

Pioneers in Conservation:

Stories from the Field

January 2007



Dairy farmer, Wiard Greoneveld, standing on a porous weir constructed to meter flows through his slough. The weir helps provide flood control for his farm and new habitat for salmon.

John Sayre of Northwest Chinook Recovery takes a critical look at new off stream habitat created on the Groeneveld farm along the Skykomish River near Monroe



Andy Wilcox and Barrie Wilcox proudly display their family farm's Salmon-Safe certification. Photo credit: David Burger, Stewardship Partners.

Pioneers in Conservation is a project of Shared Strategy for Puget Sound



Pioneers in Conservation: *Creating a Partnership for Farms and Salmon*

Some amazing things are happening among farmers and salmon advocates in the Puget Sound Basin! Not only are they working together, but as they work, there is a new realization dawning that **saving farms is good for salmon, and that saving salmon is also good for farms.**

After two years, the fledgling Pioneers in Conservation grants program is making such wonderful progress and having such far-reaching impact that we wanted to bring you these remarkable Stories from the Field. We believe these stories illustrate the growing power behind the Partnership for Farms and Salmon proposed in Shared Strategy for Puget Sound's Draft Puget Sound Salmon Recovery Plan and now being implemented through the Pioneers program.

Following the stories, is a brief report with grantees, background, and statistics on the current accomplishments of Pioneers in Conservation.

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For further information about the Pioneers program, please contact:

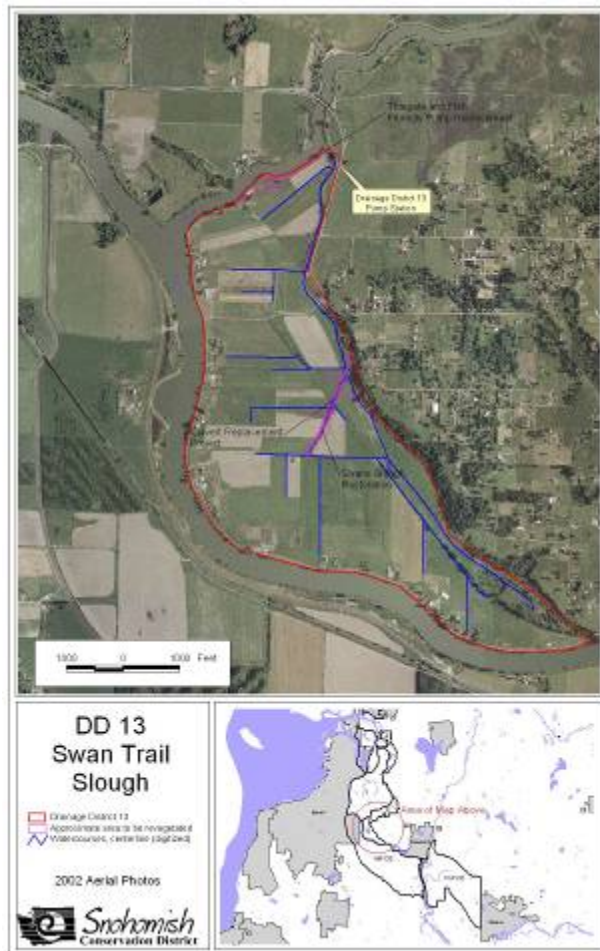


Don Stuart
104 W. Meeker St., Suite A
Puyallup, WA 98371
(253) 446-9384
dstuart@farmland.org

Snohomish County Drainage District No. 13: Helping Salmon and Saving a Farming Community

The Pioneers project with Drainage District 13 is a perfect illustration of the growing interconnectedness between farming and the environment in the Pacific Northwest.

Drainage District 13 (DD13) is a small, special-purpose government created and funded by local residents and run by volunteers to keep this tiny community dry enough to farm and live. The almost 600-acre district is located near Everett, Washington in the Snohomish River Estuary, where tides raise and lower the river from Possession Sound all the way to the city of Snohomish. The 19 farms in DD13 lie below high tide. Early settlers erected dikes along the banks of the river to reclaim the land behind – much like their European ancestors had done for centuries in places like the Netherlands. The dikes are equipped with tide gates that open to let water drain out at low tide, but are forced closed when the tide comes up, protecting farmland from inundation. Several generations of farmers have lived here, working the land, improving the soil, and making this little community a worthy contributor to the local farm economy. Swan Trail Slough, a waterway that once provided refuge for fish escaping the main channel, now drains the district's farmlands.



Snohomish Conservation District map/aerial
showing Drainage District 13 along the Snohomish River

But the Snohomish River is also home to dwindling runs of wild Chinook salmon now listed under the Endangered Species Act (ESA). The collective impact of population growth and human activities has degraded much of the Snohomish River watershed. Once-robust commercial, sport, and cultural salmon fisheries are disappearing. Native American tribes with strong ties to these fish have treaty rights to protect and restore them. Public pressure is intense to prevent the extinction of the Snohomish River Chinook salmon and to preserve the immense natural value of this watershed. Heightened regulations affect almost every activity associated with the river.

So when DD13's 58-year old tide gate began to succumb to rust, residents feared that they would never get permits to replace it. The 20 year old pump was still running, but so obsolete they couldn't buy replacement parts anymore. There was talk that if the tide gate and pump failed, the district's dikes, like neighboring District 6, could be marked for breaching and the land returned to fish habitat as it had been before their forefathers settled here in the late 1800s. And there was a definite lack of money to do the work.

Drainage District 13 learned about the Pioneers grants program. Their Board was impressed that the partners included some that were friendly with agriculture as well as with the environment, so they decided to apply. They wanted a new, efficient tide gate that would let more water out of the district at low tide, draining farmland and flushing the stagnant slough to improve water quality. Their existing heavy steel tide gate with its rusting hinges barely opened for fish to enter or leave. A tide gate made of lighter material like fiberglass or aluminum would open wider, also allowing salmon to pass freely.

