Grantee: North Santiam Water Watershed Council
Project: Cold Creek Culvert Replacement
Grant: OWEB #211-3003

2016 Compliance Monitoring Report

1. As assessment of whether the project continues to meet the goals specified in the grant agreement.

The goals for this project included:

- Providing improved fish passage
- Reconnecting off channel floodplain habitat in the Lower North Santiam
- Increasing anadromous fish habitat complexity by adding large wood in-stream
- Improving water quality and wildlife habitat by improving riparian vegetation diversity and complexity.

Project conditions are meeting design objectives. The improved crossings are allowing up stream fish passage. The 30 large wood structures placed throughout the project reaches appear to be performing as expected, providing complexity to the instream habitat.

Plantings are establishing with maintenance and weed control. The very hot summer of 2015 did cause some mortality in the young plantings. The North Santiam Project Manager will assess the overall loss in the first part of the 2016 growing season. Additional weed control will need to be done on the blackberry and reed canary grass in the spring and fall of 2016 to help the existing plantings until they are free to grow.

2. A description of any maintenance performed.

The North Santiam Watershed Council continues to work with the landowners and project partners to maintain plantings at the site. Since completion of the grant spot spray weed control was conducted by USFWS Partners Program staff in the spring of 2015. Also, the additional trees and shrubs were planted by the USFWS in the lower project reach.

3. An accounting of any costs associated with maintenance and monitoring.

Weed Control & Plantings- Approximately $2,000
$500 in spray work and $1,500 in tree and shrub plantings was paid for in 2015 by the NRCS via inter-agency agreement with the USFWS Partners Program.

The NSWC Council Coordinator conducted 2 sites visits in 2015. One in the early spring (2/25/15) and one in the early fall (9/9/15). Site assessments were made and photo points were taken at each visit.

Brian Bangs, with ODFW Native Fish Investigations program surveyed the Cold Creek project site for Oregon Chub for the fourth year in 2015. Brian provided an email to the one of the landowners highlighting his 2015 results. (See attached email for brief summary and commentary on the fish survey results.)

4. A summary of any public awareness or educational activities related to the project, including identification of any tours or presentations and copies of newspaper or other media coverage about the project.

Newspaper & Newsletters- Staff with the Marion SWCD published an article in the Statesman Journal in June of 2015 highlighting one of the project landowners and the restoration work done on Cold Creek. This article will be counted as a grant deliverable for the OWEB technical assistance grant 213-3046. The Marion SWCD also published an article on the Cold Creek project in their July 2015 monthly newsletter, The Marion SWCD Insider (See attached for both articles).

Displays/Website- The project is posted on the North Santiam Watershed Council's website. http://northsantiam.org/cold-creek-restoration-project/

NSWC Biennial Report- The Cold Creek project were highlighted in the NSWC 2013-2015 Biennial Report which was mailed out to landowners, stakeholders and partners, sent out in the Summer NSWC eUpdate and posted on the NSWC Facebook page and website. (See attached for NSWC Biennial Report)

5. A description of the condition of the project as it relates to the original proposed design and any modifications made during the implementation.

There were no more modifications in the project other than those explained in the project completion report.

6. Photo Point Monitoring

Cold Creek Culvert Replacement OWEB Grant 211-3003 Photo Point Monitoring

Low Water Crossing Site (1)

-122.8925, 44.7535

Bridge Site (2)

-122.8915, 44.7540


08/24/2011


09/09/2011


10/20/2011


05/31/2012


07/25/2013


10/30/2014


1/20/2016


Bridge – Looking downstream

First Log Pool Site (3)

-122.8844, 44.7525

Upper Culvert Site (4)

