

THE CASCADIA CONSERVATION DISTRICT



CONSERVATION QUARTERLY

WINTER 2011

HIGHLIGHTING A SUCCESSFUL 2010

Cascadia implemented many successful projects in all our program areas in 2010. As we move into 2011 we'd like to give you a glimpse into our accomplishments from the last year.

EDUCATION & OUTREACH

"In the end, we conserve only what we love. We will love only what we understand. We will understand only what we are taught."

-Baba Dioum, Senegalese poet



Children at the Rolling Rivers activity station during the Wenatchee River Salmon Festival

Education & Outreach is critical to the success of every program we participate in. Educational programming and outreach materials demonstrate how natural environments function, how our activities impact those environments and how we can best mitigate those impacts. The following are highlights of the education programs we participated in as well as a few of our outreach efforts in 2010.

Kids in the Creek: This annual hands-on learning program gets high school science students out of the classroom and into the outdoors to learn how streams and watersheds work. In 2010, Cascadia worked with 294 students from seven different area high schools. Be sure to check out the new Kids in the Creek video on YouTube! See the link on our website, www.cascadiacd.org.



High school students participate in Kids in the Creek

Wenatchee River Salmon Festival: Cascadia and partners annually host the Rolling Rivers activity station where participants learn the components of a healthy salmon-friendly watershed.



A family of volunteers at the Entiat River Clean-up

Entiat River Clean-up: In 2010, Cascadia hosted the first annual Entiat river clean-up. More than 63 volunteers removed three tons (about 12 yards) of debris from the Entiat River. Following the clean-up was a volunteer appreciation party including a barbeque and entertainment.

District Newsletter: Each quarter Cascadia produces the *Conservation Quarterly* highlighting current projects, upcoming events and general district news.

District Website - www.cascadiacd.org: Cascadia maintains a website to keep district members, partners and other stakeholders informed about our history, current programs and upcoming events. Check us out on Facebook as well.

2011 NATIVE PLANT SALE



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ENVIRONMENTAL MONITORING

Environmental monitoring activities provide the data necessary to properly manage natural resources for current and future uses. Monitoring is performed to understand the status and trends of a resource, to determine if conditions are in compliance with project, state or federal guidelines, or to gage the effectiveness of a particular action.



Stream flow gaging helps determine water availability

Stream Flow Gaging: Cascadia assists with operation, maintenance and troubleshooting of stage height equipment and staff gages at multiple sites on the Entiat River. Stream flow data is essential to determining the amount of water available to meet instream and out of stream needs. Discharge data is an important part of water quality and flood monitoring efforts.

Landowner Outreach and Coordination: Landowner outreach and coordination activities support the Integrated Status and Effectiveness Monitoring Program (ISEMP). ISEMP represents a multi-agency effort to monitor salmon and steelhead populations and associated habitat conditions in targeted watersheds.

LANDOWNER ASSISTANCE

Managing natural resources and meeting regulatory requirements can be a daunting task. Cascadia administers a number of programs that are designed to help landowners navigate complex land management rules, minimize their impact on fish and wildlife populations, and ensure that their land remains healthy and productive for years to come.

Landowner Assistance Program: In 2010, Cascadia worked with seven landowners to install projects designed to improve natural resource stewardship. The projects varied in



Landowners participate in a Landowner Assistance Program to rid their property of noxious weeds

scope, and costs were shared by Cascadia and the landowner. The projects were installed on over 50 acres of land, and included four upgraded irrigation systems, four soil moisture monitoring systems, six acres of noxious weed removal and associated rehabilitation, one acre of upland native plant establishment for wildlife habitat, one owl nesting structure, 4200 linear feet of livestock exclusion fencing, and two off-channel watering troughs.

Surface Water to Well Conversions: Cascadia is coordinating efforts with multiple funding sources to replace several surface water irrigation diversions with groundwater wells in the lower and middle Entiat River valley. Surface water diversions often present maintenance difficulties for users and can result in entrapment and killing of fish.

