



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

## Annual Report: July 1, 2015 to June 30, 2016



Bird Haven Slough

### Reconnecting the Lower North Santiam River to its Floodplain

The North Santiam Watershed Council received an Oregon Watershed Enhancement Board (OWEB) grant in the spring of 2015 to fund the replacement of a small 12" diameter concrete culvert located at the mouth of Bird Haven Slough with a large 150" diameter open squash pipe which now allows native fish species such as spring Chinook, winter steelhead, Oregon chub, cutthroat trout, Pacific lamprey and other native resident fish access to prime off channel habitat in the Lower North Santiam watershed. Reconnecting the slough with the mainstem North Santiam River provides resting areas during winter main channel high flows and cool water refuge during the hot summer months.



Bird Haven Slough Culvert Replacement Project (Before & After Photo) July 2015





## 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 and best management practices, 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

**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

**Dave Carpenter**, At Large, Landowner

**Vacant**, Middle North Santiam Sub-basin or Economic II

#### Council Staff

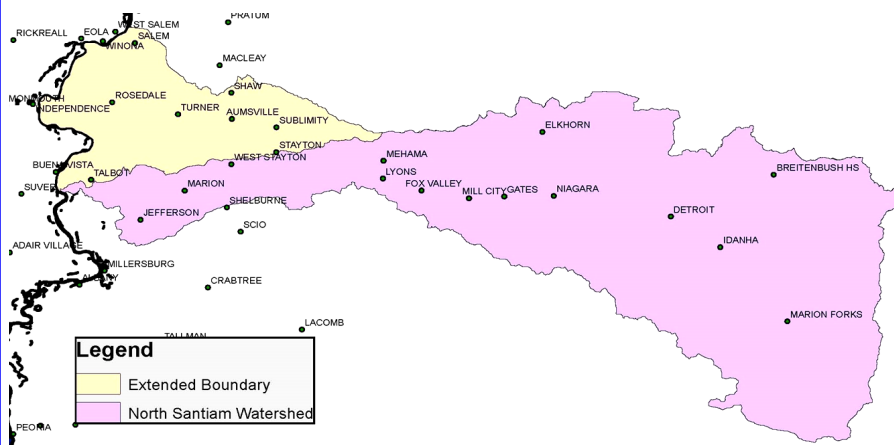
Rebecca McCoun, Council Coordinator

Tyler Pedersen, Shared Santiam Project Manager (As of 9/2016)

Joseph Deardorff, Shared Santiam Project Technician (As of 9/2016)

### Watershed Council Boundary Extension

On December 30, 2015, the Marion County Commissioners approved the North Santiam Watershed Council's request to expand its service area boundary to include Wilkerson Creek, Bashaw Creek and the Mill Creek and Pringle Creek sub-watersheds. Strategic collaboration was the main driver for the request. The Council wants to work with its local partners and build efficiencies where possible, ultimately working together to leverage funding and available resources.



### OUR PROGRAM FUNDERS & PROJEC PARTNERS



Linn Soil & Water  
Conservation  
District



SANTIAM WATER  
CONTROL DISTRICT



SPIRIT MOUNTAIN  
COMMUNITY FUND



Thank you to all the participating landowners, community members and land managers working hard to improve the health and resiliency of the North Santiam Watershed.



## FINANCIAL SUMMARY: JULY 1, 2015 - JUNE 30, 2016

Revenue			Expenses	
Federal	(13%)	\$ 40,056	Salaries	\$ 78,645
State	(55%)	\$ 168,889	Operating Costs	\$ 13,376
Local	(2.5%)	\$ 7,500	Project Costs	\$ 213,475
Foundation	(25%)	\$ 75,783	Total Expenses	\$ 305,496
Donations	(4.5%)	\$ 13,525		
Total Revenue		\$ 305,753		



Cascade Pacific Resource, Conservation & Development, a 501(c)(3) non-profit organization, is the North Santiam Watershed Council's Fiscal Sponsor & Employer of Record

To learn more visit: <http://www.cascadepacific.org>



## LOWER NORTH SANTIAM FLOODPLAIN ANALYSIS

In 2015, the NSWC received grant funds from the Oregon Watershed Enhancement Board (OWEB), Meyer Memorial Trust and the Spirit Mountain Community fund to contract River Design Group and WEST Consultants to conduct a Lower North Santiam floodplain restoration alternatives analysis.

