

THE CASCADIA CONSERVATION DISTRICT

CONSERVATION QUARTERLY

FALL 2009



Above: One of the graphics developed by local artist Lindsay Breidenthal in support of the river clean-up.

Left: Volunteer, Gary O'Bryan, totes garbage and debris from the river.

VOLUNTEERS MAKE RIVER CLEAN-UP A SUCCESS

Concerned volunteers converged on the Wenatchee River on August 24 for the 1st Annual Wenatchee River Clean-Up. With help from staff members of the Cascadia Conservation District and Chelan County Natural Resources Department they removed an estimated 3,500 lbs. of trash and debris from the banks and belly of the Wenatchee River between Leavenworth and Monitor.

A surprising array of refuse was recovered by volunteers who worked by either floating a reach of the river or scouring the banks on foot. Old car parts and unidentifiable chunks of rusty metal lay witness to a bygone era when it was more socially acceptable to dispose of refuse in rivers and streams to be "washed away". Recently deposited pop bottles, plastic bags

(Continued on page 2)

FINANCIAL ASSISTANCE AVAILABLE FOR CONSERVATION PROJECTS

Are you a resident of Chelan County? Do you own 2.5 acres of land or more? Are you interested in improving how you currently manage natural resources on your property? If you answered yes to all three of these questions, you are encouraged to apply for project funding from the Cascadia Conservation District's Cost-Share Assistance Program.

The cost-share assistance program promotes good stewardship of natural resources on private lands within the district by helping qualifying landowners cover the costs of select conservation projects on their property. Up to 50% of the costs associated with the implementation of eligible Best Management Practices, or BMPs, are covered through the program. BMPs are actions landowners can take to minimize their impact on soil and water resources, as well as neighboring fish and wildlife populations.

**Applications Are Due
October 16, 2009
For 2009-2010 Funding**

Examples of eligible BMPs include: 1) irrigation system upgrades and/or soil moisture monitoring equipment to improve water delivery and timing; 2) livestock exclusion fencing and/or off-channel watering facilities to prevent the spread of disease, keep algae in check, and protect habitat; and 3) stream bank erosion control and/or riparian planting to keep property intact, protect water quality, and improve habitat.

If this sounds like a program you would like to benefit from you are encouraged to contact our office at (509) 664-9370. We can help you determine what eligible BMPs are appropriate for your property and assist you through the application process. Applications for 2009-2010 funding are due by **October 16, 2009**, but we are always interested in discussing potential projects with interested landowners.

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Watershed Photo Contest

Contest Deadline Extended to October 16, 2009!

Contest rules, entry forms, and a map of the watershed can be found on our website www.cascadiacd.org or by calling (509) 664-9370.

RIVER CLEAN-UP (Continued from page 1)

and furniture, on the other hand, provided a reminder of how far we still need to go to alter public perceptions and protect our local waterways and public access points.

Garbage and debris in the river is not only unsightly, but it also poses an environmental and human health hazard. It degrades valuable habitat and can pose a serious risk to people who enjoy recreating on the water. This list of concerns was reflected by the different interest groups represented at this year's event including rafters, kayakers, fishermen, and riverside landowners. It also extended outside the boundaries of our local communities as evidenced by the two volunteers who came all the way from Seattle to help out.

The event culminated with a much deserved barbeque at Riverside Park in Cashmere and a T-shirt raffle made possible through a generous donation from the Washington Rivers Conservancy. Local artist Lindsay Breidenthal provided the graphic that graced the event poster and subsequent T-shirt. To see this example of her artwork, along with other pictures from the clean-up and a list of sponsors, visit our Flickr account at www.flickr.com/photos/cascadiacd.

The Cascadia Conservation District and Chelan County Natural Resource Department would like to host the event again next year. Prospective volunteers are encouraged to contact the Cascadia Conservation District at (509) 664-9370 for more information.