The district also wanted to replace the pump used to drain the fields after fall floods and before spring planting with one that wouldn't kill fish passing through it. Newer pumps require less maintenance, use environmentally friendly oil, and can be designed to pass fish without injuring them. Finally, the district wanted to replace invasive weeds like reed canary grass, blackberry, and knotweed with native plants on the slough banks to provide habitat for fish and other wildlife, improve water flows and quality, and reduce erosion and maintenance. The nineteen farms in DD13 would be drier and more farmable. A whole new area of improved habitat would be opened up for juvenile salmon seeking refuge from the river's main channel.



"The Farm" is one of the agricultural operations located in DD 13 and protected by the new tide gate and pump.

The wish list grew as the potential for funding inspired district farmers. With funding available, a willing landowner with a successful agro-tourism business would volunteer land and labor to create an educational trail through restored habitat. He would invite school groups to adopt the area and learn how farmers could serve as good stewards of the land. Another volunteered land for a large buffer if funding to replace a collapsed culvert could be found.

Not everybody in the District immediately warmed to the idea, however. Most residents were suspicious about environmentalists in general, and specifically, the potential land-use consequences of harboring endangered salmon – worried about what would happen if they “let salmon into the District.” But given the benefits, even they ultimately signed on. Some of the most skeptical have now even warmed to the possibility of riparian habitat improvements on their own land. Such is the power of an idea – especially one with broad credibility and backed by money!



Another of the farms located within DD 13

The Pioneers in Conservation money attracted other money and support. Snohomish County established an inter-local agreement to help the district pay for the tide gate. NOAA Fisheries awarded state-of-the-art water quality monitoring equipment to the Snohomish Conservation District to measure improvements in water quality and Snohomish County Surface Water Management pitched in to help with monitoring. Conservation District engineers provided technical designs, assisted with permits, and provided construction oversight. The Pioneers award encouraged the Community Salmon Fund to also support replacing a collapsed culvert and planting the buffer on private land. Community members stepped forward to pot and care for plants, assist with paperwork, and even clear weeds.

Armed with funding, new credibility, community backing, and the obvious benefits for fish and other wildlife, the District got its permits from the Washington Department of Fish and Wildlife. At this writing (January 2007), District 13's riparian habitat work and trail construction is still underway. Weather delayed pump installation, but the new tide gate is in place, and its first test convinced even the most stalwart doubters. In November 2006, the Snohomish River experienced near-record floods. The entire district filled with water, leaving only a ribbon of dike and houses above the waterline. As the floods receded, district residents walked the dike to watch the lightweight tide gate open wide, draining water from the district at a rate they had never before seen. The new tide gate allowed the district to leave the old pump turned off for

most of the event – a good thing since salmon fry are already entering the slough in numbers not seen in recent history.

This project also produced an unexpected benefit to district residents' future plans. DD13's farmers had been questioning their future. Many thought agriculture in the Snohomish River Valley was doomed, either by environmental regulations or drainage problems that would bankrupt them and condemn their land for wetland restoration projects. Some hesitated to invest in improvements or even maintain their farm businesses. All had withdrawn in frustration from the political arena certain that county government wanted them to fail at farming and give in to restoration. Most had become vocal adversaries of environmental protection.



Workers installing the new, aluminum tide gate.

Today, however, the community is acquiring a new sense of pride and self-identity. Agriculture business owners who run traditional beef and hay operations, agro-tourism, and nurseries, are discussing ways to market their products locally. District farmers and residents are beginning to discuss how DD13 can become a model for other area districts to promote agricultural products grown with respect for the salmon and the environment. The district is beginning to reach out to neighbors on the surrounding hills to help them recognize and reduce the rising impacts of impervious surfaces and poor landscape management on Swan Trail Slough. The community is making plans to educate other farmers and the public through workshops and site visits.

Most importantly, the Pioneers in Conservation program helped DD13s farmers realize a new self-confidence with the knowledge that they are valuable, perhaps even indispensable, in saving salmon and protecting the region's environment while they provide a source of locally grown agricultural products. With that confidence comes the realization that in exchange, the other three or so million people living in the Puget Sound area may well be prepared to do what is necessary to help farming survive, both environmentally and economically, well into the next millennium.

The Wiard Groeneveld Farm Project Growing Partnerships for Farmers and Fish

by Patricia Chambers

They met regularly at the Dutch Cup Restaurant in Sultan, Washington connected by more than casual conversation. They were connected as a band of farmers and landowners who shared a valley, as families who lived and worked beside a productive and vigorous river and as a community that was coming to realize that their long-established way of life was in danger of disappearing.

Table-talk included observations on the impact of encroaching development: the ever-expanding clusters of condos and building complexes, the rising value of real estate, and the noticeable loss of once open lands. Urban expansion seemed to be efficiently rewriting their history, threatening to replace their local active agriculture and to adversely alter fish and wildlife habitat in a river system that ran right through the heart of their livelihoods and community.

For dairy farmer Wiard Groeneveld (pronounced Vee-ard), and six other neighbors who farmed along the Lower Skykomish, it seemed imperative that something be done to not only keep farmers on the land, but also to help salmon recover and preserve habitat along the river corridor. Ranked as one of the top three salmon producing rivers in the Puget Sound, and home to 15-20% of the remaining wild Chinook in the region, they recognized a real urgency to the task.



The threat of development caused Washington's Skykomish River to be listed among America's Most Endangered Rivers of 2005. This image shows the Skykomish as it flows through the towns of Gold Bar and Sultan, with Puget Sound in the background. *Photo credit: American Rivers; image by Commenspace, www.commenspace.org.*

Accustomed to facing many challenges, Groeneveld and the other farmers set out with gritty determination to accomplish a more sustainable future for both fish and farmers. They formed a non-profit organization, called the Lower Skykomish River Habitat Conservation Group (LSRHCG) and eventually developed an agricultural habitat conservation plan (HCP) that could be applied to farms along the lower stretch of the Skykomish River. Their efforts would lead the way for habitat restoration projects in the Valley, including Groeneveld Slough.