Delivery systems from diversion to place of use are subject to water loss through evaporation and leakage. Replacing these diversions with wells saves water and ensures regulatory compliance. Four wells were dug in 2010 and will be completed in 2011.

If you are interested in participating in our Landowner Assistance program or would like additional information please contact us at (509) 664-9370.

RIPARIAN RESTORATION

Riparian areas are the transition zones between the water and the land. They have many important functional roles that help protect people and property as well as sustain fish and wildlife populations. A well-vegetated riparian area provides erosion control, flood moderation, water quality protection and essential fish and wildlife habitat.

Historic and present-day land use practices have resulted in disturbed riparian areas along many streams and rivers in Chelan County and contributed to eroded stream banks, intensified flooding, decreased water quality and habitat loss. In 2010, Cascadia conducted several riparian restoration projects in both the Wenatchee and Entiat watersheds.

In an effort to restore function to disturbed riparian areas Cascadia Conservation District worked with eight different landowners and partnered with USDA Forest Service (USFS) to plant nearly 12,450 plants along 6260 linear feet of streambank or approximately 7.5 acres. Also installed was 0.75 miles of livestock exclusion fencing.

Lower Wenatchee River: The CMZ 2 Lower Sleepy Hollow Island Riparian Restoration Project took place on the property of two landowners along the lower Wenatchee River. Cascadia installed 600 linear feet of brush revetment to stabilize the banks of an intermittent side-channel. Over 2000 native trees and shrubs were installed along 3.4 acres or about 2000 linear feet of streambank.



The Tillicum Creek Fence Project

Entiat River: Riparian restoration efforts along the Entiat River were accomplished by working cooperatively with four streamside landowners. Approximately 4.3 acres of riparian habitat was assessed and restored along 3460 linear feet of the Entiat River with over 8745 native trees and shrubs. Nearly 0.5 acres of previously active livestock pasture was reclaimed into riparian habitat.

If you'd like to see a riparian restoration project, check out Stormy Preserve at river mile 18 on the Entiat River. Stormy Preserve is part of the Chelan-Douglas Land Trust and will have an interpretive sign installed by Cascadia in the spring.



Riparian restoration at Mom & Me Farm in Entiat

Cascadia currently has funding available for streamside restoration projects for 2011. Benefits of riparian plantings include: bank stabilization, shading, spray drift buffer, and flood attenuation, as well as nutrients and cover for salmon. If you would like additional information please contact us at (509) 664-9370.



The Tillicum Creek Fence Project

Mad River (Entiat River tributary): The Tillicum Creek Fence project excludes livestock from those portions of Tillicum and Indian Creeks that are immediately adjacent to temporary livestock handling locations. The fencing protects approximately 0.7 miles of streambank and riparian vegetation along steelhead spawning areas. Nearly 0.8 acres, 750 linear feet along Tillicum Creek and 250 linear feet along Indian Creek, were planted with 1620 native trees, shrubs, forbs and grasses. The Tillicum Fence project has been ongoing for four years. The project was the result of a partnership between Cascadia and USFS.

STREAM HABITAT RESTORATION

Many streams and rivers in Chelan County are home to threatened and endangered salmon, steelhead and bull trout populations that require specific aquatic habitat conditions to support them during different life stages.

Historic and current water and land management practices have disturbed some habitat, resulting in high stream temperatures, elevated levels of fine sediments, fish passage barriers, channelization and loss of habitat.



“Like most farmers we want to live in a place with a good healthy environment. We want to keep farming, but enhance the fish and wildlife habitat as well.” - Scott McManus, Organic Pear Producer, Yaksum Creek Restoration Project

Cascadia strives to restore instream habitat in the Wenatchee and Entiat watersheds to provide salmon, steelhead and bull trout with the necessary conditions to live and prosper.