In the meantime, the Chelan County Natural Resource Department will be continuing clean-up efforts by tackling large debris in the mainstem Wenatchee River through a grant from the Washington State Department of Ecology. For more information on these efforts contact their office at (509) 667-6533.



Pile of garbage and debris rounded up by volunteers at the Washington State Department of Fish & Wildlife public access point in Dryden as a part of the 1st Annual Wenatchee River Clean-Up.

KIDS IN THE CREEK CELEBRATES SWEET 16

Last May marked the 16th annual Kids in the Creek experiential education program. Every year, the Cascadia Conservation District partners with the US Fish and Wildlife Service, US Forest Service, Washington State Department of Ecology, and the City of Wenatchee to take high school students deep into the world of stream habitat, and overall watershed health.

Some of these students have never had an opportunity to explore a creek or river. The Kids in the Creek program allows them to step out of the standard classroom environment, get their hands and feet wet, and literally submerge themselves in the subject matter. Those who may normally struggle to understand certain concepts out of a textbook are given the opportunity to directly witness how stream environments work and the effects people can have on the environment.

This year 43 resource specialists guided 217 students through six stations titled *Fish Health*, *What's in that H2O?*, *Macroinvertebrates*, *Riparian Rx*, and *Habitat Sense*. After spending most of the day knee deep in the subject matter the students reconvene and put their newly acquired knowledge to use at the final station titled *Watershed Wonders*. This station is a community planning exercise where teams of students are given a land use proposal. They are then asked to assess the effects such a project would have on surrounding natural habitat, and develop ways to reduce any potential negative impacts. At the end of the day the students present their swiftly organized plans to a panel of mock "County Commissioners" who critique their ideas and offer suggestions they may want to consider.

Tom Graham, who volunteered this year as one of the mock commissioners, was struck by the ease with which these students conducted themselves in the short amount of time given. He likened the awareness of this young generation to the many before it who have been introduced to conservation concepts through various campaigns targeting America's youth, and in turn act as information pipelines to the older crowds by advocating a change in behavior and attitude. Graham commented that Kids in the Creek gave the students "...a forum to express their creativity and concerns."

The high schools represented this year include Eastmont, Entiat, Manson, Westside, Wenatchee, Cascade Christian, and the Cascade Discovery Program. The program was hosted at the Entiat National Fish Hatchery for two days



Students and resource professionals pose in their waders at the 2009 Kids in the Creek experiential education program.

and Lake Chelan State Park for one day. The 2009 Kids in the Creek program proved once again to be an amazing experience for students and volunteers alike. It wouldn't have been possible without the generous support of sponsors, area resource professionals, and other community volunteers.

With the excitement of this year's Kids in the Creek festivities still fresh in the air, planning is already underway for next year. Cascadia and its core team members are hoping to get more high schools and home-schooled students on board for the upcoming year, as well as drum up support from the community in the form of financial donations and volunteer time.

If you are interested in supporting Kids in the Creek or enrolling your high school student in the program, contact us at (509) 664-9370. The curriculum is available for review on our website at www.cascadiacd.org.

THANK YOU FOR SUPPORTING KIDS IN THE CREEK IN 2009!

Sponsors

- Cascade Quality Water
- City of Wenatchee
- Entiat Valley Community Service
- Friends of Northwest Hatcheries
- Wenatchee Sportsmen's Association

Partners

- Chelan County Natural Resource Dept.
- Chelan County PUD
- City of Wenatchee
- Grant County PUD
- US Fish & Wildlife Service
- Washington Dept. of Ecology

FISH, TRAPS, AND TAGS! OH MY!

FISH POPULATION MONITORING IN THE ENTIAT & WENATCHEE

Contributors: Mike Cotter, US Fish & Wildlife Service, Todd Miller, WA Dept. of Fish & Wildlife, and Pamela Nelle, Terraqua, Inc.