With the assistance of a technical team of tribal, federal, state and local area experts, 17 floodplain restoration projects were identified in the project area. Five of those projects were chosen to be incorporated into hydraulic models to determine feasibility and potential adverse effects of floodplain reconnection to adjacent landowners.



Technical Team Floodplain Site Visit

Project partners included the Confederated Tribes of Grand Ronde, Bureau of Land Management, private landowners and technical advisors from the USACE, USFWS, USGS, ODFW, TNC, Santiam WCD, Marion SWCD and Marion NRCS.

The restoration alternatives analysis looked at projects that would address the following key limiting factors identified as high priority in the multiple planning documents:

**Fish Passage Barriers** - Undersized and perched culverts block access to upstream habitat.

**Habitat Connectivity** - The river channel has been confined by riprap, berms and revetments resulting in the reduced frequency in floodplain inundation and side channel connectivity; and reduced magnitude of in-flow preventing floodplain exchange of nutrients, organic matter and sediment in streams.

**Loss of Riparian/Aquatic Habitat Quality and Complexity** - Human activities (e.g. channelization, diking, bank stabilization, floodplain development, logging and gravel removal) have resulted in the reduction in the amount of large wood in the river system, amount of spawning gravel available, the number of wetland, floodplain and off-channel habitats present, including floodplain/riparian forests, which in turn reduces the potential for large wood recruitment.



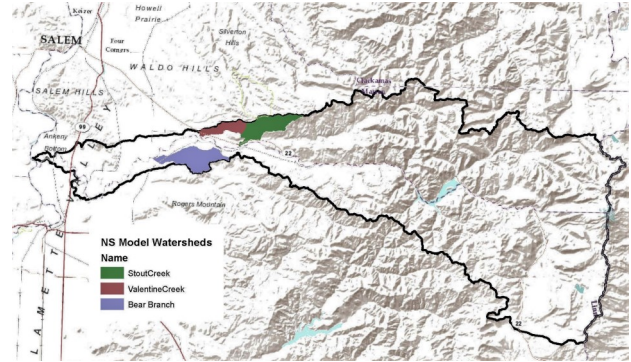


# NORTH SANTIAM RIPARIAN RESTORATION

## North Santiam Model Watershed Restoration & Plant Establishment Efforts Update

The NSWC continued to work with Model Watershed landowners in 2015-2016. Summary of efforts to date

- ◆ Stout Creek: 14 Landowners; 29 Acres
- ◆ Bear Branch Creek: 6 Landowners; 26 Acres
- ◆ Valentine Creek: 6 Landowners; 19 Acres



Since 2009, the Bonneville Environmental Foundation (BEF), the Meyer Memorial Trust (MMT) and the Oregon Watershed Enhancement Board (OWEB) have worked together on a unique watershed approach to restoration in Willamette River basin. The North Santiam Watershed Council is one of the seven organizations participating in the Willamette Model Watershed Program. For more information on the Willamette Model Watershed Program visit: <http://willametteinitiative.org/river-stories/project/179>

In the North Santiam Watershed, Stout Creek, Valentine Creek and Bear Branch Creek were chosen for the Model Watershed Restoration Program. All three watersheds are located in the upper extent of the Lower North Santiam Watershed, which drains approximately 113 square miles of land. It is the most heavily populated portion of the watershed, containing the communities of Jefferson, Marion, Stayton, and Lyons. Geren Island, the drinking water facility for the City of Salem, is also located in this portion of the watershed. Thus, water quality in each of these sub-basins impacts the water quality of the North Santiam River. All three tributaries in the program are listed as essential salmonid habitat and exceed summer temperature standards. It is for the above reasons these tributaries were chosen for the Model Watershed Program.

