

CONSERVATION QUARTERLY

SPRING 2019

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HABITAT RESTORATION PROJECT PLANNED FOR MIDDLE ENTIAT RIVER

The Gray and Stormy Reach Habitat Restoration Project will improve habitat for Endangered Species Act (ESA) listed salmon and steelhead on two sections of the Entiat River in Chelan County, Washington. The project will be implemented on public and private land approximately 18 miles west of the town of Entiat, on the Entiat River. The project area is within two reaches, The Gray Reach (RM 16.1 to 17.9) and the Stormy Reach (RM 18.1 to 20.7). This project is similar to others in the region seeks to improve habitat capable of supporting salmon populations for future generations.

Based on preliminary assessments completed by U.S. Bureau of Reclamation (BOR) in 2014, the Entiat River was identified as being cable of supporting higher quality habitat, if projects could: improve floodplain connectivity, create side channels and alcoves, install log structures and create



Helicopters will be used to transport large wood for these habitat restoration projects

complexity in the flow paths, add cover for fish in the main channel, and remove levees and riprap. Habitat improvement for ESA-listed species is a priority under the 2008 and 2014 Federal Columbia River Power System Biological Opinions (BiOps).

This project is by a team of local sponsors including: the Chelan County Natural Resource Department (CCNRD), Yakama Nation Fisheries (YN) and Cascadia



Logs arrive streamside in bundles

Conservation District (CCD). Engineering and technical assistance has been provided to the CCNRD and CCD by US Bureau of Reclamation's (BOR) subcontractor (ICF and subconsultants, Natural Systems Design (NSD), and CH2M-Hill). The design of the project also reflects the review and recommendations of Bonneville Power Administration (BPA), Washington

Department of Fish & Wildlife (WDFW), and the United States Fish & Wildlife Service (USFWS). The majority landowner for this project is the Chelan-Douglas Land Trust along with other private owners.

The project has been separated into six shorter and more easily constructible sections. To reduce overlap and congestion, the project construction window will be spread over two years. In 2019, CCNRD and CCD will oversee the first two construction operations that will begin as early as July 1 with completion by November 1, 2019. In 2020, CCNRD and YN will oversee the final sections beginning as early as July 1, and be complete by November 1, 2020. All six construction sites will be managed as individual projects and will utilize material delivery by highway trucks and helicopter. Project features will be assembled by hand crews and heavy construction equipment. During construction, in the interest of public safety, some portions of the Entiat River will be closed to public use.

For questions regarding the potential river access closure schedule and alternative portage locations, as well as general questions about habitat restoration projects, please contact Cascadia Conservation District at (509) 436-1601. Project partners will be available to answer questions about these efforts during the Entiat 75th Anniversary Celebration on May 18 at Entiat City Park. Contact the Entiat Chamber of Commerce for event details.

FISH PASSAGE BARRIER ASSESSMENT SCHEDULED FOR ENTIAT RIVER & TRIBUTARIES THIS SUMMER

The historical range of many fish species has been reduced by human-made barriers, and opening up disconnected habitat is critical to their recovery. Cascade Columbia Fisheries Enhancement Group (CCFEG) and Cascadia Conservation District will identify where fish passage barriers exist and work with willing landowners to remove or improve them. If you are a streamside landowner interested in this barrier assessment or have questions about this effort please call CCFEG at 509.888.7268 or email jason@ccfeg.org.



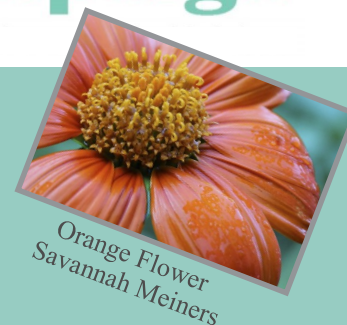
LOCAL
POSTAL CUSTOMER

Non-Profit Org.
US POSTAGE
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PERMIT # 40
Wenatchee, WA
ECRWSS

**Chelan County
Clean Water
Campaign**

**PHOTO
CONTEST**

Visit www.cascadiacd.org
for complete contest rules &
details and to submit your photo(s)!



