## 20 Spring 2023 Applegater Calling all Applegate irrigators

## **BY NATHAN GEHRES**

If you are an irrigator in the Applegate Valley, the Applegate Partnership & Watershed Council (APWC) would like to hear from you.

Members of the local farming community know that getting reliable water for irrigation hasn't gotten any easier over the past several years. One of the big challenges that irrigators are facing is the condition of the aging irrigation ditches. At the same time, as the types of agriculture diversify, new ways of applying water to the fields will require adaptation to the present systems. Also, water is becoming an increasingly precious, and limited, resource.

APWC will be reaching out to local water users and ditch associations to hear about their concerns and to determine how we can work together to address all needs, while also finding

ways to add efficiency to our system and reduce water loss to benefit our streams. This outreach will be funded through an Oregon Watershed Enhancement Board (OWEB) grant and will be in partnership with the local Oregon Water Resources Department (OWRD) watermasters and with soil and water conservation districts of each county.

The current system of 100-year-old dirt ditches carrying water for miles across the landscape is being strained, sometimes close to the bursting point. That is a conclusion I reached by walking local ditches, talking with dozens of irrigators, and watching the steady disappearance of streams I grew up swimming in. Irrigation ditches that stretch like arteries throughout our valley are vitally important to local farms that help to support and define the character of the Applegate. The system was developed during a different time, when multigenerational farming families would work diligently with their neighbors to maintain the ditches.

Since then, many of those large family farms have been broken into smaller parcels. Alfalfa fields have transitioned into vineyards and other crops. The regular, communal maintenance of the irrigation ditches has largely become a thing of the past, as the community ages and the younger generation moves off the farm. This new reality presents some problems, but it also provides opportunities to improve the situation for everyone. One of the most common complaints I have heard from irrigators is about the constant maintenance and adjustments required to keep the water flowing down irrigation ditches. A variety of problems, from fallen trees to ground squirrel tunnels, must be constantly addressed. Also, as the water level of the river changes, the ditch needs to be adjusted accordingly,



Running water in October? No, it is just overflow/runoff water from an irrigation ditch emptying into a roadside ditch.

to maintain a regular supply of water. This could be as easy as turning a headgate or as difficult as expanding a push-up dam. APWC would like to hear from irrigators about the issues they have faced and work together to find solutions, such as using pipe in sections of the ditch, that will reduce maintenance labor.

Communication is often treated as a lost art, and perhaps for good reason, but clear communication is essential for the smooth operation of an irrigation ditch. Coordinating the use of water among several ditch members in such a way that every member gets their allotted share is difficult, not to mention the difficulty of collecting dues. Communicating instructions from the watermaster to all the water users poses a challenge. Forming a structured ditch association can help solve those problems, and APWC would like to help with that.

Once the water actually gets to the farm, its journey is far from complete, and the opportunities for improvement aren't over either. One of the goals of the project is to help water users upgrade the efficiency of their irrigation systems-to move from flood to rainbirds, or from rainbirds to drip. Tailoring the water use to the crop and to the setting could reduce the amount of labor needed to run the system, while also reducing wasted water and runoff. The Applegate Valley has changed a lot during my lifetime, and it will continue to change, but the need for local farmers and for clean water in our streams will be constant, and we need to support both. Applegate irrigators, please feel free to contact me, and I look forward to talking with you. Nathan Gehres nathan@apwc.info 541-890-9989



This large wood structure was created with whole trees and logs salvaged from a wildfire area. Photo: Applegate Partnership & Watershed Council.

## Streams: The messier the better

## BY JULIE CYMORE

After the recent wind events, many landowners have been left with a lot of cleanup to do from downed trees. When a tree falls in a stream the results can look like a disaster with broken branches, leaves, and limbs everywhere. However, this chaos is exactly what the creatures and fish that live in the creek need to survive. Wood, leaves, and other organic debris provide many benefits to the creek. They contribute food sources for aquatic bugs that support fish populations. In addition to supplying nutrients, the trees provide homes for bugs and other organisms, hiding places for fish, and habitat for juvenile fish.

Logs in the stream slow the flow of the water, which allows the ground to soak up water like a sponge, recharging groundwater that can support the streamflow and vegetation during the drier times of the year. Minor erosion can occur as water eddies around the log, but slowing water down reduces the larger forces that cause harmful erosion downstream. Overall, logs and woody debris are a win for streams. There are so many benefits that, the next time you see a newly fallen tree in a stream, leave it there and over time watch nature take its course.

For the last three years, the Applegate Partnership & Watershed Council has been working on large-scale stream habitat restoration on West Fork Evans Creek, a tributary of Evans Creek, near Elderberry Flat, outside of Rogue River. It is one of the highest priority areas for restoration under the National Oceanic and Atmospheric Administration (NOAA) recovery plan for endangered coho salmon. In addition, the project benefits fall Chinook salmon, summer and winter steelhead, Pacific lamprey, and cutthroat trout.

Past forest and road management practices, including clearing wood out of streams, have reduced the amount of wood instream, simplified instream habitat, and increased sediment to the stream. Our West Fork Evans Creek Large Wood Project has added trees and logs to the creek that will help reverse these impacts and boost local fish populations by improving spawning and rearing habitat.

Through our partnership with Lone Rock Timber, Silver Butte Timber, Olympic Resources Management, and the Bureau of Land Management and with funding from Oregon Watershed Enhancement Board (OWEB) and NOAA Restoration Center through the Wild Salmon Center, we have added 530 logs and 140 whole trees to 12 miles of stream. Trees are carefully selected from overstocked riparian areas so that shade is maintained for the stream.

It's a beautiful, organized chaos as whole trees crash over and are pulled into the stream by using a BU-85 Skagit winch mounted on a truck. Juvenile fish begin to use this new habitat within minutes of the tree being placed in the stream, and adult fish use the logs as soon as they arrive to spawn.

The summer of 2023 marks our fourth season. If you are interested in hearing more or touring this project, please contact me, Julie Cymore, project manager, at 541-890-9765 or julie@apwc.info.

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Large wood slows stream velocity, sorts gravels for spawning, and creates cover for fish. Historically trees would naturally fall into the creek, providing these benefits. Photo: Applegate Partnership & Watershed Council.