-122.8817, 44.7537

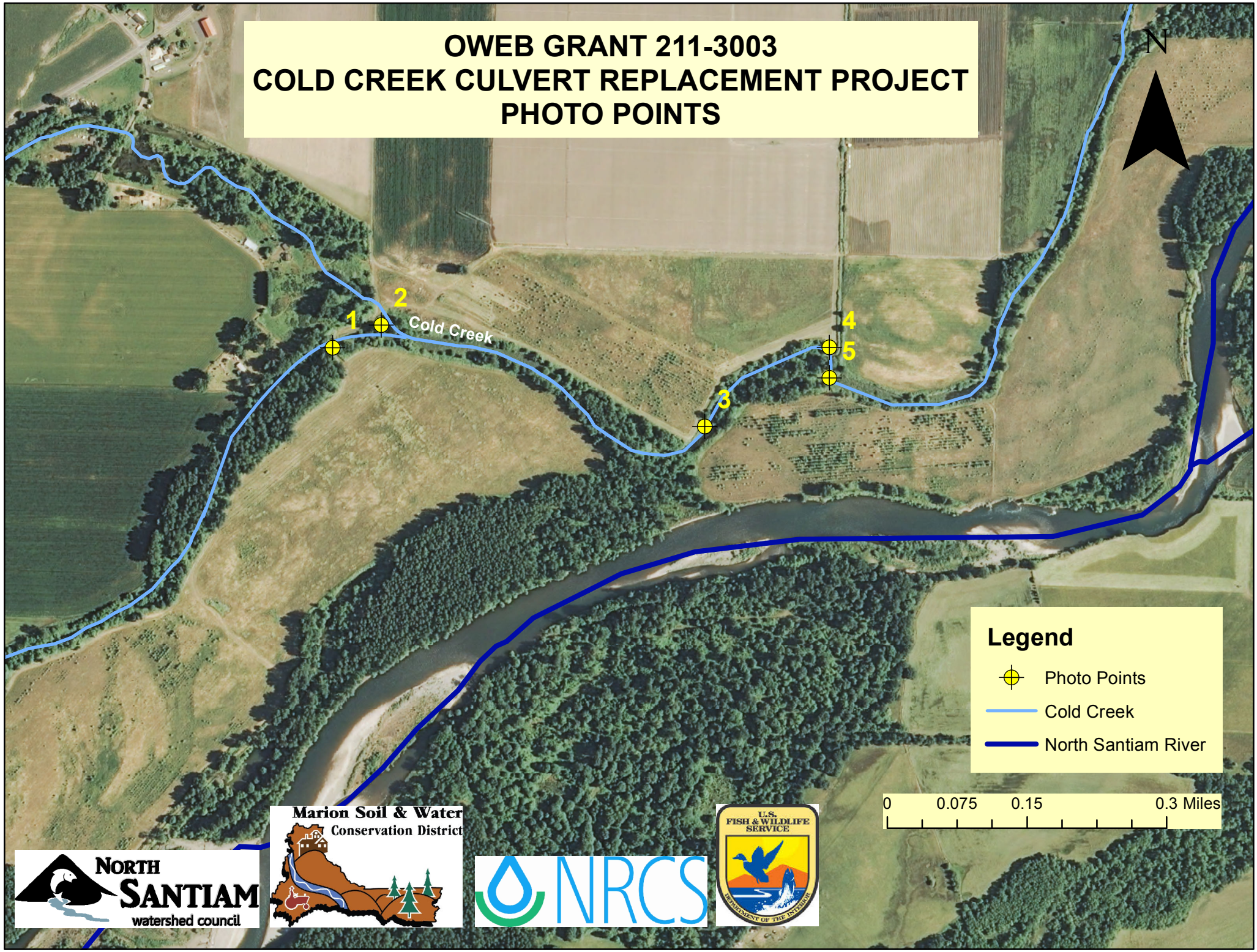
Chub Pool Site (5)

-122.8817, 44.7533

Chub Pool Plantings

-122.8817, 44.7533

Plantings on Cold Creek between Upper Culvert and Bridge


OWEB GRANT 211-3003
COLD CREEK CULVERT REPLACEMENT PROJECT
PHOTO POINTS
N
1
2
3
4
5
Cold Creek
Legend
Photo Points
Cold Creek
North Santiam River
0
0.075
0.15
0.3 Miles
NORTH SANTIAM watershed council
Marion Soil & Water Conservation District
NRCS
U.S. FISH & WILDLIFE SERVICE

Subject:	Oregon chub survey data
From:	Bangs, Brian (Brian.Bangs@oregonstate.edu)
To:	
Date:	Monday, November 9, 2015 1:27 PM

Bob –

I wanted to take a minute and write an email to let you know what we found while surveying the Oregon chub population out on your property earlier this year.

