funds will be used to support EPA staff involvement.

Likelihood of Project Success. The Pacific Northwest is one of the best-positioned regions in the country to successfully develop the multi-state regulatory templates and agreements that other states can “sign on” to, reducing their start-up time and risk. All three state water quality agencies are co-applicants and have had experience working together on total maximum daily load development for the Columbia and Snake Rivers, Columbia River total dissolved gas criteria, *EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards*, etc. The Willamette Partnership has a long history of working constructively in lock step with regulatory agencies and over the last five years has helped lay the foundation for Oregon’s active water quality trading program by developing credible standards and protocols and building broad consensus and support from public and private partners. Partnership staff has a high level of expertise in developing multi-agency processes and agreements. With cooperation from all three state regulatory agencies assured, the likelihood of project success is very high and the timing is ideal. Each state is being asked to review and comment on a range of programs and activities with water quality trading at the core. The groundwork has been laid to build the Joint Regional Agreement, but multi-state coordination will take a substantial and sustained effort to be done in a way that creates operational standards for credibility and transparency, while maintaining local, state-specific control of trading programs.

2. Project objectives

The primary objective of this effort is to secure multi-state consensus and USEPA endorsement on regulatory guidance, general restoration project and BMP quality standards, credit tracking procedures and accounting infrastructure 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 USEPA have some form of guidance or framework in place to inform water quality trading. This project will help create needed alignment and consistency among trading programs while maintaining essential state flexibility to address unique circumstances. In addition to standardizing program elements in the three-state area, partners will coordinate with water quality trading programs currently under development in the Ohio River Valley, California, and Colorado in an effort to create consistent, multi-state program elements and cooperate toward shared infrastructure. Close multi-state coordination and use of common infrastructure will improve the likelihood that standard program elements will work across regions throughout the U.S. – increasing transparency and credibility of programs and minimizing start up and transaction costs over time. A model for multi-state coordination will be needed in coming years as agencies seek to address water quality issues at whole basin scales such as the Mississippi, Columbia, and Colorado.

The Joint Regional Agreement will include a three-tiered structure that establishes consistent regulatory authorities and processes in Tiers I and II, but allows individual state flexibility for the specific mechanics of trading in Tier III:

- **Tier I Regulatory Guidance:** Legal authorities, guiding principles, and appropriateness of trades based on EPA’s 2003 Water Quality Trading Policy, but updated based on lessons learned and new information from current trading activity.
- **Tier II Standard Operating Procedures:** Common processes and mechanics shared across trading programs (e.g. considerations for baseline and other eligibility requirements, project quality guidelines, credit verification, monitoring and registration/reporting).
- **Tier III State Specific Addenda:** State-specific appendices that include unique baseline procedures, credit calculation methodologies, discounting and ratio factors, minimum quality standards for allowable conservation practices, etc.

Experience in the Chesapeake Bay and with the Climate Registry for carbon reinforces the need for regulatory processes that are state-centric, but coordinated. Done correctly, a Joint Regional Agreement among the three states and Region 10 EPA could quickly spur additional participation from neighboring regions and states, which is one of the intentions of this project.

TIER ONE - Regional Guidance and Regulatory Authorities

- **Legal basis and guiding principles for trading.** EPA’s 2003 Water Quality Trading Policy was completed before many of the active point-nonpoint source trading programs were created. Additionally, guidance documents in the three states need updating based on recent permits and trading activity. Tier one Regional Guidance should be the same across all states.
- **Frame conditions and general considerations to encourage water quality improvements in “pre-TMDL” areas.** Most of the 14 trading programs in place now around the country are based on compliance with TMDL allocations. More guidance could be used than what currently exists in current US EPA and state trading policies to develop trading

mechanisms to comply with water quality-based effluent limits in NPDES permits or to keep water bodies from becoming impaired. The project partners will establish considerations for a process defining baseline conditions and providing certainty to permittees (credit purchasers) and producers (credit sellers) that credits will be acknowledged when TMDLs or other regulatory documents are developed.

