Conservation Innovation Grants Program – Final Progress Report (June 2011 – December 2014) Submitted by The Freshwater Trust

1. A comparison of actual accomplishments with the goals and objectives established for the reporting period and, where project output can be quantified, a computation of the costs per unit of output.

The project goals, objectives and timelines outlined in the original proposal are described below, followed by a report on the current status of each element.

A. Operational and Replicable Market Framework Within the project period, TFT and Willamette Partnership will integrate proven, completed elements of market infrastructure – standardizing credit project workflow so a project moves seamlessly from idea to implementation, lowering transaction costs and transfer time to new watersheds.

1. Software Connections (Primary software work: June 2011 – December 2014; refinement ongoing) Objective: Fully functioning, scalable and secure software connections that streamline data flow between private and public platforms, registries, etc., and standardize data management through project accreditation according to regulator-approved protocols for credit validation, verification, regulatory certification, registration, and reporting.

Progress: Willamette Partnership staff have selected Basecamp as a software for managing the credit issuance process. Procedures for using Basecamp have been developed in coordination with The Freshwater Trust and a template is in place to guide users through uploading documents, requesting project validation and scheduling verification activities.

2. Plan for long-term selfsustaining market infrastructure (Identify needed market volumes, fee levels, revenue sources, roles: June 2011-December 2011) **Objective:** Develop business models to sustain the components of a high-functioning regional market infrastructure.

Progress: Partners have worked closely with experts (including World Resources Institute) to identify the various roles and services required to establish a functioning and sustainable ecosystem market, highlighting the opportunities and challenges presented by necessary partnerships between key actor groups. Partners have assessed: 1) the revenue sources associated with market development and operation; 2) the existence of economies of scale both within and between programs; 3) the total market volume required to support sustainable transactions under a variety of scenarios and timeframes; and 4) the importance of collaboration between organizations in establishing consistency, integrity and transparency within the field. A report summarizing these findings is currently in external review by several experts within the fields of water quality trading and habitat offsets.

Additionally, Willamette Partnership, often performing the role of market administrator, is testing many of the assumptions to refine the analysis. Willamette Partnership is using the analysis as a budgeting tool for planning around market

3. Technical Service Manual (Outline ready Jan 2014; partner review/comments March 2014; manual complete May 2014)	Objective: Guide for project developers that helps them through the requirements and procedures of project implementation and accreditation.	operations. In addition to this evaluation, The Freshwater Trust (TFT) has worked extensively with municipal finance experts, utilities managers and bank managers to identify the range of financing options available to purchase credits. Both TFT and Willamette Partnership are exploring alternative models for project verification (e.g., programmatic audits instead of individual project verification) to determine if there are more efficient ways to achieve the desired robust review of credit generating projects. Note: While substantial work has been accomplished on this task, the delayed issuance of National Pollution Discharge Elimination System (NPDES) permits to credit buyers in Oregon has in turn delayed several transactions and postponed completion of the business models. Original analysis was based on the idea of a high transaction volume market and those figures will continue to be refined in the future. Recent application of the analysis has focused more heavily on those areas where market infrastructure overhead, which might otherwise get spread across multiple programs, can be reduced to match the modest scale of current operations without compromising the ability to scale up when transaction volume increases. Progress: Version 2 of the General Crediting Protocol (GCP) has gone through final review by the Counting on the Environment (COTE) coordinating team and was released on November 1, 2013. Other work has been done to create templates for new geographies, including: working to further revise the Project Design Form and Validation Checklist to reflect usage and concerns about landowner privacy (relevant in the Rogue, Klamath and other basins); development of a template and example Stewardship and Monitoring Plan; development of a template for navigating Basecamp in the credit issuance process, which will serve as a guide for all new users.
4. Templates for Legal	Objective: Create templates for	Progress: Willamette Partnership and TFT have
Agreements and Contracts	the legal and operational	developed a master contract form for verification
(Initial contract drafts	scaffolding necessary for	services, with scopes of work for individual programs
complete by July 2011;	market function (e.g.	or projects. Issues considered include release and

