



Whatcom County Ag-Watershed Project Fact Sheet #3

Beneficial Actions for Agriculture & Watersheds: Accounting Tools and Protocols

The Ag-Watershed Project recognizes that one size does not fit all, when it comes to caring for waters in and around Whatcom County's agricultural lands. This project uses a structured approach to engage landowners in planning for strategic enhancement actions to maintain, repair or protect larger-scale watershed processes that are taking place in their neighborhood, while also strengthening agriculture. Landowners in the project focus area worked with project partners and regulators to identify opportunities to improve both agriculture and watershed health. This fact sheet, #3 in the series, introduces beneficial actions for enhancing agriculture and watershed health, as well as the measurement, tracking and accounting tools that will be tested in two pilot projects in the Bertrand, Fishtrap and Kamm Watersheds.

How do we know if enhancement projects are beneficial?

We need scientific tools and rigorous protocols to measure, track, account for and incentivize actions that directly address adopted priorities and help to enhance agricultural and watershed health. Practical beneficial actions that could be eligible for crediting through a marketplace approach in the project focus area (see Fact Sheet #2) will be identified and implemented by the Ag-Watershed Project team and partners working with landowners and regulators in the pilots.

In Phase 2 project partners will develop and refine appropriate methods to measure, verify and track the benefits of implementation actions aiming to enhance or protect specific agricultural land and/or watershed priorities. The proposed tracking and accounting protocols will provide a structured, transparent way to assess progress on the agreed actions. These tools will also be used to account for the benefits generated, in order to deliver appropriate incentives, compensation or credit to participating landowners for their actions.



The Ag-Watershed Project's benefit accounting tools, tracking system and protocol rely on two fundamental principles:

You can't get credit for what you can't measure.

Credit for specific beneficial actions can only be generated if the agricultural-watershed enhancement benefits of those actions can be measured, using credible scientific methods which can directly connect the actions and their benefits to specific agricultural and/or watershed enhancement priorities.

You can't get credit for what isn't taking place.

Credit for specific beneficial actions can only be secured where baseline and post-action calculations of credit have been independently verified, work done on the ground has been confirmed, and ongoing verification reports indicate that the required performance standards are being met.

For information on the project approach and the fact sheet series see the Ag-Watershed Project website <https://sites.google.com/site/wcwatershedag/>

How is this project different than what we're doing today?

A marketplace approach should provide a simple, straightforward system and tools to connect people willing to pay for, or invest in, agricultural and/or watershed enhancement actions with people who can take those actions. This project will develop a local tracking and accounting system (see steps in the diagram on the right) using existing regulation and adopted priorities, as outlined in the Agricultural Strategic Plan for Whatcom County, the WRIA 1 Watershed Management Plan, local, state and federal regulation.

Other building blocks for an ag-watershed tracking and accounting system include existing incentive-based tools, such as Whatcom County's PDR program, USDA's Conservation Reserve Enhancement Program (CREP), and learning from similar initiatives underway locally and across the U.S. A local example below illustrates how a system like this could help quantify and communicate the many benefits of actions intended to strengthen agriculture and improve on-site and larger-scale watershed processes.

Diagram: The Ag-Watershed Project tracking & accounting system includes protocols and procedures for each of these steps.

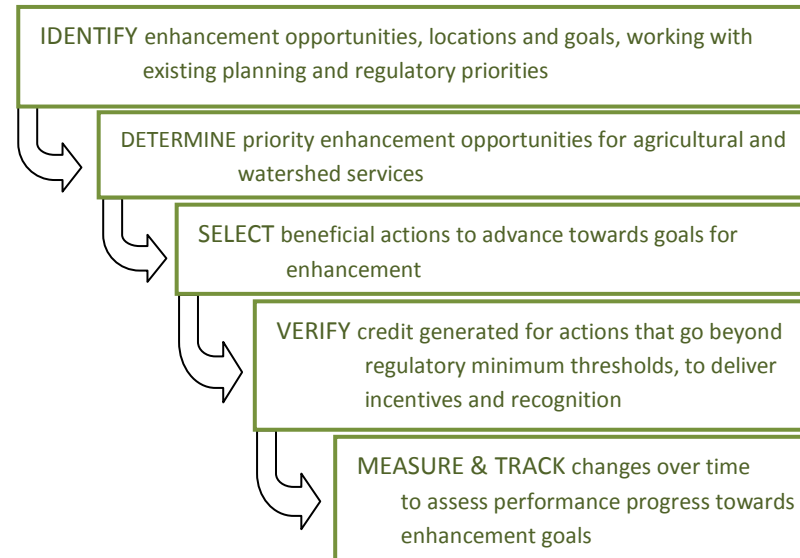


Table: Benefits provided by the 2002 Fourmile Creek Watershed project to date.

ACTIONS in FOURMILE	PRIOR TO 2002	AFTER 2002
Fourmile Creek stream-side land management by landowners and local Diking & Drainage District	– Periodically clean, dredge ditches and creek to clear out reed canary grass and accumulated sediments	– Cleaned creek and ditches in 2002, then planted riparian vegetation and filter strips to control reed canary grass and sediments in creek – Control beavers, trim spread of vegetation into fields
ENHANCEMENTS ACHIEVED	PRIOR TO 2002	AFTER 2002
Ag – Maintain drainage network to keep fields in production	X	X
Ag – Reduce dredging & maintenance needs of drainage ditches		X
Watershed – Water temperature		X
Watershed – Dissolved oxygen		X
Watershed – Reduced fecal coliform loads into Tenmile Creek		X
Watershed – Habitat for fish		X

The Fourmile Creek Watershed was the site of a 2002 stream enhancement project, (see actions on the right). Landowners planned for, planted and maintained native vegetation buffers of varying widths designed to protect the creek with additional shade while minimizing the amount of land taken out of agricultural production. In this way, both agricultural and watershed benefits were generated (see enhancements achieved in bottom of table on the right). In the future, the Ag-Watershed tracking and accounting tools could be used to quantify the range of benefits generated through actions such as these, and to support the delivery of recognition, incentives, or compensation for actions that go beyond the minimum required to enhance watersheds and strengthen agriculture.