



A program of the Willamette Partnership
A product of the Counting on the Environment process

Ecosystem Credit Accounting System

As ecosystem markets emerge around the world, demand is growing for standards and tools that ensure these markets achieve their environmental goals with the greatest efficiency and transparency. A broad group of public, private and non-profit stakeholders, led by the Willamette Partnership, recently developed a standardized approach to accounting for environmental benefits and impacts in Oregon's Willamette Basin.



The Willamette Partnership is now engaged in the expansion of this approach, covering new geographic areas, new types of benefits and impacts providing the very standards and tools other emerging markets need to succeed.

Protocol Development

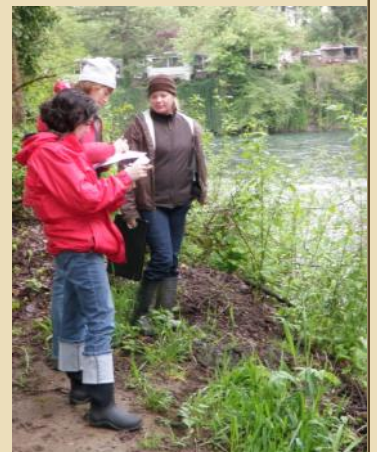
The Counting on the Environment process builds standards and market designs that work for compliance and voluntary markets. Stakeholders approved four currencies in 2009; water quality, upland prairie, wetlands and salmonid habitat. Additional currencies in development include the calculation of nutrient reduction, stream functions, and additional habitat types.

Technology Development

The Willamette Partnership has built technology to speed the process of quantifying the benefits of restoration actions taken over time, turning these actions into credits and making them available for sale in an efficient and transparent way. The Ecosystem Crediting Platform and Registry create new opportunities for land managers to strategically invest in the environment.

Market Operations

The Willamette Partnership is administering multiple portions of the ecosystem services market emerging in the Willamette Basin including project eligibility standards, verification training, and arranging public certification and registration.



Willamette Partnership: 2550 SW Hillsboro Hwy., Hillsboro, OR 97123

(503) 681-5112 www.willamettepartnership.org

Protocol Development: Counting on the Environment

The Willamette Partnership led the Counting on the Environment (COTE) process in Oregon that developed an ecosystem credit accounting system with approved protocols for a two-year pilot test. Version 1.0 of this first of its kind system includes a general crediting protocol and four specific environmental currencies. The general crediting protocol provides the overall framework and process for attributing credits and debits to actions that affect the environment. The currencies, meanwhile, calculate the raw credit scores that enter the general crediting protocol. The first four currencies covered in the ecosystem credit accounting system are:

Water Quality

The Water Quality Protocol covers thermal load reductions from riparian re-vegetation. The temperature crediting is built from the Dept. of Environmental Quality's Shade-a-Lator. Nutrient credits are on the way.



Upland Prairie

The Upland Prairie Crediting Protocol captures the habitat functions provided by upland prairies. The crediting protocol prioritizes prairie protection, but can be applied to restoration and enhancement.



Wetlands

The Wetland Crediting Protocol uses the Oregon Rapid Wetland Assessment Protocol (ORWAP) as its base for credit and debit calculations. The credit can be applied to wetland enhancement, restoration and creation.



Salmonid Habitat

The Salmonid Habitat Crediting Protocol can be applied to riparian re-vegetation, large wood placement, culvert removal and riparian fencing on the crediting side and site level actions that alter vegetation, hydrology, contaminant levels, or other natural systems on the debiting side.



The outputs of the ecosystem credit accounting system are ecosystem service credits that can be traded to meet compensatory mitigation responsibilities. It can also track the voluntary conservation outcomes of restoration.

Technology Development



Assessing existing conditions, estimating the benefits of different restoration alternatives, consistently quantifying these benefits as credits, verifying them, acquiring agency approval and then tracking them over time will require coordinated efforts by dozens of parties. The Willamette Partnership built a system that facilitates this and is in the process of building the technology that will

ensure its accessibility and efficiency. The Willamette Partnership is co-developing two pieces of internet-based technology, to aid in the operation of ecosystem service markets, an Ecosystem Crediting Platform and Registry. The Platform leads qualified land managers through the credit creation process step by step and the Registry takes these credits and makes them available for trade and tracks their custody over time. Markit Environmental Registry is the exclusive registry provider for credits generated through the accounting system.



Market Operations

The Willamette Partnership administers portions of the Willamette Basin's emerging market for ecosystem services. This work includes:

- Guiding the selection and development of appropriate currencies and pilot projects.
- Coordinating the production of credits by determining project eligibility, assisting with verification, arranging public certification and facilitating registration.
- Providing training on the credit issuance process and its approved currencies.
- Verifier training and accreditation. Accreditation requires training on the verification protocol, a proficient understanding of the system's metrics and protocols and a commitment to the standards and principles outlined in the Willamette Partnership's Verification Protocol.



Guide to the Process of Credit Creation:

The General Crediting Protocol provides market participants with the overall framework they need to develop, sell, and buy ecosystem credits using the Ecosystem Credit Accounting System. This system is designed to deliver transparency, predictability and ecological integrity. It can be tailored to specific places.