Orange Flower
Savannah Meiners

CASCADIA IS HERE TO HELP WITH YOUR NATURAL RESOURCE CONCERNS

Conservation districts use Natural Resource Investments funding from the Washington State Conservation Commission (SCC) to offer local, incentive-based programs that empower landowners to voluntarily install best management practices (BMPs). BMPs advance progress toward resource objectives, such as improved water quality and habitat, and are farm-friendly.

Cascadia Conservation District helps landowners to be better stewards of natural resources, and Cascadia's cost share program provides landowners with cost-share assistance to support implementation of these practices on private property. Landowner expenses associated with pre-approved conservation practices are matched with cost-share funding at a ratio of 50% to 75% of the total cost of projects. Cost-share ratios vary by conservation practice (see "Eligible Practices" on our website). Some examples of recent projects include irrigation efficiency upgrades to save water on orchards, cover cloth or crops to reduce erosion and weed pressure, and forest thinning, pruning and slash reduction.

Applications for 2019-2020 will be accepted through June 1.

To initiate the application process or for more information, contact Resource Specialist Sandy Letzing, or visit our website at cascadiacd.org under Programs, Landowner Assistance.

SPRING LAWN CARE TIPS!

Feed: In Central Washington, more fertilizer is required during the spring and fall when the grass is growing. Split applications can be made in sandy soils, such as 0.5 lbs/1000 sq. ft in April and 0.5 lbs/1000 sq. ft. around Memorial Day. In fall around Labor Day make another single or split application of fertilizer (avoid complete fertilizers containing phosphorus). Have your soil tested at least every 3 years to ensure correct nutrient levels. When applying your fertilizer, spread it out evenly across your yard, applying about 0.5 to 1 pound of actual nitrogen fertilizer (the first number of the analysis) per 1000 square feet of lawn. Any more fertilizer than this will most likely just be washed away and will make its way into local waterways. Proper application saves money and protects water quality. Use a fertilizer product with about 50% slow release nitrogen to prevent leaching.

Watering: During the spring, most cool-season grasses begin to speed up their growth rates rather quickly. During this time, proper watering is key to ensure your lawn doesn't develop any brown or wilted patches. Water your lawn early before sunrise (1-1.5" a week in the spring) and ensure the water reaches 4-6 inches deep into the soil, allowing the growth of deeper roots. In order to avoid the development of turfgrass diseases, do not water your lawn if your soil is still moist to the touch.

Mowing: For healthy grass, mow the lawn once a week and do not cut off more than one-third of your grass height at a time. By cutting shorter lengths more frequently, not only will your grass be healthier but you can then leave the grass clippings on the lawn (as long as they do not form clumps) as mulch. This returns nutrients back to your lawn and acts as a free, natural fertilizer. Spring is also a perfect time to have your lawn mower blades sharpened. Dull blades can damage your grasses and make them more susceptible to diseases and pests.

Dethatching: Spring is also a great time to get rid of any excess thatch in your lawn just before the growing season begins. Thatch can be beneficial to lawns in small quantities and bolster your turfgrass to resist regular foot traffic. However, overly thick thatch (greater than 1 inch) can become home to many diseases and pests and prevent water from reaching the soil. In early spring, when the last frost has ended, use a dethatching rake to dig up excess thatch and remove the clippings left behind in order to allow for your lawn to fill in. It's also a good time to aerate to manage compaction issues.

Disease Control: Early spring is a popular time for many turfgrass disease symptoms to begin showing themselves. Take time to inspect your lawn for symptoms and catch diseases before they spread.

- **Fusarium Patch disease:** Look for small, round, tan colored spots on your lawn during this time. This disease grows best in cool, moist soils and commonly affects bentgrass species.
- **Necrotic Ring Spot:** This disease shows itself through dead rings and arches on your grasses that can reach up to several feet in diameter.



Less is more! Learn how to conserve water while maintaining a healthy green lawn

WILDFIRE PREPAREDNESS Protect your investment!