### NSWC Long Term Commitment Plant Establishment

The NSWC Project Managers regularly monitor riparian plantings for survival, growth, and maintenance needs. The NSWC uses grant funds to contract annual spring and fall plant establishment activities geared towards achieving high levels of native cover and low levels of non-native cover. The NSWC commits to working with landowners with projects for up to five years or until the riparian native plantings are free-to-grow.



Bear Branch Creek 3/2015



Bear Branch Creek 3/2016



### Special "Thank You" to Kendra Smith, BEF Willamette Model Watershed Program Director

The North Santiam Watershed Council staff and council members would like to give a special recognition to Kendra Smith, Willamette Model Watershed Program Director with the Bonneville Environmental Foundation. Since 2009, Kendra has provided technical support to the North Santiam, South Santiam and Calapooia Watershed Council shared staff, Council Coordinators and Executive Director. Kendra committed an immense amount of time and heart to helping the councils develop a robust and efficient riparian revegetation program. She has made a huge contribution to the working knowledge of riparian restoration in the Willamette River Basin tributaries. Thank you Kendra for helping us with our efforts to improve the health and resiliency of our watershed ecosystems. We are very grateful!





## BIRD HAVEN RIPARIAN RESTORATION

The Bird Haven Tree Farm (BHTF) is a 217-acre parcel located along approximately 1 mile of Lower North Santiam River, just upstream of the City of Stayton, in Linn County. BHTF is located in a high priority, 15 river mile reach of the North Santiam River. Habitat types on BHTF include floodplain forest, side channel habitat, historic oak savanna and upland prairie. Habitat condition had been compromised due to significant disturbance, lack of management for several years, and presence of invasive species. Douglas fir plantations of varying age classes had occupied much of the historic habitats. Many resident and migratory fish species (including Threatened Upper Willamette River spring Chinook and winter steelhead, as well as Oregon chub and Pacific lamprey) utilize the North Santiam mainstem in this reach.

The NSWC received an OWEB Restoration grant in the spring of 2015 which was leveraged with the USDA FSA CREP cost share program to restore the floodplain habitat along Bird Haven Slough and along the Lower North Santiam River. In the winter of 2016, after summer and fall site preparations approximately 56,000 native riparian trees and shrubs were planted over 20 acres.

**Project partners include:** NSWC, USFWS Partners Program, NRCS, FSA, ODFW, ODF, TNC, Linn SWCD, City of Salem, Steve Smith and Trout Mountain Forestry.

Participating project partners have worked together with Jan Irene and Jim Bayuk, landowners of the Bird Haven Tree Farm, to develop a restoration vision and trajectory that restores processes and function to high priority habitats. Large scale restoration at Bird Haven was made possible by leveraging the resources available through federal, state and local restoration programs.



Bird Haven Riparian Planting



## DIECKMAN CREEK RIPARIAN RESTORATION

The NSWC has been working with the Eck Family since 2013 to plan and fund the restoration of 24 acres on Dieckman Creek, a side channel located in the lower North Santiam River floodplain. The landowners assisted with riparian site prep by removing old fencing and outbuildings in the riparian corridor. The NSWC used an OWEB Restoration grant leveraged with FSA CREP cost share funds to contract the removal of large reaches of invasive blackberry and reed canary grass. In the winter of 2016, project funds were used to purchase and plant over 48,000 native trees and shrubs along both sides of the section of Dieckman Creek running through the Eck's property. The Marion County Free Tree program also donated native trees to the project. The NSWC will assist the landowner with plant establishment efforts over the next five years or until the plantings are free-to-grow.