Groeneveld Farm

Four cows equals one acre of land. That's a significant relationship for a dairy farmer who runs a 400-acre farm and lives beside a river that is prone to flood portions of his fields, leaving behind a jumble of scattered wood and other debris. With forces like that at work, it's not surprising that the Groeneveld Slough Restoration Project was designed to emphasize subtle and simple enhancements--restoration that lets the river do all the work.

The comprehensive project was designed to draw upon a variety of restoration techniques using the natural terrain and other available resources on the land to the best advantage. The combined effect of the construction work: flood control while also adding salmon habitat.

According to Bob Aldrich, Principal Watershed Steward for Snohomish County and one of the consultants on the Project, "We're dealing with what's here, what's functioning in the system and working with it."

One important feature of the slough enhancement includes the construction of a porous weir to help meter the flows of the river. Rather than the more customary approach of hauling in rocks and mounding up the broken stone, Groeneveld chose to use cotton wood trees and other silva-culture already present on his property. The process includes hand-selecting the trees, which are nearby the slough, carefully 'releasing' them and then stacking them at the head of the slough into something that resembles a large beaver dam.



Main channel of Groeneveld Slough from porous weir

Innovative approaches like this seem to be first-nature for Groeneveld. John Sayre, general manager of the project and director of Northwest Chinook Recovery, a non-profit organization dedicated to supporting farmer and landowner interests in regards to salmon enhancement and habitat restoration, says of Groeneveld, "Wiard and other farmers in the Valley are responsible for helping to change the way things are conducted." It's a good thing, says Sayre, "Without landowners getting involved, salmon recovery won't work."

Sayre's point is underscored by the critical function Groeneveld Slough provides for juvenile salmon in the Lower Skykomish. Situated on the mainstem of the Skykomish River, the slough serves as the first way station for fish just downstream from the confluence of the Sultan River and the nearby salmon hatchery in Wallace.

According to Aldrich, the Groeneveld slough enhancement will create one of the biggest rearing areas for juvenile salmon in the lower Skykomish. “By providing a place for juveniles to delay their travel down the river,” says Aldrich, “The Groeneveld slough will allow the small fish to grow bigger, stronger and smarter.”



While Wiard Groeneveld’s fields will still flood during high water, the Pioneer work will protect them from erosion, debris, and damage

A Partnership for Fish and Farmers

Funded in part by a Pioneers in Conservation Grant, the Groeneveld Slough Restoration project reaches completion this fall. It will accomplish the sort of scenario the LSRHCG was originally envisioning—a shared benefit for fish and farms. For the Groeneveld farm, the project reduces erosion and loss of fields and for salmon, it removes a fish barrier, improves habitat by removing an infestation of knotweed, and creates an important side channel rearing and refuge along the mainstem Skykomish River.



These cottonwood “posts” will grow to trees and create a natural protection from flood water erosion and debris on adjacent farm fields

Between the six Skykomish Valley farmers who first came together to form a conservation group and lead the development of the HCP, they collectively own 1,500 acres and actively farm along 15 miles of the Skykomish River between Sultan and the confluence with the Snoqualmie River. Though the group represents a significant potential impact to salmon recovery, their influence extends even further than that. Shortly after the concept for the HCP was born, the group hired Sayre to be their executive manager and joined forces with the Tulalip Tribes, conservation

groups and sports anglers in drafting up the plan, which was finalized in 2001. Several years later, the plan expanded to include the Snoqualmie River Watershed.

The collaborative process developed positive relationships with the Tulalip Tribes, landowners and other farmers, says Groeneveld. “I think the plan brought a lot of people with different interests together and showed that support for habitat and Chinook salmon, also meant support for farmers.”

Sayre adamantly agrees, “If you don’t save farms you don’t save habitat.” It’s the sort of motto that the group hopes catches on and spreads to other groups working to protect farms and fish. According to Sayre this is already happening in part due to the success of their efforts: the Senate Agricultural Committee proposed that Sky Valley become the example of how to resolve conflicts between landowners, agencies, tribes, and environmentalists and that the development of their HCP serve as a template for Western Washington farmers and state and county interactions.

Sayre admits getting people from different backgrounds and interests to work together isn’t easy. As he sees it, it’s a lesson in learning how to listen, to build trust, and to understand opposing views. For Groeneveld, this coming together of opposing views seems to represent one of the crowning highlights of the restoration work being done on his farm.

“We’re building habitat,” he says smiling, “But we’re also building relationships with people. Its taken time but it’s been great to see it develop.”

Stewardship Partners: Creating Markets for Salmon-Safe Farm Products

If you ask David Berger and Larry Nussbaum of Stewardship Partners how to save salmon, they’ll tell you its all about saving farms.

Stewardship Partners is the local agent for a regional certification program called “Salmon-Safe” that provides independent third party certification for farms that grow their products in a way that is friendly for the salmon environment. Their comprehensive assessment, conducted by specialists in both farming and fisheries, evaluates a farm’s management practices in six categories:

- riparian and wetland protection
- water use/irrigation management
- erosion and sediment control
- chemical use
- animal management
- promoting native biodiversity

The Salmon-Safe “seal of approval” offers credibility, exposure, and new marketing opportunities for participating farmers. Once certified, a farm operation is able to use the Salmon Safe logo, point-of-purchase materials, and promotional information to distinguish their operation in the marketplace. They also gain positive public visibility through an education and media campaign. For many farms, especially those that direct-market to the public, that label can be important.

So when Berger and Nussbaum learned about the Pioneers program, they felt it was a natural fit for their efforts. With Pioneers funding, they could complete on-the-ground work, like planting riparian corridors, erosion control, improved irrigation management, and other tools helpful for salmon, and at the same time help the farmers market their products to environmentally responsible consumers who care about salmon recovery thus helping the farms succeed in business – an essential prerequisite if the land is to stay in agriculture and out of more intensive, environmentally damaging, development.



These plantings along the banks will provide riparian habitat for Snoqualmie River salmon and improve the market for this farm’s products.