A collaboration of federal, state, local and tribal entities are hard at work in the Wenatchee and Entiat River watersheds collecting data to better understand threatened and endangered fish populations in the greater Columbia River basin. Hanging out along the banks of the Entiat and Wenatchee Rivers this summer you may have seen their tools of the trade floating in the water. These creaking metal cones are rotary screw traps used to gather valuable information on juvenile spring Chinook salmon, steelhead trout, and other finned residents of our local waterways.

Rotary screw traps are seasonally deployed from early spring through the fall, and are placed lower in the basin to maximize capture and estimate the number of juvenile salmon and steelhead migrating to the ocean year to year. The traps operate using the power of flowing water and are positioned to face upstream into the main current. Water flow enters the opening of the cone where metal plates form a "screw" pattern and the force of the flowing water rotates the cone. As fish enter the cone, the water funnels them into a live well located at the rear of the trap. Seven traps were deployed in our area in 2009, including two on the Entiat River and five in the Wenatchee River watershed.

Depending on the location of the trap and the entities involved, trapped fish are either transported to a handling station located nearby, or handled on site. Handling is minimized to prevent causing any stress to the fish. Biological information about each fish captured is recorded including length, weight, and injuries. Each juvenile salmon or steelhead is then scanned with a transceiver to check for a PIT, or Passive Integrated Transponder, tag. PIT tags provide a unique personal identification number, which remains in place for the lifespan of each tagged fish. If a juvenile fish already has a tag it provides valuable growth and movement data to fisheries managers. If no tag is found, workers implant one so the fish can be tracked if it is trapped again in the future.

Once all of the data is collected the fish are released. The data is then submitted to the Columbia River Basin PIT Tag Information

System found at www.ptagis.org. This allows interested parties to track movements of individual fish throughout the Columbia River and its tributaries.

Sometimes, however, river conditions make it impossible to rely on rotary screw traps to capture fish, and biologists are forced to use other means. During periods of heavy precipitation or rapid snowmelt, the traps cannot safely operate due to high flows and heavy debris loads. This poses a huge problem for the entities operating them because increasing flows trigger juvenile Chinook salmon and steelhead to migrate out of the mainstem river into smaller tributaries where conditions aren't so inhospitable. Without the rotary screw traps operating, important biological information is not collected. So the question is, how do you alleviate this problem? One answer is remote sampling.



Above: Double rotary screw trap located just below the Old Monitor Bridge on the Wenatchee River.



Left: Snorkelers participate in remote sampling activities in a local waterway.

Instead of waiting for fish to migrate toward the rotary screw traps in the lower river, biologists head to locations where the juvenile fish wait out the storm. This is referred to as remote sampling. Different methods are utilized to capture and tag juveniles in these locations, including hook and line sampling, snorkel herding, and minnow trapping.

In addition to growth and movement data, remote tagging also provides important information regarding habitat use, habitat preference, population density, and over-winter survival of juvenile fish. It also permits the study of other species found in tributaries such

WHAT IS A PIT TAG?

A PIT tag, or Passive Integrated Transponder tag, provides a unique personal identification number for a fish. It can be likened to a social security number for an American citizen.

The uniquely designed tags are extremely small and are implanted under the skin of targeted fish. The anatomy of a tag is simple and requires no batteries to operate. A copper wire wraps around an iron base core creating a circuit, which activates as it passes through an electric field or transceiver. This in turn relays the personal identification number from the small microchip back to the transceiver for a handler to read and record.



Relative size of a PIT, or Passive Integrated Transponder, tag compared to a penny.

PIT tags have proven to be an extremely useful tool for monitoring fish and they are widely used. In 2008 alone, the Chelan County PUD tagged over 55,000 fish at hatcheries on the Wenatchee River, and over 20,000 in the tributaries. In fact, since 1987 there have been over 15 million fish PIT tagged in the Columbia River basin!

as resident rainbow, cutthroat and bull trout. Areas remote sampled in 2009 included portions of the Mad, Entiat, and Wenatchee Rivers as well as Nason Creek.