- *Partners to this grant application understand that “pre-TMDL” programs carry significant challenges and the ability for state or federal water quality regulators to create certainty for producers or early adopters will be difficult.*
 - *The purpose of this section of work is to evaluate the policy tools available to regulatory agencies that can incentivize actions that improve water quality conditions in the absence of TMDLs or other strong regulatory drivers.*
 - *A minimum delivery from this work element is documentation of factors that need to be addressed when considering pre-TMDL trades.*
- **Outline minimum requirements for a water quality trading program.** A minimum set of conditions must be met in order for states to implement successful water quality trading programs. Under this proposal, partners will work toward a common set of basic requirements and a checklist to help guide state agencies in the development and review of trading programs. This element of the guidance will help ensure programs are consistent with federal laws, are transparent and credible, and will generate the promised water quality improvements.

TIER TWO – Standard Operating Procedures for Trading

- **Develop standard crediting procedures and common infrastructure.** Many of the efficiencies and acceleration provided by Regional Guidance will stem from the certainty and ease-of-use inherent in a standardized set of agreed-upon procedures and common definitions for water quality trading. The Willamette Partnership has developed templates for many of these procedures and they are being applied in watersheds across the Northwest. Standardization will help make agency evaluation and oversight of trading programs more predictable, making it easier for trading program developers to provide the information agencies will need to make decisions about project viability.
- **Create standard language, process steps, and considerations to be included in TMDLs and NPDES permits to support trading.** Experience in the Pacific Northwest has shown that clear authorization for trading in TMDL documents and standard NPDES permit language creates a stronger legal footing for trading and easier regulatory implementation. Standard Operating Procedures will provide standard language and steps for TMDL developers and permit writers to consider when establishing TMDLs or trading programs throughout the regulatory process. Current EPA guidance for permit writers does not get to the level of specificity needed for clear, consistent regulatory agency operations throughout the region. The Standard Operating Procedure will apply region-wide (Idaho, Oregon and Washington) with acceptance and formal agreement by these three states and USEPA.

TIER THREE – State-Specific Addenda

Water quality trading programs are shaped by the ecological, economic, and socio-political needs of their given state or watershed, which makes complete standardization difficult. Each state will need to define some elements of trading that are unique. The Joint Regional Agreement will provide for State-Specific Addenda to accommodate these changes, which will also make it easier for additional states to “sign on” to the Agreement.

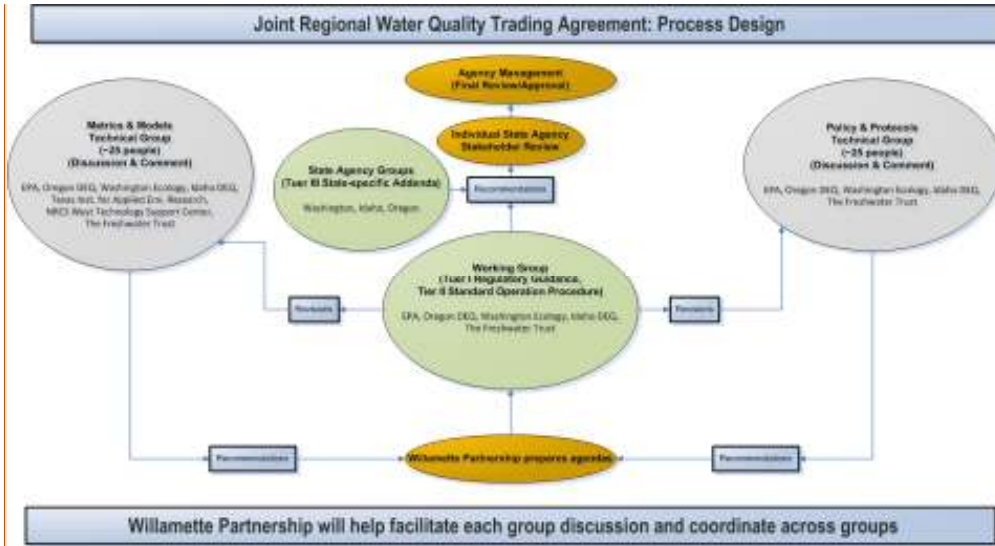
- **Define modifications to the Standard Operating Procedure needed for each state.** Idaho, Oregon and Washington will analyze their individual programs and statutory requirements and define protocols that will address the specifics of water quality trading for each state.
- **Define credit calculation methodologies and minimum quality standards for conservation practices.** Quantifying water quality improvements is trending toward increased standardization. To the extent possible states will try to adapt the same tools to quantify nutrient and temperature reductions, but individual states may need to determine their own crediting procedures for issues such as baselines.

