

CONSERVATION QUARTERLY

WINTER 2015

HIGHLIGHTING SUCCESS IN 2014

Cascadia Conservation District participates in diverse projects and activities throughout the year. We have several different program areas and in the next few pages have captured some of our accomplishments and successes in each program from 2014:

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 some highlights from our 2014 education and outreach efforts.



Wenatchee River Cleanup 2014.

Hosted by Cascadia Conservation District and Chelan County Natural Resources

www.cascadiacd.org and Facebook page: Cascadia maintains a website and Facebook page to keep district members, partners, and other stakeholders informed about our history, current programs, and upcoming events.

Earth Day Fairs: Cascadia participates in the annual Leavenworth, Chelan, and Entiat Earth Day fairs where we host fun educational activities.

Chelan County Fair:

Cascadia hosts an information table and the Enviroscope Model to teach kids about the dangers of pollution and how to be better stewards of natural resources.

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

District Website -

Kids in the Creek: This annual hands-on outdoor environmental education program gets high school science students out of the classroom and into the outdoors to learn how streams and watersheds work. In 2014, over 300 students from eight area high schools participated. For additional information and to view our video brochure visit: www.kidsinthecreek.com.



Collecting macroinvertebrate insects for study at Kids in the Creek 2014

Native Planting 101 Workshop: In 2014, about 40 participated. *This year's workshop will be held Saturday, February 28 and covers planting techniques, pollinators, weeds and more. For additional information and to RSVP please call (509) 436-1601.*

Picture the Wenatchee Watershed Stewardship Campaign (PTW): In 2014, PTW hosted a river cleanup, conducted a photo contest, and produced a calendar with the winning photos. *Order yours by calling (509) 436-1601. *Note: PTW is being expanded and renamed the Chelan County Clean Water Campaign. Visit www.cascadiacd.org for additional information.*

Water on Wheels: This hands-on interactive water and soil education program is new to Chelan County and taught to kindergarten through 6th grade students. From September to December 2014, 89 lessons were taught and 1,906 students reached.

Wenatchee River Salmon Festival: Cascadia and partners annually host the Rolling Rivers watershed model where students learn about, then build and place the components of a healthy salmon-friendly watershed.

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LANDOWNER ASSISTANCE

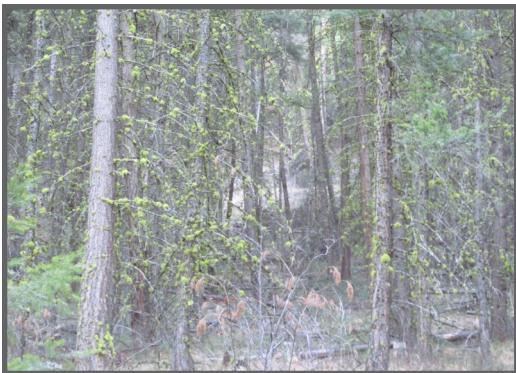
Managing natural resources and meeting regulatory requirements can be a daunting task. Cascadia administers a number of programs that are designed to help landowners navigate complex land management rules, minimize their impact on fish and wildlife populations, and ensure that their land remains healthy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

Cascadia's Landowner Assistance Program offers technical and financial assistance and can pay up to 75% of the total cost of eligible projects. Eligible projects include: wildfire fuels reduction, forest health practices, irrigation system upgrades, riparian restoration, noxious weed control, and more. For program application deadline and additional information, please contact Kristine Desgroseillier at: kristined@cascadiacd.org or (509) 436-1601.



Tom Brown in his pear orchard with newly upgraded irrigation system

In 2013/2014, Cascadia worked with a pear grower near Monitor to complete his irrigation system upgrade on about six acres. He has already seen an increase in yield and water savings in one growing season!



Forest pre-treatment. Overgrown, unhealthy, and extremely susceptible to wildfire damage



Forest post-treatment. Open, clear of ladder fuels, and much less susceptible to wildfire

In 2014, Cascadia worked with three landowners in the Squilchuck, Chumstick, and Blewett Pass areas to accomplish fuels reduction work on forest land. Thinning, pruning and slash treatment was accomplished in partnership with the Natural Resources Conservation Service and the Washington State Conservation Commission in 2014/2015 on over 55 acres of private forest land.