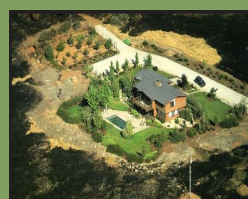
As fire season approaches, it's time to consider the defensible space around your home and take action to reduce your risk of wildfire damage.

These actions include, but are not limited to:

- Raking and removing leaves and needles from decks and roofs
- Moving flammable materials at least 30 ft from structures
- Ensuring that vents have metal screens
- Keeping brush low and limbing trees to prevent ladder fuels

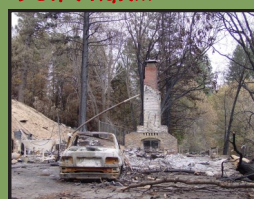
Learn more at Firewise.org or by contacting your local fire department.

The best offense...



...is a good defense.

Don't wait...



...until it's too late!

Cascadia offers free fire risk assessments

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

The best way to prevent these diseases is to avoid over-watering and over-fertilizing. If you notice symptoms go to your local lawn care store immediately. There are many products you can purchase to stop the disease from spreading. Follow the label's instructions carefully, as many fungicides can also damage grasses and plants. Take care of diseases early to allow your grass time to recover before the hot summer.

For more information check out our lawn care brochure: http://cascadiacd.org/images/site_graphics/Cascadia-Lawns.pdf

The WSU Gardening in Washington State website has many publications on home lawn care <http://gardening.wsu.edu/lawns/>

WSU Publications General Gardening – Lawns, has many great publications on lawn care. <https://pubs.wsu.edu/ListItems.aspx?CategoryID=218>

Or for more specific questions, take a few pictures of the problem and/or bring a sample of your grass into the WSU Chelan Douglas Master Gardener clinic for free advice. Mondays and Wednesdays from 1-4pm at Chelan County Extension, 400 Washington Street, Wenatchee, WA

CAMP BIOTA: SCIENCE CAMP OF THE FUTURE



Students gathered carcasses, then used equipment to locate coded wire and PIT tags, took measurements, and identified species.

The first week of April, Cascadia had the opportunity to be a part of Camp Biota, a hands-on science camp for migrant middle schoolers at the Leavenworth Fish Hatchery (LFH) and the YMCA.

Along with 23 other instructors, our Natural Resource Education Coordinator, Sasha Vafaei, was able to help deliver important natural resource-based education to 18 students from the migrant program. Using the US Bureau of Reclamation's *Rolling Rivers* trailer, which has sand-like material and running water to model stream flow dynamics, students were able to use their hands to create a model riparian habitat.

Camp Biota takes students from the migrant program, meaning they have moved at least once during the school year, through a week of activities focusing on riverine ecosystem ecology, fish biology, and wildlife conservation that mimic local conservation challenges. During each of these interactive science-based activities, at least one Spanish speaker is present and interpreting for less-fluent English-speaking students.

The brain-child of Barbara Guzman of the North Central Educational Service District and Julia Pinnix of Leavenworth Fisheries Complex, Camp Biota is in its second year and has been resoundingly successful.

"We aimed to create a space where interest in science is shared by both women and men, by people of color, and in more than one language—a welcoming space where everyone can be at the table." – Julia Pinnix, LFH

The benefits to having bilingual science programs for at-risk students who would normally be left behind are countless. It is important not to leave out any members of the next generation in the environmental science conversation.

"If we wish to see a diversity of people enter public service and science careers, we must invite them into that world when they are young. Camp Biota can help pave the way." – Julia Pinnix, LFH

VOLUNTARY STEWARDSHIP PROGRAM (VSP)

The Voluntary Stewardship Program (VSP) is a new way to enhance agriculture while protecting the environment in Chelan County. Chelan County has formed a VSP Work Group, including Cascadia Conservation District, Chelan-Douglas Farm Bureau, and local producers and technical experts. The work group looks forward to working with you to provide technical assistance and financial incentives to protect and enhance critical areas and maintain agricultural viability in Chelan County.