Discussion of Innovation. State agencies and Region 10 EPA are facing requests from multiple interested parties and permittees looking for guidance and options to conduct trading. Similar requests are occurring in western EPA Regions 8 and 9. Without clear and consistent guidance, programs will operate in isolation with different rules and with reduced overall transparency, increasing risk and uncertainty for regulators and permittees, and minimizing opportunities to implement programs at a meaningful watershed scale.

Clear regulatory guidance is an essential element of water quality trading programs, but only 8 states have any current guidance at all. The Clean Water Act also wrestles with a fundamental tension between a desire for national standards and the reality that watersheds need to be managed locally. This project provides the common regulatory guidance, standard operating procedures, and framework to customize trading elements to each state. The deliverables from this project will enable states to quickly “sign on” to shared trading program elements, enabling state water quality agencies and stakeholders to focus on the challenges unique to their locale and speeding the ability of producers to participate in trading programs.

3. Project methods

The Willamette Partnership will build from its 2008 Counting on the Environment process to support EPA Region 10, and the three state water quality agencies. That process has been proven and was used to successfully achieve multi-stakeholder agreements across water and biodiversity markets on science, policy, and crediting protocols. The Partnership will work with the agencies and others to conduct other needed stakeholder processes with producers, utilities, environmental groups, and others to complete guidance (See Figure 3.0). Throughout the project, project partners will actively participate in national conversations on the regulatory guidance and common tools needed to support water quality trading.



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The methodology for each element of the project is described below:

Task 1. Review existing 8 state water quality trading policies and convene agencies

The Willamette Partnership will review the existing 8 state trading policies (ID, WA, OR, WI, CO, MI, OH, MN) and USEPA guidance to identify common elements, inconsistencies, and gaps. That review will form the basis of a two-day kick-off workshop with EPA Region 10 and the three state agencies to begin sorting trading program elements into Tier I Regulatory Guidance, Tier II Standard Operating Procedure, and Tier III State-Specific Addenda.

The workshop will include presentations from each of the agencies on their current regulatory authorities and operating procedures and gaps in existing tools. The agencies will form subgroups focusing on topics needing further development such as credit quantification, baselines, and developing legal authorities.

Task 2. Draft Tier I Regulatory Guidance

Based on the action items from the kick-off workshop, each state agency will develop a list of additional regulatory guidance and authorities needed to support trading and a set of comments on each state’s existing guidance. The list and comments will be used to create an outline of the Tier I Regulatory Guidance with a series of options for standardizing that guidance.

The Willamette Partnership will convene staff leads from each agency through a series of work sessions to develop a complete draft of the Regulatory Guidance. The Regulatory Guidance will include minimum requirements for a trading program such as compliance with anti-degradation

and anti-backsliding provisions and general programmatic elements that every trading program will need to address (i.e. trading areas, baselines, trading ratios, assurances, verification, monitoring, credit registration, credit custody tracking, remediation strategies etc).

Task 3. Draft Tier II Standard Operating Procedures

Each state agency will assign a staff lead who will be responsible for coordinating participation from their agency in two subgroups needed to develop Standard Operating Procedures for shared policies/permitting processes and technical/modeling. Those subgroups will complete the following subtasks. Project partners shall discuss recommended operating procedures as a group.