Landowner Sara Rolfs said: "I whole-heartedly recommend Cascadia to my friends and neighbors as they are a tremendous help in ensuring proper management of natural resources in a responsible and practical manner."

The Natural Resources Conservation Service (NRCS) is offering FREE conservation plans on private land in Washington state. Sign-up is open January 6-March 20, 2015. For additional information visit your local NRCS field office or go to <http://www.nrcs.usda.gov/wps/portal/nrcs/main/wa/technical/cp/>

WILDFIRE PREPAREDNESS

Wildfire is a fact of life in North Central Washington. Although fire is important to natural eco-systems, the effect of wildfire on property, infrastructure, human life and the local economy can be devastating. 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 2014, Cascadia continued to promote the Firewise communities program. Firewise focuses on taking steps to be prepared for a wildfire by creating defensible space around homes and removing wildfire fuels from communities. Cascadia offered free wildfire risk assessments for residences and support for communities seeking national Firewise Communities/USA recognition. Cascadia assisted local communities with implementing Firewise practices and helped Chelan County communities work toward becoming recognized Firewise communities.



Chipping crew removes flammable slash piles prepared by landowners of the Bretz Rd Firewise Community in Plain

In January 2014, Cascadia worked with the Natural Resources Conservation Service (NRCS), Department of Natural Resources and the South Douglas Conservation District to host a Forest Health Workshop. Cascadia also participated in a Firewise meeting in Plain in April that brought in about 60 landowners interested in becoming Firewise.

From May to June 2014, Cascadia staff conducted over 100 wildfire risk assessments on private homes in Chelan County. These free assessments were requested by landowners and the number of them clearly illustrates interest from landowners to become Firewise. Cascadia currently has funding for additional wildfire risk assessments. Contact Amanda Levesque at amandal@cascadiacd.org or (509) 436-1601 to request yours.

In June 2014, Cascadia partnered with the Department of Natural Resources to organize a chipping event in the Lake Wenatchee/Plain area. Residents worked together to clear and stack piles of slash in preparation for the chipper crew. Forested land was treated on the properties of over 30 landowners. This work will make these areas much less susceptible to damage from wildfire.

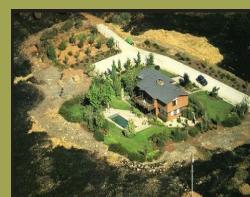
JOIN US FOR A FIRE EDUCATION OPEN HOUSE SERIES THIS SPRING!

Learn how to reduce the risk of wildfire damage to your property and home by maintaining healthy forests. Fire experts will be available at all of these FREE open houses. We hope to see you there!

- March 21: 10 am - 1 pm at the Chelan Fire Station, 232 East Wapato Ave, Chelan
- March 28: 10 am - 1 pm at the Ponderosa Community Clubhouse, 21000 Morgan St, Leavenworth (Plain)
- April 4: 10 am - 1 pm at the NCW Fairground Community Hall, 601 North Monroe St, Waterville
- April 18: 10 am - 1 pm at the Douglas Co PUD Auditorium, 1151 Valley Mall Pkwy, East Wenatchee

Hosted by Cascadia Conservation District and South Douglas Conservation District.

The best offense...



...is a good defense.

Don't wait...



...until it's too late!

Contact Amanda Levesque at amandal@cascadiacd.org or (509) 436-1601 for additional info

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. Cascadia implements riparian restoration projects, with an emphasis in the Wenatchee and Entiat watersheds.

In 2014, Cascadia worked with a private landowner on Icicle Creek to remove noxious weeds and plant 125 native trees and shrubs on 0.2 acres. Also in 2014, Cascadia began partnering with the Port of Chelan County on a large-scale planting at Cashmere's Old Mill site. Stay tuned for more details as the project gets underway in 2015. Both of these riparian projects are funded through a water quality grant from the Washington Department of Ecology.