Stewardship Partners’ project involved work with six different farms in scenic and mostly pristine East King County along the Snoqualmie River corridor between Fall City and Duvall, Washington. Some of their farmer cooperators were already Salmon-Safe certified, and were completing additional work on their farms to assure that their certification would continue. Others were completing improvements that would be required by their application for certification. The agenda included riparian enhancements with appropriate plantings, invasive plant removal, fish blockage removals, and other on-the-ground actions to help priority salmon habitat along the Snoqualmie River. Most (though not all) of these six farms were selling directly to the public, either on site or at farmers markets in the populous urban centers of the Puget Sound area.

In addition to their on-the-ground salmon habitat work, Stewardship Partners also promotes their participating certified farm businesses with an aggressive advertising and marketing campaign. The Salmon-Safe label is posted at the farms and at their farm or farmers market stands, and is displayed in their own advertising and promotions. But it is also promoted generally. Grocery

outlets are encouraged to do special Salmon-Safe promotions for their customers. And, recently, a series of bus-side ads are appearing in local urban areas promoting the Salmon-Safe label.



Bus ads like this one make the linkage between local farms and salmon recovery in the Puget Sound area.

Salmon-Safe certification is not only for direct-market farmers. It can also of great value for farmers who sell their products into the more impersonal, but increasingly sensitive wholesale marketplace. Even though environmentally concerned consumers still represent only a small percentage of the market, they are already having a disproportionate influence on the overall marketplace as large food distributors jockey for market share. Certified producers often find it easier to sell their products even in the wholesale market.

David Berger and Larry Nussbaum help bring salmon to the forefront of peoples thinking as they make their purchase decisions. Their hope is that, if enough people see these ads and purchase Salmon Safe products at farms or farmers markets or in special grocery promotions, a critical-mass of consumer support will be reached that can dramatically improve both the conduct of agriculture and the market for local agricultural products in the Puget Sound area.

Bertrand Creek Levee Set Back: New Life for Nooksack Salmon and Local Farmers

Farming along the shores of the vigorous and flood-prone Nooksack River can be a challenge. Until recently, many local landowners saw the answer as having a dike that was higher and stronger than your neighbor's dike. So long as the river overtopped or broke through first onto somebody else's property, your land stayed dry.

The increasingly obvious problems with such a strategy, however, have motivated public flood control experts and enlightened landowners to begin looking for another way. This, combined with new motivation to improve conditions for endangered Nooksack Spring Chinook salmon led the Nooksack Indian Tribe to team up with Whatcom County River and Flood Division, U.S. Corps of Engineers, Whatcom Conservation District, Bertrand Creek Watershed Improvement District, Whatcom County Diking District No. 4, and four local farmers, and to apply for a grant from Pioneers in Conservation to make important improvements.



This shot, taken in December 2006, shows the good condition of the new Bertrand Creek dike shortly after the November flood. One of the protected farms lies to the left, with Bertrand Creek shown to the right.

The farms involved lie along the Bertrand Creek, where it joins with the Nooksack River – one of the largest and most important salmon rivers in the Puget Sound area. Bertrand Creek had been diked and closely confined for most of a mile upstream from its confluence with the Nooksack. Both winter and spring flooding had a habit of breaking through this dike, causing erosion and other damage both to the dike and to adjacent fields and imposing unwelcome repair costs. But for the farmers, the problem has been especially acute in the spring. While not usually as high as the winter floods, the spring backwater floods are the ones that generally do not run off and dry out in time for planting – a major problem for their farming operations. These farmers needed a long-term solution.

At the same time, the closely channelized Bertrand Creek was providing little of habitat value for the troubled salmon runs on the Nooksack River. The local watershed plan placed a high priority on improving channel conditions in Bertrand Creek and in improving riparian habitat for salmon. But small salmon fry could find no place in the area to hide, feed, and grow.

The project partners developed a plan that would set the Bertrand Creek Dike substantially back, away from the creek by some 50 yards from the current channel and onto the properties of the adjacent farmers. The rebuilt dikes would actually be lower than before, but would be much more substantially built to minimize erosion. And, even though they were lower, given the much widened area for the river to spread, they could be engineered to provide greater protection for the farms – protection from at least a 5 year spring flood. The farmers would, in future, only need to face perhaps three spring floods in 15 years, a big improvement from what they had faced in the past.



Bertrand Creek, facing down-stream. The Nooksack River lies beyond the line of trees in the distance. The old dike is shown at left. The muddy area to the right had been recently flooded at the time of this picture. This will be the area that is restored to natural riparian habitat for salmon now that the new, replacement setback dikes are completed.

The area between the newly setback dikes would be restored to natural conditions with riparian planting, placement of large woody debris, and other restoration work to open this new area up as spawning and off-channel habitat for Nooksack salmon. It was an expensive proposition – with the total budget for all this work estimated at \$834,000. Included in this was \$71,000 for arranging and purchase of a conservation easement from the adjacent landowner who would need, in turn, to be able to purchase other land to replace that which was lost to the project. So the Nooksack Indian Tribe applied for a Pioneers grant of \$71,000 to fund the conservation easement component of this overall budget.

Work started on the project during 2006, and by the late fall, basic construction of the new dikes had been completed – just in time for the record November 2006 floods. When James Lee, the project lead for Whatcom County’s River and Flood Division, joined Pioneers staff for a site visit in mid-December, it was with some trepidation. The floods had occurred too soon after construction for the critically necessary plant growth to have occurred that would provide natural vegetative armor for the new dikes.



This is another shot of the newly completed dike. The farm is to the right and the area to be restored for salmon to the left. The Nooksack River lies beyond the line of trees in the distance.

But the work had stood up well. There were a few signs of erosion, and some field debris. But, for the most part, the dike was in mostly serviceable condition to face the balance of the winter and spring season. The habitat improvements in the expanded area between the new dikes has yet to be completed. But the work has clearly survived the first big test. And prospects for both the farmers and the fish are better now than they have been in a good long time.

The Wilcox Dairy: A Local Family Farm that Promotes Salmon Friendly Practices **By Patricia Chambers**

All things are connected. It's an age-old lesson that may have taken some holiday grocery shoppers by surprise last season when they went to purchase an essential ingredient in their eggnog—eggs—and see a “Salmon-Safe” logo.