First off, thank you for allowing us access to do our survey! This was our fourth survey on your property since 2011 (we did not do a survey in 2014), and it's been a great opportunity to get out on your property to do this work. Being able to document healthy populations of Oregon chub throughout the Santiam, especially on private, working lands, was one of the reasons we were able to recover the Oregon chub. This year your Oregon chub population was a bit lower relative to previous years, but it's still quite high compared to the other populations around it. Here's what we found:

Oregon chub: 1,641 (95% confidence interval: 1,418-1,911). Also present: threespine stickleback, speckled dace, sculpin, pumpkinseed, redside shiner, largescale sucker, peamouth chub, northern pikeminnow, coho salmon, rough-skinned newts, American bullfrog.

In 2013, we marked 475 Oregon chub in your population with VIE (a red florescent, biocompatible elastic plastic) to differentiate the adult chub in your slough from chub in neighboring sloughs. We have seen small numbers of chub move between populations in the Middle Fork Willamette and McKenzie basins. This demonstrates the ability of chub in these areas to colonize new habitats and for the mixing of local genetics, both of which will hopefully ensure the long term health of the populations in these areas. This year we found that one of the chub we marked on your property moved upstream to a slough near the Hatch Airport, which is the first time we have been able to document movement in the Santiam. I had previously observed Oregon chub moving up to 3.3 miles upstream in the McKenzie; your fish moved 4.1 miles upstream, which is our new record!

Thank you so much Bob! Please let me know if you have questions or comments.

Brian Bangs

Native Fish Investigations – Oregon chub

Oregon Dept. of Fish and Wildlife

28655 Hwy 34, Corvallis, OR 97333

P: 541-757-4263 ext. 224

C: 541-908-1538

F: 541-757-4102

Brian.Bangs@oregonstate.edu

Web: Native Fish Investigations Program

Attachments

- image001.jpg (5.76KB)

Easing into conservation; farmland converts to forest

Dee Moore, Marion Soil & Water Conservation District *11:10 a.m. PDT June 17, 2015*

(Photo: Special to the Stayton Mail)

Retired farmer and Stayton resident Bob Koenig has lived near the North Santiam River for most of his life and, by choice or coincidence, it taught him one of the greatest lessons of his life. As a result, he and a neighbor joined together in 2004 to enroll 331 acres in a wetlands reserve easement that included forested buffers, a first for Oregon.

As part of the Natural Resources Conservation Service Agricultural Conservation Easement Program the property will be returned to native habitat. For the past 12 years the conservation service, with the help of several agencies, has slowly worked toward restoring the easement.

It is now a different place; a place where wildlife gathers.

“We have lots of deer, coyote, birds and fish since we increased the (ground) cover. It’s great I certainly enjoy it,” Koenig said.

The 1996 flood was the catalyst that changed Koenig as well as his property. The river flooded, destroying part of his property; much of the top soil was lost and the underground irrigation that had watered his crops was destroyed.

“There were huge craters … (deep) holes and an awful lot of damage,” Koenig said.

Rebuilding didn’t work. A second storm came in and washed out the dyke, destroying all the repairs.

“We lost 10 acres. We were unable to restore the lower field.”

Environmental conservation became more than just an idea; it became a reality.

Throughout his career Koenig was active in the agricultural community, serving on numerous agency boards including the Oregon Water Resources Congress, Santiam Water Control District, the NORPAC board and the U.S. Department of Agriculture’s Farm Service Agency’s county committee.

It was as chairman of the Farm Service board that Koenig began to learn about conservation practices and how they apply to agriculture. It’s also where he met Les Bachelor, district conservationist for the Natural Resources Conservation Service.