What is VSP?

The Voluntary Stewardship Program (VSP) is an optional, incentive-based approach to protecting critical areas while promoting agriculture. The VSP is allowed under the Growth Management Act as an alternative to traditional approaches to critical area protection, such as "no touch" buffers. Chelan County received funding to develop a VSP work plan from the Washington State Conservation Commission, and the State Technical Panel approved the plan in April 2017.

Benefits of Participation

- Participation is voluntary.
- Protects and enhances critical areas while maintaining and promoting agricultural viability.
- Gives landowners a chance to avoid unnecessary regulations and be recognized for conservation practices.

What areas does the VSP protect?

The VSP protects environmentally critical areas on agricultural lands located in unincorporated Chelan County. Critical areas include: (1) fish and wildlife habitat conservation areas (2) wetlands, (3) frequently flooded areas, (4) geologically hazardous areas, and (5) critical aquifer recharge areas used for potable water. *See RCW 36.70A and WAC 365-190*

Producer Stewardship Checklist – Available Online

Producers can support VSP by completing this short voluntary stewardship checklist:

<https://www.surveymonkey.com/r/ChelanVSPProducer>. It is anonymous and will help us understand the conservation efforts you already do and identify other conservation practices you may be interested in.

Contact Mike Kaputa, mike.kaputa@co.chelan.wa.us, 509-667-6584, or Hannah Pygott, Hannah.Pygott@co.chelan.wa.us, 509-670-9306, at the Chelan County Natural Resources Department for more information.

You may benefit from this voluntary program in Chelan County through an evaluation of overlapping critical area locations and agriculture. For additional information please contact: <https://www.co.chelan.wa.us/natural-resources/pages/voluntary-stewardship-program>



Students learn to dissect fish and identify parts of the anatomy during Camp Biota

WELCOME DILLON!



Cascadia welcomes our newest Board Member, Dillon Miller, to the Cascadia family.

Dillon was born and raised in Cashmere and is a 4th

generation orchardist in the Cashmere/Dryden area. We are excited to have another local farmer on our Board!



Wenatchee Area Orchard
Photo by: Berk Consulting

SURFACE WATER MONITORING FOR PESTICIDES IN CHELAN COUNTY

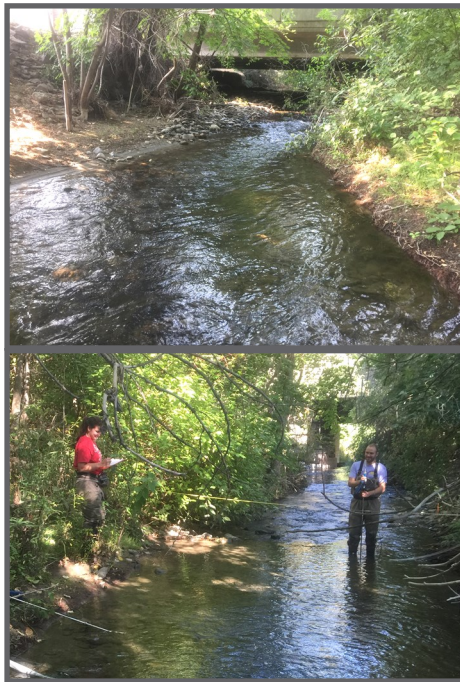
CONTRIBUTED BY ABIGAIL NICKELSON, USDA

The Washington State Department of Agriculture (WSDA) has been conducting monitoring of pesticides in surface water in Chelan County as part of their state-wide Surface Water Monitoring program. Samples are collected between March and September in three local creeks; Mission and Brender Creeks (Cashmere) and Stemilt Creek (South Wenatchee). The water samples are analyzed for 146 pesticide compounds and their degradates.

Most pesticides detected are found at very low concentrations and are not of concern. Certain pesticides have been detected in recent years at concentrations that are approaching a surface water benchmark or level of concern. Results from 2018 indicate springtime chlorpyrifos and malathion concentrations in surface water are exceeding levels known to be toxic to aquatic organisms. The exceedances usually occur in April and May. Other pesticides that were detected include: norflurazon, simazine, pyridaben, etoxazole and spirotetramat.