What do chicken eggs and salmon have in common? A lot, according to Wilcox farms, one of the largest producers of fresh milk and eggs in the Pacific Northwest and the first farmer in the Nisqually watershed to receive “Salmon-Safe” certification for their eco-conscious farming practices.



Andy Wilcox and Barrie Wilcox proudly display their family farm's Salmon-Safe certification.
Photo credit: David Burger, Stewardship Partners.

The 1,800-acre farm situated on the Nisqually River, received the Salmon-Safe certification earlier this year from the Stewardship Partners, a non-profit group that helps private landowners to restore and preserve natural resources. Qualification for the eco-label required the family-owned farm to meet several environmental standards that seek to provide better water quality and habitat protection for salmon and other wildlife.

Wilcox earned its certification by voluntarily putting several sustainable practices to use on their farm. Working with the Nisqually Tribe, they restored native trees and vegetation along portions

of Horn Creek and the Nisqually River to shade water and improve habitat for the Chinook, coho, chum, pink and steelhead that spawn or over-winter in the streams that are on or near their property.

Wilcox also significantly reduced their use of commercial fertilizers and pesticides on the land; fenced off livestock from the rivers and streams to create large buffer zones; and perhaps the most monumental task of all, established a system to remove from the farm, most of the animal waste produced by over 1 million laying hens and baby chicks. The accomplishment is an important step in helping to maintain water quality.

To keep up with the task, the recently renovated chicken houses are equipped with a conveyor-belt system to remove the manure that would otherwise pile up. Several truck loads each day haul away tons of manure to the largest organic farmer in the state. According to Barrie Wilcox, The farm also composts some of the animal waste on site. “That way, the manure becomes part of a bigger cycle of restoring the soil and helping to grow food for the organic farmer,” says Wilcox.

Keeping the farm and the chickens healthy also means healthy eggs, says Wilcox. The family adds flax seed to the birds’ feed, making the eggs rich in omega-3 fatty acids. “It’s far better tasting than a spoon full of cod liver oil, and we’re able to provide the benefits of fish oil to our customers by doing this.”

Wilcox intends to label its other products, including dairy, as more of the Farms’ land-base is evaluated and certified by the program, but for now their organic and omega-3 eggs are enjoying the limelight of a growing market that caters to consumer demand for food products produced with environmentally sensitive methods.

“Our customers are telling us that this is what they want,” says Wilcox. “We’re listening to them, and we’re adapting to make good things happen for them and for the environment.”

Making the Connection: Agriculture & Salmon

Many of the major salmon-bearing streams in the Puget Sound flow through productive agricultural valleys. Because of this, farmers in the region play a critical role in salmon recovery. Wilcox farm is a leader in recognizing this, says David Burger, executive director of Stewardship Partners.

According to Burger, their success in combining environmentally friendly practices with farming serves as a model for other farmers. “As one of the largest family-owned dairy operations in Washington, Wilcox Farm is a leading example of how agriculture and salmon conservation go hand in hand,” says Burger.

Enthusiastic about the success of the Salmon-Safe program, Burger says that the eco-label certification is catching on. Stewardship Partners is currently promoting the program throughout the Puget Sound as a means to engage farmers in regional salmon recovery and so far 25 farms throughout the area have been awarded the Salmon-Safe label.



Andy Wilcox stands next to a Pioneers in Conservation funded planting. This southwest corner of the farm, near the Nisqually River, was planted in Spring 2006 with the help of the Nisqually Tribe. The planting helped to improve valuable off-channel habitat, refuge and potential spawning grounds for salmon. Photo credit: Dominique Lewis, Shared Strategy.

Opening up the Farm

The Wilcox family wasn't always as environmentally conscientious as they are now. Since the early 1900s they farmed the land, like many other dairy farmers in the area, without taking proactive steps to ensure healthy water quality and habitat for salmon and other animals living near the streams.

In the mid 1980s things began to change on the farm. A group of government and fisheries representatives, called the Nisqually River Council, came together to manage and develop a plan for the Nisqually River basin.

Initially skeptical, the Wilcox family joined the group intending to protect their property rights. What happened was the beginning of a long-time friendship between the Wilcox family and Nisqually Tribal elder and noted salmon conservationist Billy Frank, Jr.

Gradually, the Wilcox family became one of the proponents of the plan helping to shape actions that affect not only their farm but the entire watershed.

Today, fourth generation family member Andy Wilcox, who runs the egg operations, says the farm intends to continue to expand its environmental awareness and education efforts both internally and externally.

“We'd like to open up the farm and let visitors see how it runs, and encourage our employees to get involved,” says Andy.

To involve the public, the family aims to build a 2-1/2 mile interpretive trail starting from the chicken houses, where the organically raised laying hens and chicks live, to Horn Creek, which runs into the Nisqually River.

To complete the work, Wilcox will continue to build on collaborations with the Nisqually Tribe, the Nisqually River Council, and the Nisqually River Foundation.

Andy hopes the project sparks interest with some of the Wilcox employees, who he imagines could lend a helping hand by collecting data as part of the Nisqually Tribe's Salmon Watchers Program.

For visitors to the farm the interpretive trail would serve the mutual benefit of providing an opportunity to learn about salmon habitat and salmon life cycles while seeing a working farm in action.

According to Andy, it's about providing an experience, "People really want to know that the things that they are buying are authentic. If we open up the farm here and let them see how things are being raised and let them see the connection to sustainable practices, we'll be accomplishing a lot."



Andy Wilcox explains, "The young chickens are trained to roost above the conveyor belt that carries the manure away." The Wilcox chicken houses use state-of-the art equipment. Photo credit: Dominique Lewis, Shared Strategy.

In addition to the Wilcox Farm's eggs, Stewardship Partners has certified dozens of other Salmon-Safe products throughout Puget Sound including vegetables, apples, berries, and even wine.

You can see the Salmon-Safe label on Wilcox Farm's eggs and other agricultural products in PCC Natural Markets, at other local retailers, and at Seattle area farmer's markets.

