

Commentary: A farm for the future

Dan Murphy | Updated: March 23, 2012

For tourists who've only visited the Pacific Northwest during our brief summers, the snow-capped mountains, towering fir trees and bright blue skies are postcard perfect.



Copyright 2102 The Herald**Jim (left)and Andy Werkhoven on their dairy farm.** Those of us who actually live in western Washington, however, know that the long gray winters typically drop massive snowfalls on nearby Cascades Mountains, often followed by a warm front that brings torrential rains and snow melt to the region. The result can be devastating floods in the lowlands where agriculture—particularly dairying—is still big business.

That was the scenario more than 20 years ago when the Skykomish River flooded in November 1990. At the time, local cattle ranchers Dale Reiner and his brother feared losing a big piece of the property on their 300-acre farm in Monroe, Wash., some 30 miles northwest of Seattle, thanks to the raging river's attempts to cut a new channel across their pasture lands.

That's when they connected with John Sayre, director of the Northwest Chinook Recovery. Sayre was excited about potential salmon habitat on the Reiners' riverfront land, according to a story in the (Everett, Wash.) *Herald* newspaper, and spearheaded a project that diverted part of the Skykomish River flow into nearby Haskell Slough to create new salmon spawning grounds and, not coincidentally, protect the Reiners' farm.

The eleven ponds strung along Haskell Slough provided excellent still-water habitat for endangered salmon during peak river flows, but they lacked an outlet back into the river, so fish were likely to end up stranded when winter and spring floodwaters receded, Sayre said. "The Skykomish River is the second most productive wild salmon river in Puget Sound," he explained. "You've got about 20% of the remaining wild chinook and half of the remaining wild coho here."

Northwest Chinook Recovery helped form a public-private partnership with the Reiners, their neighbors and tribal, state and federal agencies to excavate 7,000 feet of the channel, linking the string of ponds back up with the main channel. The Haskell Slough project was widely celebrated by politicians and local leaders—even President George W. Bush once visited the site.

A digester comes to town

Thanks to the success of the Haskell Slough project, Reiner and Sayre got other farmers with substantial riverfront property—including area dairy farmers Jim and Andy Werkhoven—to create the Lower Skykomish Habitat Conservation Group, which began working with the local Tulalip Tribes.

Fast forward to 2002, when the Werkhovens assumed a leadership role in developing a collaborative partnership between their farm and neighboring dairy and beef producers affiliated with the Sno/Sky Ag Alliance.That's also when tribal officials Daryl and Terry suggested that the alliance initiate use of an anaerobic digester that could extract energy from cow manure.

The alliance created Qualco Energy, a nonprofit that now operates an anaerobic digester on former Washington State Reformatory property about a mile from Werkhoven Dairy. The 1.45 million-gallon digester processes liquid manure and pre-consumer food waste to produce methane that fuels a generator whose electricity goes onto the Snohomish County Public Utility District's power grid. The process also creates marketable compost.

The electricity and compost sales help keep the Werkhovens' dairy operation viable, when numerous other local dairies are struggling, and helps protect the area's salmon streams.

The Werkhoven's efforts to run a cleaner, greener dairy operation won them the Outstanding Dairy Farm Sustainability Award in the inaugural U.S. Dairy Sustainability Awards this month. And it got them the front page of the business section in local newspapers, a space typically reserved for aerospace and high-tech success stories.

"We commend Werkhoven Dairy for the leadership role they took in developing this unique and collaborative partnership with a focus on resource conservation and preserving the environment in a way that makes good business sense," said Erin Fitzgerald, senior vice president of sustainability for the Innovation Center for U.S. Dairy, which was founded by dairy producers.

Andy Werkhoven now makes it his job to find "slop" he can convert from landfill waste into digester-produced energy. Almost three-quarters of the alliance's \$700,000 in annual revenue comes from fees for processing recovered grease, cattle blood, fish processing waste and expired beer, wine and soda.

The group is now exploring ways to use methane to heat vegetables hothouses and power "green" vehicles.

As Werkhoven noted, "It's exciting to be part of something that makes a difference."

Even better that animal agriculture is front and center in a project that delivers all the benefits that urban consumers expect: Sustainability, environmental protection and renewable energy production.

Oh by the way: The Werkhoven's DariGold milk products are pretty darn good, too.

The opinions expressed in this commentary are solely those of Dan Murphy, a veteran food-industry journalist and commentator.

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