Policy/Permitting

- Generate a comprehensive list of **acceptable trading scenarios** (for example, intraplant trading, intramunicipal trading, single buyer, multi-party closed market, etc.) based on pollutant(s) to be traded, size and hydrodynamics of the trading trading area, number and type of sources involved, pre-existing regulatory framework, stakeholder preferences, etc.
- Review federal and state guidance documents and available case law to create a basic **checklist of minimum requirements** for consideration.
- Determine **priority conservation practices** that give certainty of “high-quality” and effective restoration for use in compliance-grade offset credits.
- Develop a detailed list of parameters necessary for viable trading proposals, including designated trading partners, a description of how proposed trades can be quantified for both point and non-point sources, if applicable, and mechanisms/protocols for establishing reasonable assurances that proposed actions identified in the trading will be implemented.
- Analyze and compile essential, **well-defined permit conditions**, including acceptable trades, minimum requirements for trading agreements, recordkeeping, monitoring, third party verification, serialized registration, and reporting requirements.
- Identify and develop information or guidance for the **required elements of permit evaluation** reports.
- Review and develop a standard method for assessing compliance with and **enforcement of trading proposals** in permits. Review Idaho, Oregon and Washington’s existing enforcement regulations to determine if additional compliance and enforcement tools need to be developed to specifically address trading.

Technical/Modeling

- Determine how to establish nonpoint source “**baselines**” that define the quantity of a pollutant or credit that NPDES permittees or nonpoint sources may buy or sell, including specific guidance in areas that do not yet have established TMDLs.
- Define the **unit of trade**, or “credit,” that represents the amount of pollutant reduced over a specified **time period** by a particular action, and establish how these credits can be generated and used.

- Agree to **credit calculation** tools and metrics, including adaptation and calibration of tools across the states. If states wish to use specific quantification tools, those will be included in the State-Specific Addenda.
- As part of this project, **Nutrient Tracking Tool (NTT)** will be uploaded with crop management, soils, and climate data for Washington and Idaho by the Texas Institute for Applied Environmental Research and in coordination with NRCS' West Technology Support Center. Agencies will work with local partners to identify validation sites to calibrate the outputs for NTT.
- Develop **trading ratios** which account for the amount of time necessary for the beneficial impact of a trade to take effect, compensate for the distance between the generation of a credit and the point of maximum impact as defined in a TMDL, or incorporate the variables that could influence the effectiveness of a particular action that are outside of the control of an individual landowner or credit producer.
- Review current methods and develop new methods and procedures if needed that ensure compliance with NPDES permit requirements, including **sampling/testing protocols and monitoring**. Determine if additional methods or procedures should be developed specific to trading compliance.

Task 4. Draft Tier III State-Specific Addenda

As agency staff and stakeholders identify issues specific to each state, those will need to be incorporated into State-Specific Addenda. These Addenda will be designed in a way that is easy to maintain consistency with standard operating procedures but will maximize state flexibility to manage and control their respective programs. The bulk of the state-specific addenda are likely to include discussion of:

- The **minimum design criteria** for installing high quality conservation practices. These criteria will vary depending on actions, but will contain the specific project detail and standards needed to use those practices to generate credits.
- Identify criteria for **"trading areas"** within each state and develop rules regarding priorities within these areas.
- Identify third party **entities in each state with expertise in credit verification** and provide a description of the requirements that must be met in order to be qualified for selection so that new third party entities are clear on the qualification and selection process. Third party verification of credits is critical to ensure that offsets used in compliance-based trading meet the highest ecological and regulatory standards.
- Review and select a **legitimate credit registry** to easily record and track trades in each state.
- Clearly define state policies on total project loss, remediation and **Force Majeure**

Task 5. Maintain communication with other regions and national-level discussions

The intent of the Joint Regional Agreement is to act as a starting point for developing a viable regional water quality trading marketplace, by making it easier for other states to "sign on" to a common set of Regulatory Guidance, Standard Operating Procedures, and State-Specific Addenda. Project partners will work with neighboring EPA regions and states (e.g. Colorado and

California) that have already expressed interest in basing their trading programs on tools developed in the Northwest. Project partners are already working with the California's North Coast Regional Water Quality Control Board to support water quality trading in the Klamath River Basin. In addition to neighboring states and regions, project partners are already coordinating with trading programs being developed in the Ohio River Valley to maximize consistency and the use of common infrastructure where possible. In addition, USEPA Region 10 will share key developments and draft products with USEPA's Office of Water to maximize the Agency's investment in the development of a consistent regional approach to implementing water quality trading to across the Agency.