Dungeness River Irrigation Water Conservation Saving Water for Fish AND for Agriculture

In recent years, Clallam County farms like the Maple View Farm (pictured below) have been concerned that their existence might be threatened by the troubling over-appropriation of

available water resources on the Dungeness River. And local tribes and environmentalists have been similarly concerned for the fate of Dungeness salmon.



The Dungeness is a key river for both agriculture and for salmon on the North Olympic Peninsula. The Clallam County “sunshine coast” boasts a dry and friendly climate which attracts tourists and immigrants alike to its comfortable, rural lifestyle. But that same dry climate, the growth it is attracting, and the irrigation needs of local agriculture have placed immense pressure on the Dungeness system which, if all water demands were fulfilled, would quickly run dry. Needless to say, salmon runs on the river would fare poorly in such a scenario. And farmers would be in deep trouble.

The local environmental and agriculture communities have been engaged in long negotiations about how to protect the water in the Dungeness. And among the ways most people agree the problem can be addressed is through efficiencies in the management and use of agricultural irrigation water. So the Clallam Conservation District developed a project to do just that and applied for a grant from Pioneers in Conservation to pay for it.



Construction underway of irrigation pipelines in Clallam County that replace older, less efficient irrigation ditches and save water in the over-appropriated Dungeness River.

The project replaces an older system of irrigation ditches that were used to convey water from the river to farmers' fields. Instead, a new, more modern piping system will provide a more reliable source of water with much less lost to evaporation or seepage. The new system has the added advantages that it is easy to maintain and saves in electrical power needed for pumps.



Bull in an irrigation ditch, prior to completion of the new project.

The result is more water in the river for fish, which also indirectly improves water quality in the river. And it keeps livestock out of the irrigation system (see above) – improving the quality of the irrigation water and of the resulting run-off back into the ground or into the surface water system and making treatment easier.

California Creek Rehabilitation Project Habitat for Fish – Dry Fields for Farmers

Whatcom County's California Creek watershed had become a problem for farmers and for salmon. In wet weather, the area became sodden and unmanageable for farming, yet at the same time the creek was providing little in the way of wetland and habitat benefits for fish. But doing something about it was a challenge. There were so many landowners along the creek and so many groups affected by or interested in it, just getting them together to discuss solutions had become a major undertaking.

California Creek supports self-sustaining runs of coho, steelhead, and cutthroat trout and historically supported chinook populations. But parts of the stream had been heavily impacted by livestock, had been artificially straightened, and had had natural vegetation and woody debris removed severely impacting the fish. All this was particularly tragic because California Creek runs directly into Drayton Harbor, so its fish runs had suffered little harvest pressure over the years. So the stream was also not functioning well either for the fish or for the farmers along the planned site of work for this project or downstream from it. It was unusable for several of the wet months, and tended to flood downstream farm properties, limiting their utility for agriculture.



New channels and ponds being carved in an existing farm field in the fall of 2006. California Creek itself runs through the trees in the distance.

The objective of the project is very straightforward: restore a portion of the area to a fully functioning salmon riparian stream habitat, wetland corridor while providing flood protection and improved drainage for adjacent and downstream farm properties. Some 2,100 feet of salmon stream is being restored for fish habitat, livestock exclusion fencing is being installed while three of the four participating landowners install CREP buffers.

By January 2007, substantial work had already been completed on the project. Skilled excavation work had produced a sinuous channel and several open ponds that will provide a resting and feeding area for salmon while helping to conduct water away from valuable farmlands. Along the banks, somewhat higher areas have been laid up to serve as planting locations for larger trees that need the elevation. These will shade the ponds, keep them clear of invasive vegetation, and help cool the water temperature for fish. When planting is complete in the spring of 2007 and after the new trees and shrubs have some time to mature, this location will become a classic salmon habitat area. With the landowner's willing participation, it can be readily reached and viewed by educators and students – in fact arrangements have been made for Ferndale High School environmental classes to tour the site as the work progresses.



Lower portions of the downstream neighboring farm pictured in the distance will also benefit from this project.

But beyond the work itself, the California Creek project is also a big success in organizing community action. In addition to the landowners, there were seven different state agencies, local governments, and community groups who made commitments to work on this project. The Whatcom Conservation District teamed up specifically with the landowners plus the Washington Department of Fish and Wildlife, Whatcom County Public Works, Whatcom Sheriff's Office, Washington State Conservation Corps, and local contractors. And other interested groups were kept informed. All of this took time as the local watershed coordinator developed the human relationships that were needed, built credibility with the landowners, and slowly crafted a work plan that met everyone's needs.

The result of all this work, and of Pioneers funding, will be a much better place for fish to live and for farmers to continue to farm. And a community will have honed its skills at working together to solve the problems they have in common.

Pioneers in Conservation

A Progress Report – January 2006

Background:

The Draft Puget Sound Salmon Recovery Plan submitted to the NOAA Fisheries in 2005 contained a revolutionary new concept: that if we are to save our region's salmon, it might be necessary also to save its farms. This led to the prospect of ending the clash between agricultural landowners and salmon recovery advocates – that it might be possible to create, instead, a constructive *partnership for farms and salmon*. See Draft Puget Sound Salmon Recovery Plan, "Proposal for the Prosperity of Farming and Salmon," Chapter 6, page 411 on line at: <http://www.sharedsalmonstrategy.org/plan/index.htm>.

Shared Strategy for Puget Sound obtained initial funding from the National Fish and Wildlife Foundation to test this concept by creating a new grants program that would fund salmon recovery projects affecting agriculture in a way that was *beneficial to both salmon recovery and the farm business*. American Farmland Trust was asked to help develop the program, promote it with farm and fish communities, solicit applications, and, with Evergreen Funding Consultants, to help administer the grant-making process. Additional funding was obtained from The Nature Conservancy and from the Tulalip Tribes Charitable Fund. And the Pioneers in Conservation grants program was born.