Dieckman Creek - After Blackberry Removal 2016

*The North Santiam is one of the core recovery basins for Upper Willamette spring Chinook salmon and winter steelhead. Restoring tributaries and side channels that these species can readily access and utilize during all phases of their life is a high priority for the NSWC. Restoring floodplain forests provides many long-term cost effective benefits to species recovery. Healthy riparian areas provide stream shade during the summer months, biological inputs of organic matter for aquatic insects, pollution filtration, and future large wood recruitment which provides quality in-stream habitat for native fish.*



## NORTH SANTIAM DROUGHT CONTINGENCY PLANNING

In the fall of 2015 the North Santiam Watershed Council began working with the Santiam Water Control District and other local watershed partners on the development of a Drought Contingency Plan for the North Santiam River Basin.

The Santiam Water Control District (irrigation district) was awarded, through the Bureau of Reclamation (BOR), a 50/50 WaterSMART cost share grant to help fund the planning efforts. The grant was one of nine awarded in the nation. The irrigation district is the recipient of the grant, but has closely partnered with the North Santiam Watershed Council (NSWC) and others to expand the geographic scope to include the whole North Santiam basin, which is the main water source for multiple uses (drinking water, irrigation, recreation, instream aquatic habitat).



Detroit Lake Reservoir - Summer of 2015

Eleven partners have agreed to assist the irrigation district with meeting the 50/50 cost share grant obligations: City of Salem, City of Stayton, Stayton Fire, Linn SWCD, Marion County, Marion SWCD, NORPAC Foods, Inc., North Santiam Watershed Council, Oregon Department of Agriculture, Oregon Department of Environmental Quality and Oregon Department of Forestry.

Grant funds are being used to contract with GSI Water Solutions and subcontractor David Evans and Associates to help develop this much needed plan. A local stakeholder task force was formed in the winter of 2016 to help guide the development of a watershed scale plan. As required by the BOR grant the plan must answer the following three questions:

1. How will we recognize the next drought in the early stages?.
2. How will drought affect us?
3. How can we protect ourselves from the next drought?

The irrigation district and its partners have created a task force and working groups designed to answer these questions. The following work groups were formed in the spring of 2016: Drought Monitoring, Vulnerability Assessment and Mitigation Actions, Response Actions and an Administrative Framework for plan implementation.

For more information about the grant visit, <http://northsantiam.org/projects/north-santiam-drought-contingency-planning-2016-2017/> .



## NORTH SANTIAM ANNUAL BASIN SUMMIT

Staff from the North Santiam Watershed Council, City of Salem and Marion County have been convening watershed stakeholders every spring since 2011 to discuss important water management issues such as balancing conflicting uses, data management and distribution, communication and coordination and protecting habitat and water quality.



Sixth Annual NS Basin Summit

The 6th Annual North Santiam Basin Summit was held May 12, 2016. Drought and watershed scale drought planning was the theme of the 2016 summit. Over 30 individuals from multiple organizations and agencies participated. A highlight from this years meeting was the facilitated panel discussion that covered lessons learned from the drought of 2015.

For more information on the North Santiam Annual Basin Summits, including annual meeting notes visit: <http://northsantiam.org/?p=4782>





## PARTNERS OF THE NORTH SANTIAM

In the winter of 2015, the North Santiam Watershed Council and its watershed partners formed the Partners of the North Santiam Watershed (PNSW) resiliency action planning workgroup.

The PNSW consists of local, non-governmental, county, state, federal and tribal natural resource landowners and managers who have been working together in the watershed for at least 3 to 5 years. In the past, the land managers and natural resource specialists in the watershed tended to work independently with limited collaboration. Though, more recently as resources and funding opportunities became scarce collaboration between the partners increased substantially. In the past few years, many of the Partners have come together and successfully leveraged funding and resources to restore riparian areas, remove fish passage barriers, improve instream fish habitat complexity and monitor projects and educate the community members throughout the watershed.