Project partners strongly encourage and will actively participate in a Water Quality Market Network" established by USDA with other CIG grantees, state agencies, and EPA convened as a venue to share experience, coordinate program development, evaluate program components and results, and establish consistent tracking, reporting and verification parameters. Project partners will encourage the use of elements of the Joint Regional Agreement in other states and where practical will use the Water Quality Market Network to help shape the Northwest work based on national needs for consistency.

Task 6. Finalize Joint Regional Agreement and Reporting to NRCS

As a complete draft of the Joint Regional Agreement comes together, state water quality agencies with support from EPA Region 10 will make decisions together about the public processes needed to formalize agreement as regulatory guidance. This process may include one to two rounds of public comment and reacting to comments. It may include outreach to stakeholders like wastewater utilities, environmental groups, producer groups, and tribes.

The Willamette Partnership will use its Counting on the Environment process design to facilitate toward an agreement. That process includes in-depth convening to ensure the right individuals and organizations have a voice in the Joint Regional Agreement, structured communication throughout so that nothing in the Agreement is a surprise, and structuring of an agreement document that provides both flexibility and consistency for all parties. The Joint Regional Agreement may take on several forms (e.g. formal agency guidance, a Memorandum of Agreement between agencies, or other form). The final form will be determined by state agency leads and US EPA.

The inter-agency working group will recommend a final package of Tier I regulatory guidance, Tier II standard operating procedures, and Tier III state-specific addenda to agency management for final signatory approval.

Project partners will also complete a final report to NRCS summarizing work completed, outcomes achieved, and strategies for immediate transfer of the Agreement and associated tools to other states.

4. Location and size of project or project area:

This project will span Oregon, Washington and Idaho. The market procedures developed through this project will provide a blueprint for other states seeking to standardize regional market activity.



5. Producer participation:

At least 4 EQIP-eligible producers will be directly involved in commenting on and shaping the state-specific appendices. Indirectly, this project will have enormous benefits for EQIP-eligible producers. The \$13,000,000 in credit transactions already in the works in the Pacific Northwest represent over 200 landowners, many of whom are EQIP-eligible. No CIG funds will be used to implement projects to generate credits or to provide payments to landowners.

6. Project action plan and timeline

DESCRIPTION	Start	End	MILESTONES
Task 1. Review 8 trading policies & Convene Stakeholders			
Review of 8 state trading policies and USEPA policy Final process design and agendas	9/1/2012	3/30/2013	Convening Report
Task 2. Draft Tier I Regulatory Guidance			
Develop review criteria for trading proposals Establish sharing authorities and objectives Define general trading provisions	4/1/2013	11/30/2013	Draft Guidance Document
Task 3. Draft Tier II Standard Operating Procedure			
Create shared policies (e.g. on trading ratios)	6/1/2013	6/30/2014	Draft Standard Operating Procedures Protocol documents

Where agreed upon -update and validate nutrient and shade calculators for regional use			Nutrient and shade calculators for OR, WA, ID
Build permitting templates			Standard permit language
Define roles and governance			Draft roles and responsibilities

Task 4. Draft Tier III State-specific Addenda			
Draft addenda for each state	12/1/2013	12/30/2014	3 Draft Addenda for OR, WA, ID

Task 5. National Coordination			
Coordinate with other CIG grantees, USDA,US EPA, and cooperating states	9/1/2012	9/30/2014	Participation in national calls, comments incorporated from other states

Task 6. Finalize Joint Regional Agreement & Report to NRCS			
Secure final Joint Regional Agreement	12/1/2014	9/30/2015	Joint Regional Agreement endorsed by WA, OR, and ID state agencies
Develop companion document so other states can "sign on" to the Agreement			Handbook for other states on steps needed to join the Agreement
Complete Final Report to NRCS			Final Report to NRCS

7. Project management

The project overall will use the Counting on the Environment process to coordinate science and policy work across state lines and stakeholder interests. A working group of state water quality agency leads, USEPA Region 10, and The Freshwater Trust will review and discuss the recommendations made from technical groups focusing on the science and measurement of water quality improvements and the policy and protocol issues needed to support trading. The Willamette Partnership will actively facilitate these groups through a series of in-person and telephone meetings over the course of the project period.