Preventing contamination to surface water is very important for the protection of aquatic systems and maintaining crop protection tools. Maintain/clean, calibrate and inspect application equipment regularly, particularly nozzles and strainers. Plan applications carefully, do not apply right before a storm to reduce runoff and also follow label restrictions on wind speed during application. When applying next to a stream or water body turn off the nozzles facing the stream or other sensitive areas. As always, be sure to follow the label directions and the environmental hazard and precautionary label statements. Pay extra attention to the labels and vulnerabilities of the application site when applying pesticides, especially when using a pesticide product with active ingredients that have exceeded a level of concern like chlorpyrifos and malathion.

More information about this project, WSDA, and the Natural Resources Assessment Section (NRAS) can be found at www.agr.wa.gov/PestFert/NatResources.



Crews sampling on Mission Creek in Cashmere. Photo credit: WA State Department of Agriculture

BEAVER RELOCATION PROGRAM

From late April-September Trout Unlimited is trapping nuisance beavers and relocating them to National Forest lands, with a stop over at Leavenworth National Fish Hatchery along the way. The project gives problem beavers a chance to improve ecosystems and offers landowners a non-lethal removal option. For information or nuisance beaver assistance contact Cody Gillin, Trout Unlimited Project Manager, at (509) 888-0970 or cody.gillin@tu.org.

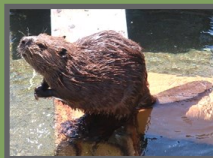


Photo: US Fish & Wildlife Serv.



CASCADIA
CONSERVATION DISTRICT

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Please Remember to Recycle



UPCOMING MEETINGS & EVENTS

Cascadia Conservation District Board Meetings

May 21 14 N Mission St, Wenatchee 3:30 pm
June 18 14 N Mission St, Wenatchee 3:30 pm
July 16 14 N Mission St, Wenatchee 3:30 pm

Entiat Watershed Planning Unit Meeting

May 1 Entiat Grange Hall 10:00 am

Wenatchee River Institute - Sustainability Series: What You Can Do

Details and registration at: <https://wenatcheeriverinsitute.org>

May 6, Red Barn at WRI 7:00 pm
June 10

Wenatchee River Institute - Birds of the West Mini Art Class with Molly Hashimoto, a Leavenworth Spring Birdfest event

Details at: <http://www.leavenworthspringbirdfest.org/>

May 17 Barn Beach Reserve, 1:00– 3:00 pm
347 Division St
Leavenworth

Wenatchee River Institute - Birding by Raft, a Leavenworth Spring Birdfest event

Details and registration at: <https://wenatcheeriverinsitute.org>

May 16, Barn Beach Reserve, 2:30 - 4:30 pm (16th)
17, 18, 19 347 Division St 7:30-9:30 am (17th)
Leavenworth 7:00-9:00 am (18/19th)

Wenatchee River Institute - Summer Camps

Details and registration at: <https://wenatcheeriverinsitute.org>

Monday– Barn Beach Reserve, 10:00 am - 3:00 pm
Friday 347 Division St
Leavenworth

The Wenatchee Area Field Guide from Chelan-Douglas Land Trust

A newly published brochure is available to guide identification of 100 locally common native plants and animals. This folding guide is lightweight, waterproof, and is available for purchase at the Greater Wenatchee Valley Chamber of Commerce, Pybus Market, and at the downtown Wenatchee Arlberg Sports for \$8.95.

Thank you to Stemilt Growers for support of Cascadia's native plant sale and restoration projects through plant storage and staff time!

FAREWELL RITA



Cascadia Board Member Rita Lovett has stepped down.

During her term, Rita Lovett generously offered her time and talent to the District. Her advice was greatly appreciated. Although circumstances changed to limit Rita's ability to devote time to serving on the Board, we are grateful for her help and would gladly welcome her back when the time is right.

Safe travels, Rita!