“He was seeing funding and practices that were going on the ground. He was getting a lot of those reports and seeing those easements come through,” Bachelor said.

Koenig asked Bachelor to take a look at his property.

“I was concerned about the erosion on the Santiam,” Koenig said. “I asked Les Bachelor to come out to take a look. It was determined that I qualified.”

The property was ripe for restoration, according to Lance Wyss, regional projects coordinator for the North Santiam Watershed Council.

“The majority of this floodplain forest has been converted to agricultural fields over the last 150 years. Historically, floodplain forests covered large tracts along braided river channels that serve as important habitat for a multitude of birds, mammals, insects, and reptiles,” Wyss said.

The property also had dykes on it to control flooding and access roads across the Cold Creek side channel, all of which decreased native habitat and wildlife population and created barriers for fish.

“Many native species like Oregon chub, red-legged frogs, and beavers live in side channels, which are also essential for juvenile salmon, Pacific lamprey and steelhead on the way to the ocean. In many cases, these channels also serve as spawning grounds for returning adults,” Wyss said.

Koenig’s property, which is currently leased out, is still being farmed. The last crop he planted before retiring was in 2000. He now spends most of his time maintaining the easement. He said he looks after the trees and removes noxious weeds such as scotch broom.

According to Wyss, though the easement cannot be farmed, the property up to the easement is still being farmed and crop production remains the same.

“Environmental conservation can coexist with agriculture; a healthy fish and wildlife habitat can function alongside a working landscape,” Wyss added.

“This is an example of agriculture and conservation going on at the same time. The illusion that you are an environmentalist or not, or you are a farmer or not, is not true. This project demonstrates that. It’s an opportunity to do both,” Wyss said.

Koenig’s easement is becoming a haven. It has been the site of several wildlife studies, including one on osprey.

The birds now nest regularly on the easement. As part of the study, an osprey was caught and had a tracking chip placed under its skin. This allowed scientists to track the bird the following year all the way to Ecuador.

It has also been the site of the study that helped take the Oregon chub off the endangered species list, Koenig said.

He is thankful for the renewed life that the restoration has brought to the easement and he is a firm believer in conservation.

“I would certainly recommend conservation to anyone,” he said.

The project has cost some $35,000, counting money spent, time and equipment donated and some fees that were waived. Marion Soil and Water Conservation District, Santiam Water Control District, Oregon Department of Fish and Wildlife, U.S. Forest Service Detroit Ranger District and the U.S. Fish and Wildlife Service all added their talents, skills and assistance to the project.

MARION SWCD INSIDER

YOUR PARTNER IN CONSERVATION | SINCE 1971

Volume 36 Issue 3 Salem, Oregon July 2015

Farmer Embraces Habitat Restoration

Marion SWCD, Oregon Watershed Enhancement Board and Others Join Forces to Help Local Man Restore Property

Retired farmer and Stayton resident Bob Koenig has lived near the North Santiam River for most of his life and, by choice or coincidence, it taught him one of the greatest lessons of his life. As a result, he and a neighbor joined together in 2004 to enroll 331 acres in a wetlands reserve easement that included forested buffers, a first for Oregon.

As part of the Natural Resources Conservation Service (NRCS) Agricultural Conservation Easement Program the property will be returned to native habitat.

For the past 12 years NRCS, along with the Marion Soil and Water Conservation District, Santiam Water Control District, Oregon Department of Fish and Wildlife, North Santiam Watershed Council, U.S. Forest Service Detroit Ranger District and the U.S. Fish and Wildlife Service, have slowly worked toward restoring the easement.

See Farmer, Page 9

"We have lots of deer, coyote, birds and fish since we increased the (ground) cover. It's great I certainly enjoy it," said retired Stayton farmer Bob Koenig.

SWCD'S ENVIROTHON LEGACY

OFRI TO TAKE OVER ADMINISTRATION AND LOGISTICS OF HIGH SCHOOL COMPETITION

FFA students from Stayton High School participate in the wildlife componet of Oregon Envirothon. The competition was held in the Oregon Garden in Silverton. The event is a large part of their curriculum.