State water quality agency, USEPA Region 10, and The Freshwater Trust staff will play central roles in delivering this project. Key personnel expected to participate include:

Bobby Cochran, Executive Director of the [Willamette Partnership](#), will be responsible for the overall project and lead facilitator for the project. Bobby has led complex inter-agency

processes around water quality trading and other environmental markets since 2007. Those processes have led to agency rule changes, shifts in standard operating procedures, and other forms of coordinated action. Bobby has nearly 10 years of experience negotiating collaborative policy at the intersection of science, policy, and economics. He has a PhD from Portland State specializing in public policy and negotiation, and an MA in Conflict Resolution.

Ranei Nomura, Water Quality Trading Project Manager, Oregon Dept. of Environmental Quality. Ranei has 20 years of experience at OR DEQ in water quality permit policy, program, and rule development. For the past five years, as the agency's alternative compliance policy analyst, Ranei has been responsible for developing state water quality trading guidance and reviewing and approving trading program proposals. Ranei also participated in the Willamette Partnership's Counting on the Environment process and is part of the Klamath Tracking and Accounting Program interagency workgroup. She has a BA in Biology from Reed College in Portland, Oregon.

Barry Burnell [identify the right person here], Water Quality Division Administrator – Idaho DEQ

Helen Bresler, Water Quality Program, Washington Dept. of Ecology. Helen manages the Nonpoint and TMDL Programs for the Washington Department of Ecology. Her staff develops policy direction for both programs and oversees the work to ensure it meets the requirements of the Clean Water Act and state water quality standards. Helen is the author of Washington's Water Quality Trading/Offset Framework.

Claire Schary, Water Quality Trading Coordinator, will represent the U.S. EPA 10. With 22 years of experience at USEPA, Claire's time in the Acid Rain Division helped establish the nation's first cap and trade program for sulfur dioxide emissions. She has been in Region 10's Water Quality Trading Coordinator for the last 15 years and is considered a national expert on water quality trading. She led EPA's team developing Idaho's Lower Boise River Water Quality Trading Framework and USEPA's Water Quality Trading Assessment Handbook. She also represented Region 10 in the national workgroup that created USEPA's Water Quality Trading Policy and the Water Quality Trading Toolkit for Permit Writers. She has a BA in Economics from Carleton College in Northfield, MN and an MBA from Cornell University in Ithaca, NY.

David Primozich, Ecosystem Services Director, The Freshwater Trust

8. Project deliverables/products

The Willamette Partnership and project partners will supply the required documents outlined in the RFP (e.g. semi-annual reports, justification of payment, etc.) and will participate in at least one NRCS sponsored event during the grant period. In addition to the required deliverables outlined in the RFP, the project will provide the following deliverables/products:

Deliverables	
<i>Task 1. Review 8 trading policies & Convene Stakeholders</i>	
1	Summary report of gaps in existing 8 state trading policies and EPA guidance
2	Convening report with process design, group membership, and process issues
<i>Task 2. Draft Tier I Regulatory Guidance</i>	
1	Kick-off workshop agenda and action items
2	Working group agendas and action items
3	Draft Guidance Document
<i>Task 3. Draft Tier II Standard Operating Procedure</i>	
1	Shade calculator updated and validated for OR, WA, ID
2	Nutrient calculator updated and validated for OR, WA, ID
3	Draft Standard Operating Procedure document with protocols, permit language, and roles and responsibilities
<i>Task 4. Draft Tier III State-specific Addenda</i>	
1	OR Draft Addenda
2	ID Draft Addenda
3	WA Draft Addenda
<i>Task 5. National Coordination</i>	
1	Comments received from USDA, USEPA, and other states via national calls
2	Versions of Tier I and Tier II documents that are applicable to other states
<i>Task 6. Finalize Joint Regional Agreement & Report to NRCS</i>	
1	Final versions of Regulatory Guidance, Standard Operating Procedures, and State-specific addenda
2	Joint Regional Agreement endorsed by USEPA and state water quality agencies
3	Handbook for other states on steps needed to join the Agreement
4	Final Report to NRCS

9. Benefits or results expected and transferability

In general, project partners are interested in a single outcome from this work - more effective ways to maximize total pollution reduction/water quality improvements achieved from dollars spent. The work completed under this proposal will set the stage to accelerate non-point restoration activities far beyond what would be possible otherwise.