With the benefits of collaboration fully realized the Partners are taking steps toward increasing the partnership capacity and restoration scope through the development of the Partners of the North Santiam Basin Resiliency Action Plan. Having a Partner-developed strategic plan will greatly strengthen the PNSW ability to prioritize and address the known limiting factors impacting the watershed's ecological, social and economic systems. Each of the Partners has offered to commit time, expertise and resources toward identifying priority restoration areas and projects. Working more closely together on the strategic plan will help the Partners formalize and organize their capacity as a collective group.

In order to conduct a basin wide restoration prioritization analysis the Partners identified the need to bring all existing natural resource and infrastructure GIS data together. At the PNSW January 2016 meeting the participating Partners were asked to voluntarily share their watershed GIS data with the group. The North Santiam Watershed GIS datasets requested include: water quality and quantity, fish passage/migration, aquatic habitat, riparian, floodplain and terrestrial habitat data, location of existing restoration projects and conservation easements, invasive weed layers, water intake locations, as well as various scales of existing climate variability data.

Analyzing existing natural resource mapping data will help the group identify where ecological, social and economic restoration needs overlap. The Partners will be spending the next year reviewing the GIS analyzed data sets and will be working on a formal project prioritization process. Funds for facilitation and GIS work have been provided by the NSWC OWEB Council Capacity grant and by a Meyer Memorial Trust Basin Wide Impact grant.

### Partners of the North Santiam (as of 12/2016)

Bird Haven Tree Farm Landowners  
Bonneville Environmental Foundation  
Bureau of Land Management  
City of Albany  
City of Salem  
Confederated Tribes of Grand Ronde  
Confederated Tribes of Warm Springs  
Greenbelt Land Trust  
Linn County Roads Department  
Linn Soil & Water Conservation District  
Marion County  
Marion Soil & Water Conservation District  
North Santiam Watershed Council  
Natural Resource Conservation Service  
Oregon Department of Agriculture  
Oregon Department of Environmental Quality  
Oregon Department of Forestry  
Oregon Department of Fish and Wildlife  
Oregon Department of Transportation  
Santiam Water Control District  
US Fish and Wildlife Service Partners Program  
US Forest Service - Detroit Ranger District  
US Geological Survey

### Partners of the North Santiam Vision

***"The North Santiam River Basin is made more resilient by partners implementing coordinated actions to restore ecological processes that maintain habitat for species while supporting and improving social and economic interests in local communities."***

Important Note: All actions outlined in the plan are dependent on volunteer participation by willing watershed landowners, cities, counties and state and federal agencies.



Peer to Peer Information Sharing 2016





## COMMUNITY ENGAGEMENT

### “Your Watershed Your Community”

The North Santiam Watershed Council takes actions to help increase public awareness and participation in the watershed council and its activities, and provides needed information to landowners on activities that will help them protect and improve the health of the watershed.

#### July 1, 2015 through June 30, 2016 Activities

Bird Haven Tour and Potluck Summer 7/2015

Detroit Lake Shoreline & Riverside SOLVE Clean Up 9/2015

Camp Taloali -Watershed Wednesday's Summer 7/2015

Little North Fork Santiam SOLVE Spring Clean Up 6/2016



Brad Nanke & Tom Fencil 12/2015

The North Santiam Watershed Council would like to give a "Special Thank You" to Tom Fencil of Mill City. In December of 2015 Tom Fencil, the Middle Subbasin Representative, stepped down from his Steering Member Position. Tom was one of the original founding members of the North Santiam Watershed Council which began meeting in 1995 and was officially recognized by Marion and Linn Counties in 1997 & 1998. He has served on the council for 20 plus years. Along with the many volunteer hours he put into helping the council meet its mission he also implemented a large scale restoration project on his property. Tom has graciously agreed to continue to allow us to include his project on our future restoration tours. Thank you Tom Fencil for all you have done for the watershed community.



**NORTH  
SANTIAM**  
watershed council

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North Santiam Watershed Council