Beginnings and endings can often be full of promise and such was the case with this year's Oregon Envirothon as Marion Soil and Water Conservation District handed over administration of the environmental scholastic contest to Oregon Forest Resources Institute (OFRI). The district has been coordinating the competition since 2003.

Envirothon is a high stakes high school environmental science competition. This year more than 20 teams from across Oregon converged on the Oregon Garden in Silverton where the event was held to compete.

See Envirothon, Page 2

KITTYHAWK VINES

LAND MANAGEMENT PRACTICE HELP PROPERTY OWNERS

Nestled next to the Ankeny National Wildlife Refuge, Kittyhawk Vines might seem to the casual observer just another small Willamette Valley vineyard. But, appearances can be deceiving.

The vineyard is a hub of activity. Grey squirrels, insects, hawks, acorn woodpeckers and other birds make up part of the cacophony generated by the resident wildlife on the property.

See Kittyhawk Vines, Page 3

RESTORATION

CONTINUED FROM PAGE 1

It is now a different place; a place where wildlife gathers.

"We have lots of deer, coyote, birds and fish since we increased the (ground) cover. It's great I certainly enjoy it," Koenig said.

The 1996 flood was the catalyst that changed Koenig as well as his property. The river flooded destroying part of his land; much of the top soil was lost and the underground irrigation that had watered his crops was destroyed.

"There were huge craters … (deep) holes and an awful lot of damage," Koenig said.

He hired a contractor but rebuilding didn't work. A second storm came in and washed out the dyke destroying all the repairs.

According to Koenig, the soil is very rocky in the fields that are bordered by the North Santiam River.

"The soil was pretty bad," he said. The flood and storms "… washed all the soil away. We lost 10 acres. We were unable to restore the lower field."

Throughout his career Koenig was very active in the agricultural community, serving on numerous boards including the Oregon Water Resources Congress, Santiam Water Control District, the NORPAC board and the US Department of Agriculture's Farm Service Agency's (FSA) county committee.

It was as chairman of the FSA committee that Koenig had begun to learn about conservation practices and how they apply to agriculture and where he met Les Bachelor, district conservationist for the Natural Resources Conservation Service.

"Bob was seeing funding and practices that were going on the ground. He was getting a lot of those reports and seeing those easements come through," Bachelor said.

Environmental conservation became more than just an idea; it had now become a reality.

Unable to restore the lower fields, Koenig asked Bachelor to take a look at his property.

I was concerned about the erosion on the Santiam," Koenig said. "I asked Les Bachelor to come out to take a look. It was determined that I qualified."

The property was no longer farmable, said Lance Wyss, regional projects coordinator for the North Santiam Watershed Council, but it was ripe for restoration.

"The majority of this floodplain forest has been converted to agricultural fields over the last 150 years. Historically, floodplain forests covered large tracts along braided river channels that served as important habitat for a multitude of birds, mammals, insects and reptiles," Wyss said.

The property also had dykes on it to control flooding and access roads across the Cold Creek side channel, all of which decreased native habitat and wildlife population and created barriers for fish.

"Many native species like Oregon chub, red-legged frogs and beavers live in side channels, which are also essential for juvenile salmon, Pacific lamprey and steelhead on the way to the ocean. In many cases, these channels also serve as spawning grounds for returning adults," Wyss said.

"Environmental conservation can coexist with agriculture; a healthy fish and wildlife habitat can function alongsidea working landscape," he added.

Koenig's easement is becoming a haven. It has been the site of several wildlife studies, including one on osprey.

The birds now nest regularly on the easement. As part of the study, an osprey was caught and had a tracking chip placed under its skin. This allowed scientists to track the bird the following year all the way to Ecuador.

It has also been the site of the study that helped take the Oregon chub off the endangered species list, Koenig said.

He is thankful for the renewed life that the restoration has brought to the easement and he is a firm believer in conservation.

"I would certainly recommend conservation to anyone," he said.