ready for use Sept 2011)	contractor agreements, supply chain contracts, etc.).	for dispute resolution, as well as flexibility and adaptability to different markets. TFT created a Landowner Access Agreement form and a Memorandum of Lease template. The Access Agreement allows TFT to conduct site preparation prior to signing a full lease. This new procedure gives TFT the ability to tailor landowner leases to as built site conditions. The Memorandum of Lease notes key lease provisions and is recorded in the property's chain of title.
permit holders to purchase s restoration projects, likely in will apply the completed ma	ubstantial volumes of temperature the Willamette, Rogue and Lower rket framework to these projects,	regon Watersheds. Finalize contracts with waiting NPDES e reduction credits generated through streamside Columbia watersheds. TFT and Willamette Partnership demonstrating efficiency, replicability and scalability.
1. Signed agreements with 100-200 EQIP-eligible producers (Ongoing process; landowner recruitment levels set annually based on credit requirements of buyer: June 2011 – December 2014.)	Objective: Recruit and sign agreements with farmers to complete credit project on their land.	Progress: The Freshwater Trust's Landowner Relations Manager continues to recruit landowners in the Rogue River basin for the Medford program. To date, TFT has signed agreements with a total of 7 EQIP-eligible landowners in the Rogue basin for credit projects and expects to sign at least 2 additional contracts in the basin in 2015. While substantial work has been accomplished on this task, the delayed issuance of NPDES permits to credit buyers in Oregon has limited landowner recruitment in basins outside the Rogue. That said, to date, TFT has succeeded in securing additional signed credit project agreements with 5 EQIP-eligible landowners in the Lower Columbia River, John Day, Calapooia River, McKenzie River and Klamath basins.
2. Implementation of revegetation projects (Ongoing process; project levels set annually based on credit requirements. June 2011 – April 2014)	Objective: Implement credit projects.	Progress: Between June 2011 and April 2014, ten riparian restoration projects were implemented in the Rogue (6), Lower Columbia (1), John Day (1), Calapooia River (1), and McKenzie River (1) basins. In November 2014, two additional revegetation projects were implemented in the Rogue River basin. Site preparation has also begun on one additional project in the McKenzie River basin. This project will be planted in early 2015. These projects all generate temperature credits. In addition to the revegetation projects, The Freshwater Trust and Willamette Partnership transacted the first phosphorus credit in the Klamath River basin in October 2014. Restoration actions on this site included a livestock exclusion fence and off channel watering facility, facilitating passive restoration of the

		riparian area.		
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3. 70,000,000 – 150,000,000 temperature (kilocalorie) reduction credits fully transacted (Ongoing; kilocalorie credit levels set annually based on credit requirements. (June 2011 – April 2014)	Objective: Complete the full transaction cycle for temperature credits.	<u>Progress:</u> A total of 286,550,000 temperature credits have been verified since 2011. The Freshwater Trust has begun implementation on three additional project sites that will generate an estimated 110,000,000 credits in the next six months.		
C. Protocol Adaptation Strategy for Other Pacific Northwest Watersheds & States. Using the protocols developed for use in the Willamette River basin, the Willamette Partnership will identify protocol adaptations required for approval in other basins throughout Oregon, Washington, and Idaho. This adaptation strategy will inform how protocols, market infrastructure and methods can scale nationwide.				
1. Strategies for policy and other rule changes (Identify changes required for adaptation in other states: June 2011 – May 2012)	Objective: Identify gaps and develop strategies for making adjustments to protocols in other states.	Progress: Through the development of Version 2.0 of Willamette Partnership's General Crediting Protocol for generating water quality credits, and through extensive conversations with EPA Region 10 and partners in Oregon, Washington and Idaho, Willamette Partnership and TFT were able to identify key policy gaps in the region that impede adaptation of protocols to new watersheds. This process led to the strategy behind the Joint Regional Recommendations (JRR) process to convene conversations with water quality agencies on coordinated approaches to water quality trading in the Pacific Northwest. A 2012 Conservation Innovation Grant was secured to fund this work (with Willamette Partnership as the lead applicant), and significant progress has been made. In 2013 and 2014, Willamette Partnership and The Freshwater Trust convened a series of 4 interagency workshops to share experiences and lessons learned between the states and identify regional best practices around trading program design and implementation. In 2014, this process resulted in the development of a Joint Regional Statement and a set of draft Joint Regional Recommendations, which will be piloted through 2015 and revised to incorporate lessons learned. Oregon is currently in the process of updating its guidance and developing a state rule on trading and formally revising. Both will reflect the effort completed in the Joint Regional Recommendations process. The final rule is expected in December 2015. Idaho DEQ is also revising state guidance documents.		
2. Review of existing	Objective : Review existing and	<u>Progress:</u> TFT has worked directly with 10 regulated		