Agencies involved in rotary screw trapping and/or remote sampling in the Wenatchee and Entiat River watersheds include the US Fish & Wildlife Service, Washington State Department of Fish & Wildlife, Chelan County PUD, and the Yakama Nation. The trapping and tagging efforts of each of these agencies is coordinated and partially funded through the Integrated Status and Effectiveness Monitoring Program, or ISEMP. This Bonneville Power Administration project is designed to increase the efficiency and effectiveness of the methods used to monitor fish populations by improving study designs and testing innovative technologies.

For more information on any of these efforts contact the Cascadia Conservation District at (509) 664-9370. We will put you in touch with the entity most appropriate to address your questions and concerns.

LOCAL GROUP HOSTS WILDFIRE WORKSHOP

Whether you own a small cabin in the woods or a large tract of land, there is an upcoming event you won't want to miss. On Saturday, October 10 from 9:00 am to 4:00 pm members of the Chumstick Wildfire Stewardship Coalition will be sponsoring a "Firewise Field Day" at Red Tail Canyon Farm outside Leavenworth.

Chumstick Wildfire Stewardship Coalition

Firewise Field Day

October 10, 2009
9:00 am to 4:00 pm
Red Tail Canyon Farm
11780 Freund Canyon Road
Leavenworth, Washington
\$5 per adult registration fee

As a participant you will walk away with a good understanding of not only what to do to protect your property from wildfire, but also how to do it and who to call if you need technical or financial assistance to get the job done.

Representatives of the Coalition and partner agencies, including the Cascadia Conservation District, will be on hand to host informational booths and perform demonstrations covering topics such as landscaping around structures, financial assistance programs, evacuation planning, fire ecology, and wildfire fuels reduction. They will also perform demonstrations on pruning and thinning with hand tools, mechanical thinning, on-site chipping, mastication, and wildfire risk assessments.

Advanced registration is appreciated, but not required. The registration fee is \$5 per adult. Lunch is an additional \$5 and proceeds will benefit the local volunteer fire department.



For more information on the event or to learn more about the Chumstick Wildfire Stewardship Coalition visit their website at www.chumstickcoalition.org or contact the Coalition Director and Event Coordinator, Christine Jakobsen, at (509) 670-9235.



CASCADIA
CONSERVATION DISTRICT

215 Melody Lane Wenatchee, WA 98801
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Please Remember to Recycle

UPCOMING MEETINGS & EVENTS

Firewise Field Day

October 10 from 9 am to 4 pm at Red Tail Canyon Farm in Leavenworth

- See article to the left for a description of the event. For more information contact Christine Jakobsen at (509) 670-9235 or visit www.chumstickcoalition.org

Volunteer Opportunity: Beaver Creek Restoration Project

October 10 from 9:30 am to noon along the Chiwawa River in Plain

- Learn how plants help keep our waterways healthy as you participate in a streamside restoration planting project. RSVP recommended.

Cascadia Conservation District October Board Meeting

October 15 from 3:30 pm to 5 pm at 215 Melody Lane in Wenatchee

- Meeting is open to the public. Attendees are asked to check in at the front desk for the meeting room assignment.

"Picture the Wenatchee" Watershed Photo Contest Deadline

Entries must be hand delivered or postmarked by October 16

- Help us capture the beauty of the Wenatchee River watershed. Entries are being accepted for five categories including plants, wildlife, agriculture, recreation, and landscapes. All entries will be exhibited by category at local businesses and two winners will be selected from each category for inclusion in a 2010 Wenatchee River watershed stewardship calendar. Complete contest rules, entry forms and a map of the watershed are available on our website at www.cascadiacd.org or by calling our office at (509) 664-9370.

2009-2010 Cost-Share Assistance Program Application Deadline

Applications must be hand delivered or postmarked by October 16

- See article on page 1 for a description of the program.

Cascadia Conservation District November Board Meeting

November 19 from 3:30 pm to 5 pm at 215 Melody Lane in Wenatchee

- Meeting is open to the public. Attendees are asked to check in at the front desk for the meeting room assignment.

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



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