NORTH SANTIAM watershed council

2013-2015 Biennial Report

Minto Fish Collection Facility (Chinook Salmon in holding pool) - NSWC Fall 2013 Tour

MISSION

Providing opportunities for stakeholders to cooperate in promoting and sustaining the health of the watershed and its communities.

WHO WE ARE

Members of the North Santiam Watershed Council are local volunteers who share an interest in improving the health of the watershed in partnership with interested landowners and land managers. Utilizing scientific assessments, the council facilitates projects, partnerships, and actions that improve watershed health.

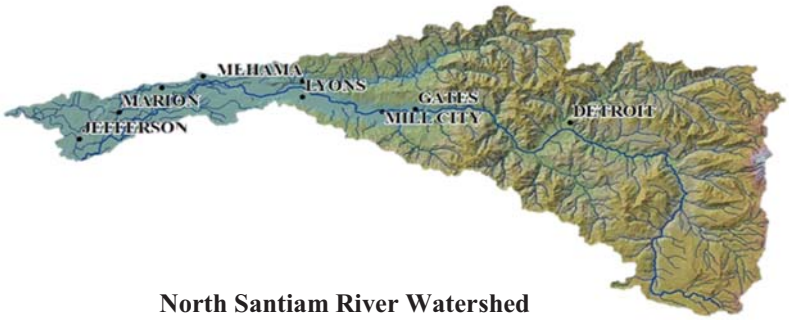
NSWC BOARD MEMBERS

Operations Committee
Brad Nanke, Chair , City of Salem
Brent Stevenson, Vice Chair, Santiam Water Control District
John Caruso, Secretary/Treasurer, Marion County

Steering Committee
Suzette Boudreaux, Little North Fork Santiam Sub-basin
Tom Fencl, Middle North Santiam Sub-basin
Mike Kroon, Natural Resources, ODF
Jan Irene Miller, At Large, Landowner
Debbie Paul, At Large, Linn SWCD
Bill Sanderson, Recreation & Economic I
Lawrence Schwabe, Grand Ronde Tribe
Jon Tucker, Lower North Santiam Sub-basin
Vacant – At Large, Economic II

STAFF

Rebecca McCoun
Council Coordinator
Sarah Dyrdahl
Regional Projects Coordinator
Lance Wyss
Regional Projects Coordinator
Eric Andersen
Regional Monitoring Coordinator



North Santiam River Watershed

PROGRAM FUNDERS

OWEB
Meyer Memorial Trust
CITY OF Salem AT YOUR SERVICE
Marion Soil & Water Conservation District
Linn Soil & Water Conservation District
Marion County
FOREST SERVICE U.S. DEPARTMENT OF AGRICULTURE
U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT
FSA FARM SERVICE AGENCY
U.S. FISH & WILDLIFE SERVICE
NRCS Natural Resources Conservation Service
CITY OF Albany OREGON
LINN COUNTY OREGON
NATIONAL FOREST FOUNDATION
SPIRIT MOUNTAIN COMMUNITY FUND
BONNEVILLE ENVIRONMENTAL FOUNDATION
OREGON Fish & Wildlife

A special "Thank You" to all the landowners and land managers working hard to improve watershed health in the North Santiam Watershed.

RESTORATION

Snake Deford Creek Restoration Project
The North Santiam Watershed Council has been working with landowners in the Snake Deford Creek sub-basin since 2008. The restoration projects in the Snake Deford sub-basin were funded by the Oregon Watershed Enhancement Board (OWEB), BLM Title II project grants, and by the USDA Farm Services CREP program. Projects have included adding large wood structures to the streams, removing non-native invasive plant species, planting native trees and shrubs, and installing livestock exclusion fencing in the riparian areas. Two undersized culverts have also been replaced with larger structures that now allow year round fish passage.

In 2014, the NSWC worked with Joseph Yost, a local Mill City streamside landowner to install large wood for fish habitat, control invasive species (invasive ivy, holly, and blackberry), and plant close to 10,000 native trees and shrubs along Snake Deford just upstream of the confluence with the North Santiam River. The watershed council will help the landowner maintain the project site until the riparian plantings are free to grow.