The Yaksum Creek Riparian and Instream Restoration Project: An organic pear producer in the Wenatchee Watershed, Scott McManus, sought help from Cascadia to improve the riparian area and instream habitat along his section of Yaksum Creek. This site had several limiting factors, including a fish passage barrier (ditched/straightened segment of Yaksum Creek), noxious weeds and a non-functioning riparian area. The stream channel was lengthened to 220 linear feet by installing meanders and other fish habitat features in the stream, such as woody debris, placed to ensure unimpeded upstream fish passage. Weed removal and restoration of native vegetation occurred over an area of 0.35 acres along the Yaksum Creek streambank. The producer and his family were very satisfied with the result of the restoration. This project will serve as a demonstration site for water quality and fish and wildlife projects.

Sunnyslope Side Channel Project: This Yakama Nation project is located on the lower Wenatchee River and is aimed at increasing floodplain connectivity and providing a cool water thermal refuge for salmon. The total project site is 1350 feet in length and covers approximately three acres. Cascadia assisted with implementation of planting for this project. The restoration site was hydroseeded to stabilize the soil. Cascadia will complete planting in spring 2011.

Keystone Project: The Yakama Nation conducted a habitat enhancement for the lower Entiat watershed. The project site involves a 75 linear foot long by 30 foot deep section of the Entiat River. It includes a 14-log jam to enhance instream salmon habitat. Less than half an acre of the landowner's property was affected and the project took just six days to complete. Cascadia planted the construction footprint area and the riparian buffer, a total of 300 linear feet or about .1 acre.

Entiat RM 21.5 Project: This project involved bank re-shaping and installing 125 pieces of large woody debris into approximately 900 linear feet of previously cleared and rapidly eroding streambank, followed by replanting. The wood provides shade, cover and complexity for fish. It also protects the bank in the short term so that plantings can become established.

Preventing ongoing erosion helps limit the input of undesirable fine sediments into important spring Chinook spawning gravels in the reach.



The Sunnyslope Project in the Wenatchee River

Entiat Hatchery Levee Removal: Two levees, built in the early 1940s, were removed or breached to allow the Entiat River to connect at high flow with approximately 10 acres of floodplain. Since the levees were no longer important for protecting hatchery infrastructure, allowing the river access to the floodplain opens up opportunities for establishing much needed off-channel fish habitat in the lower Entiat River. The upstream levee, 645 feet in length, was entirely removed. The much smaller lower levee was strategically breached but left mostly in place to avoid disturbing the existing interpretive trails at the hatchery.

WATERSHED PLANNING & COORDINATION

Watershed plans are developed by planning units composed of representatives from the public and private sectors. Planning units are required to address water quantity issues, instream flow and habitat issues. Some, like the Entiat and Wenatchee, address water quality as well.

Cascadia is the lead agency for the WRIA 46 Entiat River watershed planning effort and the local chair of the WRIA 45 Wenatchee River watershed Water Quality Technical Subcommittee.

Cascadia coordinates quarterly planning unit meetings, participates in subcommittee meetings and applies for grant funding to help facilitate implementation of actions identified in the WRIA 46 Entiat Watershed Plan. The Entiat Watershed Planning Unit (EWPU) is recognized for developing cooperative, proactive solutions to natural resource issues. The EWPU has successfully planned and implemented a variety of important habitat, water quality and water quantity restoration projects in the watershed.

In 2010, the EWPU was recognized by the U.S. Department of the Interior for outstanding conservation achievements. Specifically, the award recognized the restoration of salmon habitat in the Entiat Watershed.

Cascadia also participates in WRIA 45 Wenatchee River watershed planning unit and subcommittee meetings as well as implementing restoration projects in the Wenatchee Watershed.



WILDFIRE PREPAREDNESS

Wildfire is a fact of life in North Central Washington. As growth increases and more people build their homes in wildland-urban interface areas, the threat that wildfire poses to property, infrastructure, human life and the local economy increases.

It is important for residents of fire-prone areas to acknowledge the dangers around them and take appropriate actions to protect themselves and their community before a wildfire starts.

In 2010, Cascadia, on behalf of Chelan County Fire District #1, implemented fuels reduction treatments on approximately 50 acres of private and public lands in the Squilchuck Basin. The WA Department of Natural Resources and US Forest Service provided technical input. Funding for the work is a grant from the US Bureau of Land Management to Fire District #1. This grant allows Cascadia to cover 100% of the implementation costs.