Native trees and shrubs replace knotweed and improve fish and wildlife habitat along Icicle Creek

Cascadia currently has funding for additional streamside restoration projects. Benefits of riparian plantings include: bank stabilization, weed control, shading, and flood attenuation, as well as providing habitat for fish and wildlife. If you would like additional information please contact our office at (509) 436-1601 or info@cascadiacd.org.

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. 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 thrive. An important consideration in Cascadia's projects is that the work will also benefit the community and fit with the landowner's needs and goals for the property.

Colockum Creek Steelhead Enhancement Project: In 2014, Cascadia implemented a steelhead habitat improvement project that included bank stabilization and re-sloping of about 150 feet of incised streambank and the installation of three rock barbs on Colockum Creek. This project will wrap up in 2015 with livestock exclusion fencing and about one-third of an acre of native tree and shrub plantings. This project was funded through a WDOE Coastal Protection Fund Terry Husseman grant.

2014 Lower Entiat Projects Complete: The 2014 scheduled habitat projects were completed as part of the Intensively Monitored Watershed (IMW) Study. Sections of the river are targeted for restoration treatments to allow annual monitoring activities the opportunity to detect a fish response. The next round of habitat projects will be implemented in 2016 and 2017 in the Middle Entiat River within the Gray and Stormy Reaches, River Mile (RM) 16 to 21. More information regarding these 2016-17 projects will be available in Cascadia's next newsletter.

Three project sponsors were involved in the 2014 Entiat River habitat project implementation; Yakama Nation with a project at (RM 2.3-3.3), Chelan County Natural Resource Department (CCNRD) with two projects (RM 1.65 and RM 4.0-4.3), and Cascadia with two projects (RM 0.8-2.3 and RM 6.7-7.8). As seen in previous newsletters and public meetings,



Habitat Log Structure at RM 1.6

project elements include habitat logs and boulder clusters placed along the channel margins, improvements to existing side channel areas, two engineered log jams near the upstream end of two side channels to provide habitat and help direct flow into the side channels, and the creation of two new off channel alcove, for high flow refuge.

FAREWELL FRANK!

After serving on the Cascadia CD Board of Supervisors for 16 years, Frank Andrews is scaling back on his commitments to focus on his business. During his tenure with Cascadia, Metal Works has grown into a thriving fabrication shop, requiring even more of Frank's time and attention. We wish him continued success. Thank you Frank for your many years of service and dedication to Cascadia staff and landowners of Chelan County!



Frank Andrews above

The Cascadia CD Board welcomes back associate Jim Bartelme to take Frank's position on the Board of Supervisors. Congratulations Jim!



Jim Bartelme

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. Some, like the Entiat and Wenatchee, address water quality, instream flow, and habitat issues as well.

Cascadia is the lead agency for the WRIA 46 Entiat River watershed planning effort. 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 and the regional Salmon Recovery 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.

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



FOREST HEALTH DATA AVAILABLE ON WEB

Contributed by Stan Janowicz, Forester with the Natural Resources Conservation Service (NRCS)

Every year, all forested acres in Washington are surveyed from the air to record recent tree damage. This aerial survey is made possible by the cooperation of the Washington Department of Natural Resources (WDNR) and the USDA Forest Service. It is very cost effective for the amount of data collected. Maps and data produced by the aerial survey can be used to track pest and damage trends over time.

Digital information: When traditional insect and disease survey quad maps are finalized, they are available for download as PDF files from 2003 to the most recent available year at: www.fs.usda.gov/goto/r6/fhp/ads/maps. Click on the year of interest under "Aerial Detection Survey Quad Maps." Scroll down to view an interactive map of all the available quads from Oregon and Washington. Simply click the quad map you want and it will download the PDF.

In addition, our cooperative annual forest health highlights reports are available online at: http://www.dnr.wa.gov/ResearchScience/Topics/ForestHealthEcology/Pages/rp_foresthealth.aspx

Major insect and disease identification and management information, illustrations, and graphical trend analysis of Pacific Northwest forest health issues are available at: www.fs.usda.gov/goto/r6/fhp. Overall, in Eastern Washington, the bark beetles were a little worse in 2014 than 2013 but not as bad as the 10 year average; in 2014, Western Spruce Budworm defoliation acres was less of an issue than in 2013.