This project centers on the Pacific Northwest, but it builds the capacity to speed transfer nationally. Within the project, partners will participate with other CIG grantees to ensure the Joint Regional Agreement can be “signed on” to by other state water quality agencies. Particular focus will be placed on reaching out to other western states in USEPA Regions 6, 8, and 9. Already, work is beginning with California’s North Coast Regional Water Quality Control Board in the Klamath River Basin. Under The Freshwater Trust’s current CIG, there is \$25,000 to convene a national network of regional market developers. Project partners will use that network to transfer the results of this grant and receive the innovations of other CIG grants. In turn, that network offers NRCS and others the capacity to more easily transfer market innovations to watersheds and communities.

The benefits of credible and transparent trading programs in general are clear for four stakeholder categories as well: 1) regulators gain new tools to incentivize restoration actions that improve water quality and a way to quantify and verify outcomes from dollars spent and actions taken; 2) farmers, foresters, and ranchers with degraded riparian land gain access to new funding sources that enable them to take action more quickly and with higher quality standards; 3) regulated point sources, get access to a compliance solution that is generally (often substantially) less expensive than technological solutions, and offers numerous secondary benefits (miles of stream banks restored and business for local contractors and suppliers); 4) the public is assured that steps are being taken to improve water quality conditions and that actions taken to offset ongoing impact are real, verified, tracked, and performing to a high quality standard over time.

10. Project evaluation:

The Willamette Partnership will submit semi-annual progress reports and quarterly financial reports to NRCS. Prior to program launch, state agencies with support with Willamette Partnership will fully evaluate the legal, technical, and policy feasibility of joint action on different portions of the Joint Regional Agreement. The Partnership will keep records of action items and meeting summaries to ensure there is a record of discussion to help other states follow a path toward “signing-on” to the Joint Regional Agreement.

Mid-way through the project, the state agencies and Willamette Partnership will assess current process design, status of deliverables, and progress toward objectives to see if any changes are needed.

Technical feasibility of transfer for the Joint Regional Agreement will be assessed based on the time taken to develop and reach agreement on the different shared agency policies and tools. This measure translates directly into cost estimates needed for other states.

Comment [c6]: What are some other methods for evaluation?

D. Additional Information

Resumes for Bobby, David, others?

Comment [c7]: We can put in 2-page resumes that do not count toward the page limit.

E. Assessment of Environmental and Social Impacts.

There will be no direct adverse impacts from this project.

Positive Impacts include:

Cultural resources: By unlocking revenue for producers to engage in conservation on their working lands, this project helps maintain the working lands that support rural communities across the Northwest while balancing environmental needs.

Wild and Scenic River: Over half of the nation's Wild and Scenic rivers flow through the Northwest. Oregon has 47 designated wild and scenic rivers including the Sprague, Sycan, and Klamath River where the Willamette Partnership is already advising the Klamath Tracking and Accounting Program on market design. The Snake River in Idaho and Klickitat River in Washington are other Wild and Scenic rivers where the Willamette Partnership and TFT have already actively engaged in market feasibility analysis.

Public health and human environment: This initiative targets water quality restoration that will benefit drinking water, flood protection, safer fishing, and recreation—all key to the Northwest quality of life and tourism economy.

Retention of sustainably managed working lands: Maintaining working lands by providing market-based incentives for ecosystem services means these lands will continue to provide the positive impacts referenced in this section into the future. Riparian buffers often affect marginal farmland and contracted annual payments with producers will diversify farm income.

Environmental justice: There will be no direct adverse impacts, but many positive direct and indirect impacts for low-income land owners and rate-payers from better conservation investment. Direct impacts will include payments to land owners, reduced utility rate increases, and employment through living-wage restoration jobs when municipal funds for achieving water quality standards are invested in locally built natural infrastructure rather than imported technology.