drivers and needs to inform protocol development in other states (Identify changes in regulatory structures in other states necessary for markets: June 2010 – May 2013)

pending regulatory drivers and needs of potentially affected regulated entities that will inform protocol development and implementation of the market system in other states. With these elements in place, other states may move forward with adoption of the framework, as developed for the Willamette and Oregon. Formal adoption beyond Oregon is not a deliverable under this grant, as that will require new, state-specific resources, work plans and timelines.

entities and regulators in Oregon, Washington, and Idaho to better understand regulatory compliance obligations and potential restoration actions that could better meet these obligations. TFT has initiated analysis of thirteen specific restoration actions to determine quality standards, calculation methodologies, verification and validation procedures, and state policies needed to incorporate actions as creditable alternatives in a variety of regulatory contexts, including CWA sections 401, 404, and 402, ESA section 7 and Natural Resources Damage Assessments charged by superfund trustees.

- **D. Strategy for National Network of Regional Environmental Markets.** As entities across the country explore environmental markets as a tool for expanding conservation budgets, it is important that market innovations and developments are communicated from one region to another. This project objective will link efforts in the Upper Mississippi River basin, Chesapeake Bay, and other parts of the country to create a nationally connected system of regional ecosystem markets.
- 1. Strategy for connecting regional markets to national network (Draft strategy; partner review: June 2013 Sept 2013)
- 2. Planning workshop (Conduct workshop, finalize strategy; Oct 2013 – March 2014)

Objective: Link efforts in the Pacific Northwest, Upper Mississippi River basin, Chesapeake Bay, and other parts of the country to create a nationally connected system of regional ecosystem markets.

Progress: A strategy for connecting regional efforts to the national scale was finalized in early 2013 and is currently in progress using funds from USDA Office of the Chief Economist and the Electric Power Research Institute. In May and October of 2013, Willamette Partnership and World Resources Institute convened a group of water quality trading practitioners and stakeholders from around the country at the Johnson Foundation's Wingspread Facility in Racine, Wisconsin. The purpose of these gatherings was to explore how a national network would support consistency, integrity and transparency in water quality trading and to move the National Network from concept into reality. Willamette Partnership and World Resources Institute have since formalized the National Network goals and objectives, participants, and operating principles, and developed draft materials to support a national dialogue on the options and recommendations to improve consistency, innovation and integrity in water quality trading. Current efforts include soliciting and incorporating feedback from the full group of National Network participants in order to develop a range of memorandums on trading program elements.

- **2.** The reasons why goals and objectives were not met, if appropriate. Tremendous progress is being made in coordinating with other states and an increasing number of interested stakeholders. Implementation of credit-generating projects, while increasing significantly, remains unexpectedly constrained due to a slowdown in issuance of NPDES permits to regulatory buyers. These delays are caused by continued legal challenges to regulatory standards and are not linked to water quality trading in any way. States and Region 10 EPA are continuing to work out a process for updated temperature standards, updating Total Maximum Daily Loads (TMDLs) and renewing NPDES permits. Other areas of the grant are progressing as anticipated, and in some cases are exceeding expectations.
- 3. Additional pertinent information including, where appropriate, analysis and explanation of cost overruns or high unit cost. N/A