"To voluntarily bring people together to improve communication, reduce conflicts, address problems, reach consensus, and implement actions to improve natural resource management on associated private and public lands in the Entiat WRIA 46"

Entiat Watershed Planning Unit Meeting
May 14, 2025
4:00pm-6:00pm
Entiat Fire Station – 2200 Entiat Way
Facilitator: Mark Ingman, Cascadia CD

4:10 Round Table & Attendance:

Tim Hanrahan - Boise Idaho consulting group
Karenth Dworsky - Watershed Program Manager, Okanogan Wenatchee National Forest
Cris Butler - Yakama Nation Fisheries
Mark Ingman – Cascadia Conservation District, facilitator

- Looking to install 20 low tech structures in Stormy creek, starting in July
- Main things in work this season are riparian planting and BDA's.

Veronica Arroyo-Perez – Cascadia Conservation District
James Hudson - Yakama Nation Fisheries, presenter

- Continuing reach assessments through Entiat
- Working in Wenatchee area

Chuck Largent – Local resident
Nigel Kingsbury – Water Master, Department of Ecology
Phillip Klenke – Cascade Fisheries
Tim Aemmer – Local resident
Keith Vradenburg – resident/landowner
Mike Kane – Chelan County Natural Resources Department

- Maintenance and monitoring in middle Entiat projects

Bob Whitehall – resident/landowner

Renee Swearingen – Entiat Mayor

4:30 Columbia River Basin Long Term Supply & Demand Forecast (Entiat) – Jennifer Stephens and Nigel Kingsbury of Dept. of Ecology

Long-term supply and demand forecast required every 5 years by legislature, we are talking about this on a regional level, the Columbia River Basin

Trying to forecast water supply and demands, look at climate change, population growth potential, and shifting trends in agriculture practices

- Overall results for WA… water supplies increasing earlier in the spring/water (~ 19 days earlier), and decreasing late in summer/fall, more extremes in water supply from year to year, declining low flows, affecting important fish species, areas of diminishing groundwater supplies, watersheds with increased in out of stream demands
- Warming is the new normal
- Climate change: more rain and less snow, lower levels of snowpack, earlier snowmelt, more intense and prolonged times of drought, increased heat stress on fish, farms, and municipal systems, extreme weather events in more frequent basis
- Agricultural Practices: longer growing seasons, earlier planting dates, earlier flowering in fruit trees and specialty crops
- The timing of water supply is expected to occur 19 days earlier, increasing agricultural demand, earlier demand timing (may be earlier than existing water rights allow), residential summer demand, decreasing minimum flows

Nigel – Low flow provisions are different than in stream flow rule. The provisions were worked out with WDFW and the Dept of Ecology. The minimum low flow provisions is lower than the in-stream minimum.

Chuck – Are you seeing larger growers changing irrigation systems?

Jennifer – I am seeing lots of shade cloth (they have a significant effect)

Nigel – We are seeing more cover crops and transition from overhead sprinklers to micro sprinklers

Mark – What areas of water storage are these companies considering?

Jennifer – The office of Columbia River gathers information for water decision makers, actively focus on development of water supplies, like the Odessa groundwater

replacement program. The goal is to get farmers away from the aquifer. Have been working together with the Oregon Water Resource Department.

Mark – Surface to groundwater conversions are desired or more so a problem?

Nigel – Depends on the area in general and specific, sometimes the earlier water there is not enough time for it to go into the aquifer to recharge, and because of the demand of water later, we have to live with what is available right now. We keep overusing that resource, groundwater is not an alternative (doesn't solve the problem)

Jennifer – Aquifer Recharge is an approach that instead of waiting for an aquifer to recharge naturally, you would take surface water and pump it into the aquifer, and it refills the aquifer much quicker. The water is stored until it is needed, and you can pump that water out and use that water without detrimental effects. The city of Yakima has successfully injected water into an aquifer. Floodplain restoration is a big part as well, like the work you all are doing. The water spreads over the aquifer, that piece of natural aquifer recharge has been missing in a lot of places, now we are going back and doing BDAs and log jams.

Mark – Would you say that filling an aquifer in this way is basically using an aquifer like a water storage tank?

Jennifer –That is relatively how it works.

Mark – Have you seen a depletion? There are some concerns of the aquifer losing its capacity. Like a battery can be charged and recharged, but eventually looses capacity, is there this concern with pumping water in and out of an aquifer?

Jennifer – This is a question surrounding aquifer recharge, but I'm not able to answer if this has been an actual issue or concern.

Mark – We might have bigger problems than the structure of an aquifer, like just being able to supply enough water.

Nigel – Consult Melissa Downs or Ingrid from OCR, John Kirk has been working in water resources as well.

Mike – Nason creek had a levy built and it stored a lot of water with the help of all the beavers that are living back there.

Nigel – Its hard to do BDAs or other structures in urban areas, so looking for alternative routes.

Mark – What is the issue with apples ripening 19 days earlier?

Jennifer – That would be a timing issue, with transporters.

Nigel – Irrigators might want to start irrigating earlier, potentially you have people who want to water early but their water rights don't allow them to, or crops are behind because they have been growing before water has been allowed.

4:55 Yakama Nation Silver Falls Habitat Restoration Project – James Hudson, Yakama Nation Fisheries

Project constructed entirely on US Forest Service Land

- Current fish use, spring chinook, steelhead, bull trout they all spawn and rear in project area

Mark – I think I provided the thermal infrared data, why are the reach assessments important?

James – They provide a lot of information and clarifies the existing conditions and how they can be improved, (there's a presence of a levy in this mile), gives ideas for future projects.

Mark – How many banks full width wide would you say this area of the river is?

James – There is not a lot of flood plain room on the sides—constrained somewhat.

Mark – Recreation an issue in this area or a factor in design?

James – There's not a lot of recreation that happening that high, at least not that I've seen.

Chris – WDFW does the surveys. For whoever asked the question on the tree tipping, when we are looking at a reach, we have to have the area surveyed for adult trees and then you go out there and you try to identify the shot tree, there is quite a bite of work that goes into it. I can show some videos of the pulling truck/rig at the break.

5:20 Food and Beverage break

5:30 Roaring Creek Floodplain Enhancement Project, Mark

Bob – In Roaring Creek, there are spots where you lose all your water and then further down it flows back into the stream.

Mark – We are doing some geophysical surveys so they are sounding the depth to know the depth of different materials and the bedrock. It's a relatively primitive area; the road is not easy to get through and you need a good rig to get up there.

Renee – so your slide that is interactive ("Whats missing in this picture of the stream"), is that for us or the general public? Because most of the general public has no idea of these terms and what they mean. They are not thinking that a log jam is good for fish.

Mark – I agree these terms or concepts don't usually jump out to folks. I agree the terms are an exercise that could be worked on more for the public to explore the concepts and start discussion/thinking about stream health.

Karenth – Have you done cultural surveys up here yet?

Mark – No, but we are in conversations with the FS archeologist, and we have archeologists on our staff that if the forest doesn't want to do inventory themselves, we are able to support the process.

5:55 Final comments & questions

Meeting adjourned at 6:09pm.