Sarah Dyrdahl, Regional Projects Coordinator and landowner Joseph Yost (March 2015). Nearly 10,000 native trees and shrubs were planted along Snake Deford Creek.

Cold Creek Restoration Project Completed in 2014
OWEB Restoration grant funds were used to build on an existing Natural Resources Conservation Service (NRCS) Riparian Wetlands Reserve Program (WRP) project between Cold Creek and a reach of the lower North Santiam River. The WRP placed two permanent conservation easements on 331 acres with the intent of restoring riparian gallery forest to the North Santiam River riparian corridor. Cold Creek is a small, year-round tributary to the North Santiam River, that flows through the project area. OWEB grant funds were used to **replace two undersized culverts** located along Cold Creek that were impeding passage of adult and juvenile threatened Upper Willamette River Chinook and Winter Steelhead. Funds were also used to **place 30 large wood fish habitat structures** in the stream, **restore an alcove for Oregon chub**, **treat noxious weeds** and **plant approximately 3,900 native trees and shrubs** along the tributary.

*Project partners included two landowners, Marion SWCD, NRCS/ WRP, USFWS and the USFS.

NORTH SANTIAM FOREST COLLABORATIVE

In the fall of 2013 the North Santiam Watershed Council, with grant funding provided by the National Forest Foundation, assisted with the formation of the North Santiam Forest Collaborative. The collaborative is a "decision making" group of stakeholders that is assisting the US Forest Service Detroit Ranger District and the watershed council with identifying and prioritizing restoration activities in the Upper North Santiam watershed.

Mission: The mission of the North Santiam Forest Collaborative is to draw upon the knowledge base of a diverse collaborative to identify and address the issues and opportunities that will ultimately improve the ecosystem function and resilience of the headwaters of the North Santiam River Watershed while contributing to the economy and job market of the North Santiam Canyon.

In the spring of 2014, with the help of the natural resource specialist from the Detroit Ranger District, over 40 potential restoration projects were identified in the Breitenbush sub-basin. In the spring of 2015, three natural resource subcommittees were formed: 1. Roads, Fish Passage & Fish Habitat, 2. Recreation & Trails, 3. Vegetative Management (fuels & invasive weeds) & Wildlife Habitat. The subcommittees will be meeting separately in the coming year to further discuss and prioritize restoration activities in the Breitenbush Watershed.

2013 Breitenbush Watershed Tour

An "All Lands Approach"

We all rely on the watershed systems for various reasons: recreation, timber, special forest products, we call it home, it provides fish and wildlife habitat, it contains road systems we rely on and it can be our drinking water source. With such diverse uses and sometimes competing interests we need to take a holistic approach to managing these lands.

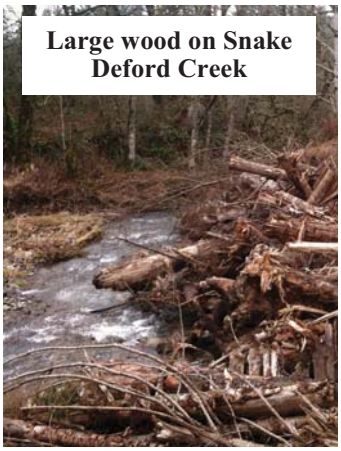
2015 NS Forest Collaborative Meeting

US FOREST SERVICE PARTNERSHIP

Detroit Lake Logs: From "Hazards to Habitat"

Since the construction of the Big Cliff and Detroit Dam wood can no longer pass downstream, so it collects in Detroit Lake. Every spring the US Forest Service Detroit Ranger District sweeps and removes the wood from the lake for summer boater safely. From 2009 to 2014 the US Forest Service donated approximately 300 large wood pieces to the North Santiam Watershed Council to use for in-stream habitat restoration projects below the dams. In stream large wood structures help retain sediments, creates pools and can help provide shade and protection for all aquatic life. The donated large wood was used in restoration projects on Snake Deford Creek, Stout Creek, Dieckman Creek and Cold Creek.

Large wood on Snake Deford Creek



Cold Creek

Large wood decked for Lower North Santiam Project