Weather and Forest Health

Severe weather events that injure or kill trees often make the stands more susceptible to attack by insects and pathogens. Examples include windthrow, winter damage (defoliation, cracks or breakage from cold, snow or ice), heat stress, flooding, landslides and hail. Many insects and pathogens use weakened or dead trees to maintain and sometimes increase their populations. Injuries can be vulnerable to infection by fungi. Outbreaks of certain bark beetle species, such as Douglas-fir beetle, follow weather or fire events that kill or injure numerous trees. Unusually wet spring weather can increase the incidence of foliar diseases. In years when summer precipitation was at or below average, the number of bark beetle-killed trees may increase the following year. An increase in bear damaged trees may occur the year after an unusually wet and cool spring due to delayed availability of berries, drawing bears to trees as an alternate food source.

Vigor and resilience to adverse weather can be increased by ensuring that trees have room to grow and are appropriate species for the site. For example, forests in eastern Washington are generally overstocked with too much fir and not enough drought tolerant pine and larch. These conditions favor defoliators such as the western spruce budworm and perpetuate root disease and bark beetle activity.

Trees experiencing drought stress can become more susceptible to insect and disease attacks and are less likely to recover from damage. In eastern Washington, trees growing in dense or overstocked stands have a higher likelihood of experiencing drought stress.

UPCOMING MEETINGS & EVENTS

Cascadia Conservation District Regular Board Meetings

- February 29, 2015 3:00 PM at 14 N Mission St in Wenatchee
- March 2015 Annual Planning Meeting 10:00 AM-4:00 PM at 14 N Mission St in Wenatchee—call us at (509) 436-1601 for details
- April 16, 2015 3:00 PM at 14 N Mission St in Wenatchee

Entiat Habitat Sub Committee Meetings

- February 19, 2015 9:00 AM at 215 Melody Ln, Wenatchee, WA
- March 19, 2015 9:00 AM at 215 Melody Ln, Wenatchee, WA
- April 16, 2015 9:00 AM at 215 Melody Ln, Wenatchee, WA

Entiat Watershed Planning Unit Meetings

- April 1, 2015 9:00 AM at 14108 Kinzel St, Entiat, WA

Fire Education Workshop Series

- See page 2 for details

Native Plant Sale

- February 21, 2015: Last day to submit orders
- April 4, 2015: Plant Sale Bundling Stemilt Warehouse 3101 Warehouse Road, Wenatchee, WA (volunteer opportunity)
- April 11, 2015: Plant Order Pick-Up- Stemilt Warehouse 3101 Warehouse Road, Wenatchee, WA
- *Contact us at (509) 436-1601 for additional information

Native Planting 101 Workshop: February 28, 2015, 12:00 PM-4:30 PM, PUD Auditorium, 327 N Wenatchee Ave, Wenatchee, WA

- *Space is limited, call us at (509) 436-1601 to reserve your seat!

Upper Columbia Salmon Recovery Board:

- *Call (509) 662-4707 for additional information
- February 11: Upper Columbia Regional Technical Team, 9am-12pm, Location TBD
- February 26: UCSRB Board Meeting 10am-3pm, Location TBD
- March 3: UCSRB Implementation Team Meeting, 10am-3pm, Location TBD
- March 4: UCSRB Forest Health Meeting, 10am-12pm, Location TBD
- March 11: Upper Columbia Regional Technical Team Meeting, 9am-12pm, Location TBD
- April 8: Upper Columbia Regional Technical Team, 9am-12pm, Location TBD
- April 23: UCSRB Board Meeting Conference Call, 9am-11am

A big thank you to our three new funding sources for keeping important outreach projects and programs in operation!



CASCADIA
CONSERVATION DISTRICT

14 N Mission St Wenatchee, WA 98801
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This newsletter is funded in part by grants from the Washington State Conservation Commission, the Washington State Department of Ecology and other public and private granting entities.

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Cascadia Conservation District has a blog:

Please check it out at:

<http://ccdconservationconversation.blogspot.com/>



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