A log home threatened by wildfire

The fuels treatment involved cutting, chipping and removal of tall live brush and low limbs, thinning of closely-spaced small trees (under 8-inch diameter), and removal of large dead fuels on the forest floor. Treatment sites were located to protect important infrastructure and properties, such as Squilchuck State Park, Scout-A-Vista Camp, Forest Ridge community and eight private residential properties adjacent to Squilchuck Road. Treated areas help to slow the advance of wildfires and give firefighters and other responders places from which to operate and find shelter if needed. More work of this type is planned for the Squilchuck Basin in the spring of 2011.

Also in 2010, Cascadia helped develop the Chumstick Wildfire Stewardship Coalition through the Firewise Communities/USA recognition process and a driving tour brochure. The communities involved are Stellerwood, Chumstick, and Forest Ridge.

WELCOME ABOARD!

CASCADIA WELCOMES TWO NEW MEMBERS TO THE TEAM

Susan Dretke,
Resource Specialist II
Susan graduated from Eastern Washington University with a Bachelor of Arts degree in Urban and Regional Planning. After graduating she spent 20 years working in both the private and public sectors in land use planning, primarily in development application and environmental review. Susan's love for all things outdoors led to relocation from the Westside to Central Washington where she has spent the last three years pursuing outdoor recreation opportunities of all kinds, particularly skiing and biking.



Amanda Levesque,
Education & Outreach Specialist
Amanda graduated from San Diego State University with a Bachelor of Arts degree in Communications and a minor in Latin American Studies. After graduation Amanda moved back home to Washington and has spent the past three years working at Rick Steves Europe Through the Back Door. She has gained extensive knowledge of many European countries and enjoyed several trips to Europe in the past few years. Amanda recently moved from the Westside to her 10-acre farm in Leavenworth and

looks forward to all the wonderful recreation opportunities available to her in beautiful Central Washington.

UPCOMING MEETINGS & EVENTS

Winter Life Snowshoe Tours

Wednesday, Saturday, and Sunday 10am-12pm, January 8-February 27, 2011, Leavenworth National Fish Hatchery.

Explore the Icicle Trail at Leavenworth National Fish Hatchery with free guided snowshoe tours. No experience is necessary, snowshoes are provided, but please come prepared with warm clothing and winter boots. The tours are for ages 8 and older. Reservations can be made by calling Andrii at (509) 548-7641.

The Chelan County Natural Resources Department has launched a new website

You can check out their redesigned website using the following link:
<http://www.co.chelan.wa.us/nr/>

NRCS is accepting applications for the Environmental Quality Incentives Program (EQIP)

This program provides producers with financial and technical support in completing projects like: upgrading irrigation systems, integrated pest management, nutrient management, wildlife structures for kestrels, bats, and native bees, hedgerows, and weed fabric. Forestry practices include: non-commercial thinning, slash treatment, and pruning.

March 4th is the deadline to apply for the NRCS Organic Initiative

Organic producers can receive up to \$20,000 per year or \$80,000 over six years through this initiative. Funding is for implementing practices that solve resource concerns.

If you are interested in these NRCS programs or have questions, please contact Amy Hendershot at (509) 664-9370.

Cascadia Conservation District Board Meetings

February 17 from 3-5pm at 215 Melody Lane in Wenatchee
March meeting to be announced
April 21 from 3-5pm at 215 Melody Lane in Wenatchee

Entiat Habitat Subcommittee Meetings

February 17 from 9am-12pm at the Federal Building, 301 Yakima Street in Wenatchee
March 17 from 9am-12pm at 215 Melody Lane in Wenatchee
April 21 from 9am-12pm at 215 Melody Lane in Wenatchee

Entiat Watershed Planning Unit Meeting

April 6 from 9am-12pm at the Entiat Grange Hall

For more information on any of the meetings and events listed above, call our office at (509) 664-9370 or visit our website at www.cascadiacd.org.



CASCADIA
CONSERVATION DISTRICT

215 Melody Lane Wenatchee, WA 98801
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