There is, of course, nothing new about landowners working with environmentalists to save salmon. But the creation of a grants program whose conscious purpose was to demonstrate that saving farms could be good for fish and saving fish could be good for farms struck a chord among a large and growing group of environmental professionals who struggle on the ground to improve wildlife habitat on private lands and among the farm and forest landowners with whom they work. Here, finally, was official recognition and monetary support for a truth most of them had come to accept – that saving farms and saving the environment must go hand in hand. Without the one, the other is not possible. Both must happen at the same time.

The breadth of appeal for the Pioneers program was illustrated by the groups which agreed to publicly endorse or financially support it representing a coalition of interests from both the agriculture and salmon recovery community. With leadership from Shared Strategy, funding came from the National Fish & Wildlife Foundation, The Nature Conservancy, and the Tulalip Tribes Charitable Fund. In addition, the program was publicly supported by the Washington State Conservation Commission, Washington State Dairy Federation, Whatcom County Agriculture Preservation Committee, Skagitonians to Preserve Farmland, and American Farmland Trust. This broad support sent an important message to applicants and landowners about the credibility of the program.

Processes and Particulars:

Pioneers in Conservation launched two initial rounds of applications with deadlines of September 2 and November 4 of 2005. Then, with additional funding from the National Fish and Wildlife Foundation, a third application round was held with a deadline of June 30, 2006. We

convened a highly qualified application Review Team to evaluate and make recommendations on proposals. The members came from among the top experts and leaders in Puget Sound agriculture and the environment and provided an excellent knowledge base and a balanced perspective on the proposals. Participating in one or more of the teams were:

- David Troutt, Nisqually Indian Tribe
- Shirley Solomon, Long Live the Kings and Skagit Watershed Council
- Jay Gordon, Washington State Dairy Federation
- Dale Reiner, Snohomish County Farmer and Snohomish County Farm Bureau
- Stu Trefry, Washington State Conservation Commission
- Jerry Gorsline, Washington Environmental Council
- Zach Ferdana, The Nature Conservancy
- Ron Wesen, Skagit County dairyman and Skagit County Farm Bureau

The Review Team met after each round, discussed the group of proposals that had been submitted, and provided their recommendations for funding. Using those recommendations, final funding decisions were made at a meeting of Shared Strategy for Puget Sound and the primary funder, the National Fish and Wildlife Foundation.

Our three Pioneers grant rounds brought in 35 separate proposals requesting over \$1.6 million in funds for salmon and farms projects around the Puget Sound Basin. Of these, the Pioneers program was able to commit \$767,929 in funds for 17 projects.

The Request for Applications, announcements, decision criteria, and other relevant documents as they were used for the June 30, 2006 application round are attached for reference.

The 17 Funded Projects:

Seventeen independent projects were funded from locations around the Puget Sound Basin. Each of these projects was one that supported the local salmon recovery plan. And each project met the dual goals of helping recover salmon while also benefiting the farm business. Those of us who were involved in performing outreach and administering the Pioneers program were not only impressed with the positive fish and farming connections represented by all of these projects, but we were also convinced that a great many more such projects are out there in need of funding in addition to the 35 that applied and beyond the \$1.6 million in requested funding.

Each of the 35 project proposals we received represented a separate, often intriguing story about farms and fish. As you can see from the stories presented earlier these projects are having a far-reaching impact on attitudes and outcomes for both the farming and the environmental communities in the Puget Sound Basin. For every story we were able to set forth in detail, there are many more represented by all of the 17 projects we were able to fund, listed below:

Drainage District 13 Tide-gate and Restoration Project- \$60,900

Ben Krause, thefarm1@gte.net; Monica Van der Vieren, mvanderv4137@earthlink.net

Grant funding is being used to replace the Swan Trail Slough tide gate and pump with an intermediate system, and enhance riparian habitat by removing invasive species and planting native vegetation.

“This project (Drainage District 13 tide gate and restoration) creates a great community partnership between farmers, environmentalists, Tribes, and others who care about both salmon and farming,” said Dale Reiner, a Snohomish County farmer. “By helping both farms and salmon, it shows how, rather than being the problem, viable, successful farms are a necessary solution for restoring salmon runs.”

California Creek Rehabilitation Project - \$32,200

Frank Corey, Whatcom Conservation District. fcorey@whatcomcd.org

Whatcom Conservation District is using grant funds to improve water quality, enhance instream and riparian habitat, and improve fish access along California Creek by installing livestock exclusion fencing, removing three culverts, planting native vegetation, and constructing a bridge to replace a degraded stream crossing. Farmlands both upstream and downstream from the project will be drier and more useful for farming and will face less flooding than before.

Bertrand Creek Levee Project - \$71,000

Ned Currence, Nooksack Tribe, ncurrence@nooksack-tribe.org

The Nooksack Tribe is coordinating with Whatcom County to use grant funds to purchase a conservation easement to widen the floodplain of Bertrand Creek and restore natural channel migration processes as part of a larger effort involving levee setbacks and riparian plantings.

“Whatcom County farmers and salmon are both struggling as growth competes for resource lands. Pioneering projects like these by the Nooksack Tribe and the Conservation District are great examples of how we can save them both,” said Whatcom County Executive Pete Kremen. “The futures of fish and farms squarely depend on each other.”

Groeneveld Slough Project - \$45,000

John Sayre, Northwest Chinook Recovery, nwchinook@aol.com

Northwest Chinook Recovery used Pioneers funding to increase productivity in an off-channel slough of the Skykomish River by installing LWD, porous weirs, grade control structures, and cottonwood boles, flood fences, and riparian buffers. This project will reduce erosion, loss of fields, and woody deposits on the adjacent dairy farm.

Wilcox Farm Riparian Restoration & Restoration Planting - \$55,780

Justin Hall, Nisqually River Council, jshall@nisquallyriver.org

Grant funds were used by the Nisqually River Foundation to improve riparian and off-channel habitat along the Nisqually River by installing livestock exclusion fencing and replanting five acres of riparian forest. This project will provide additional protection for eroding farmed fields, and enhance Wilcox Farm’s “Salmon-Safe” certification application.