Atmosphere: Riparian forests reduce nitrogen dioxide formation and sequester carbon.

Soils: Riparian planting ensures that existing farming operations have minimal impact on soil erosion and do not compromise the stability of river banks and stream-beds.

Water: This initiative will enable new strategies and funds to address non-point source temperature and nutrient water quality impairments identified in TMDLs throughout the Northwest.

Wildlife Habitat/Endangered and Threatened Species: Incentives for restoration of riparian areas and other habitats created by this initiative will improve habitat conditions for a full suite of fish and migratory birds. Essential Fish Habitat for endangered Coho and Chinook salmon includes all streams, lakes, ponds, wetlands, and other water bodies currently or historically accessible to salmon in Washington, Oregon and Idaho. The actions taken under this proposal will have positive benefits for the habitat these species depend on. A majority of on-the ground restoration projects undertaken as part of this proposal will occur on lands adjacent to these waters.

Invasive Species: Riparian planting resulting from trading programs will use only native plants, locally sourced where possible, and projects will be required to be rigorously monitored and maintained to control invasive until native vegetation is established. No adverse invasive species effects are expected.

F. Budget Information

SF424A

Detailed Budget

Budget Narrative

Comment [c8]: These are coming. Budget is roughly \$1.5 million over three years:

- \$250k to each state agency
- \$300k to WP for staff time
- \$70k to TIAER to build out NTT for ID, and WA
- \$100k in contracts for outreach/facilitation in each state

These are the big items.

G. Indirect Costs

Not applicable, no indirect costs are claimed in this application

H. Matching

The Freshwater Trust will provide \$xxx,xxx in in-kind and \$xxx,xxx in cash matching funds for this grant.

I. Declaration of Previous CIG Projects Involvement.

The Freshwater Trust: TFT was awarded funding from the 2011 national Conservation Innovation Grants program to complete the framework for water quality trades in Oregon and apply the framework on-the-ground in 2-3 Oregon watersheds. As of this writing, TFT has secured agreements with two regulated entities in Oregon (City of Medford and Metropolitan Wastewater Management Commission – Eugene/Springfield) to transact the first temperature credits in 2012. In addition, the U.S. Forest Service has committed to purchasing verified outcomes from projects implemented to the same rigorous quality standards as compliance grade credits. Projects purchased by the U.S. Forest Service will be tracked and monitored for conservation purposes (just like a credit) – setting an intriguing precedent for traditional conservation funders to become “conservation buyers”. TFT expects to have commitments from two additional public entities (City of Ashland and Port of St. Helens) and a second conservation buyer (Oregon Watershed Enhancement Board) secured by mid 2012. These six agreements represent more than \$13,000,000 in credit transactions and will result in more than

60 miles of streams restored. This work has laid the foundation for the regional agreement described in this proposal, and will help to inform the process.

Willamette Partnership: The Willamette Partnership’s Counting on the Environment process was funded in part through a grant from the national CIG program. The project created the infrastructure and regulatory agreements necessary to support markets for multiple ecosystem services in the Willamette River basin. It was built in a way that with minor adaptations could be adapted to new geographies and new credit types. This project will integrate the Counting on the Environment outcomes with other ecosystem market tools, and packaged them in a way that speeds transfers to other geographies. Willamette Partnership also received support from the Oregon state CIG program in 2009 for the development of a nutrient trading tool and to fund the verification of pilot projects implemented using the protocols.

J. Declaration of Beginning Farmer or Rancher, Limited Resource Farmer or Rancher, or Federally Recognized Indian Tribe

Not Applicable

K. Declaration of EQIP Eligibility

At least 4 EQIP-eligible producers will be directly involved in commenting on and shaping the state-specific appendices. Indirectly, this project will have enormous benefits for EQIP-eligible producers. The \$13,000,000 in credit transactions already in the works cited above represent over 300 landowners, most of whom are EQIP-eligible. No CIG funds will be used to implement projects to generate credits or to provide payments to landowners.

Comment [c9]: TFT, please revise this #)

L. Certifications

SF424B

M. DUNS Number

N. CCR registration

Comment [c10]: To be included later