Skagit Drainage and Fish Initiative - \$80,625

Steve Hinton, Skagit River System Cooperative, shinton@skagitcoop.org

The Skagit River System Cooperative is helping to implement agreements between Drainage Districts and The Washington Department of Fish and Wildlife that allow districts to maintain farm drainage infrastructure while protecting fish from maintenance activities. Funding is also being utilized to improve in-stream and riparian habitat by implementing specific provisions of the Drainage District Agreements.

“This project (Skagit Drainage and Fish Initiative) is a first step toward building a lasting partnership between fisheries and agricultural interests in a way that strives to conserve our natural resources,” said Steve Hinton from the Skagit River System Cooperative and one of the project sponsors. “This is just one example of some of the ways where the tribes and the agricultural community are coming together to help achieve mutual goals.”

Dungeness River Irrigation Water Conservation Project - \$99,190

Joe Holtrop, Clallam Conservation District, joe.holtrop@wa.nacdn.net

Clallam Conservation District used grant funds to improve water quality and increase in-stream flows in the Dungeness River by converting two open irrigation ditches to buried pipelines, eliminating livestock access, and treating contaminated drainage at a site that uses fungus to treat contaminated water. Piping both water delivery systems will facilitate more reliable, efficient, and effective management of irrigation water for participating farmers.

Fishtrap Creek Habitat and Flood Integration Project - \$12,360

Darrell Gray, NSEA, dgray@n-sea.org

NSEA is working with a local farmer to improve channel complexity, flood conveyance, and riparian habitat along Fish Trap Creek by removing reed canary grass, placing LWD, and planting 1,200 feet of riparian buffers. Completion of project activities will improve drainage of the adjacent farmland and reduce the need for routine dredging.

Snoqualmie “Salmon Safe” Farm Habitat Restoration Projects - \$68,000

Larry Nussbaum, Stewardship Partners, ln@stewardshippartners.org

Stewardship Partners is using grant funds to work with numerous farmers to restore and enhance over three miles of riparian habitat, improve connectivity between the Snoqualmie River and an off-channel habitat area, stabilize stream banks, and remove a fish barrier as part of the "Salmon-Safe" certification program and to provide public promotion of the farmer's efforts.

“This is an exciting time for salmon recovery in King County. The Salmon-Safe Farm project is just one more example of the great progress local communities are making by working together for a shared future,” said King County Executive Ron Sims and member of the Shared Strategy Development Committee. “Unique approaches like this are what’s needed to turn the conditions around for both farmers and fish.”

Nookachamps Creek Riparian Restoration on Devries Farm - \$25,700

Perry Welch, Skagit Fisheries Enhancement Group, pwelch@skagitfisheries.org

Skagit Fisheries Enhancement Group is working with a local farmer to enhance riparian habitat along Nookachamps Creek by restoring fencing and planting native riparian buffers along 1,200 feet of riparian zone. This project improves farm drainage and complements and expands previous restoration efforts undertaken by the farmer in the past.

Campbell Creek Wetlands Habitat Enhancement and Drainage Preservation Project - \$18,000

Frank Corey, Whatcom Conservation District, fcorey@whatcomcd.org

The Whatcom Conservation District is improving riparian and wetland habitat along Campbell Creek by constructing 2,500 feet of side channel and elevated planting mounts, and planting over 9,000 native trees and shrubs through enrollment in CREP. This project allows for the storage of winter water for aquifer recharge and summer flow while improving drainage of adjacent agricultural lands.

Interstate 5/Big Ditch Riparian Hedgerow Planting Pilot Program - \$25,300

Joe Holtcamp, Skagit Conservation District, joe@skagitcd.org

The Skagit Conservation District is enhancing in-stream and riparian habitat along Big Ditch by removing reed canary grass and planting a vegetation hedgerow along over 3,000 feet of stream bank. These activities will increase flood storage capacity for farmers and reduce the frequency in which their Drainage District must mow and dredge the ditch.

Nielsen Culvert Replacement Project - \$6,600

Darrell Gray, NSEA, dgray@n-sea.org

NSEA is working with a local farmer to improve fish passage and cross-stream farm equipment access, and reduce maintenance on the Nielsen Farm by replacing an undersized culvert on Caron Creek with one that will allow for passage by various wildlife.

New Haskell Slough Ponds - \$43,000

John Sayre, Northwest Chinook Recovery, nwchinook@aol.com

Northwest Chinook Recovery is clearing a blockage of sand to improve fish passage and construct a new 1-acre pond to encourage salmon access and improve the farm's irrigation and stock watering.

Butler Flats Habitat Project - \$49,941

Steve Hinton, Skagit River System Cooperative, shinton@skagitcoop.org

The Skagit River System Cooperative is improving floodwater conveyance away from the farm, replacing undersized, fish restrictive culverts, expanding and enhancing the 2-year available floodplain at the confluence of Thomas Creek with the Samish River, and establishing a fish-friendly riparian corridor in cooperation with Drainage District #14.

No Name Slough Habitat and Drainage Enhancement - \$50,000

Mike Rundlett, Western WA Ag Association, mwrundlett@fidalgo.net

The Western Washington Agricultural Association is enhancing stream flows, providing shading of the creek, and reducing flooding of adjacent farmlands on a tributary to the Skagit River by converting unused farmland adjacent to the slough to an off-channel wetland, planting a riparian hedgerow, and replacing an undersized culvert with a lightweight bridge.

Ames Creek Restoration with Salmon-Safe Farms - \$24,333

Larry Nussbaum, Stewardship Partners, ln@stewardshippartners.org

Stewardship Partners is restoring 1,000 feet of the Snoqualmie River and restoring vegetation along 3,000 feet of drainage ditches and side channels, resulting in Salmon-Safe certification for participating farms.

For further information about the Pioneers program, contact:

**Don Stuart
American Farmland Trust
104 W. Meeker St., Suite A
Puyallup, WA 98371
(253) 446-9384
dstuart@farmland.org**

Attachments – 2006 Pioneers documents:

- Program Description
- Outreach Summary
- Request for Applications
- Application Form
- Evaluation Criteria