

Puyallup River Watershed Partnership

Annual Partnership Meeting

April 18, 2022 from 9:00 a.m. – 12:00 p.m.



In attendance:

Washington State Department of Ecology

Anne Baxter
Casey Vaughn
Sheila Marcoe
Donovan Gray

King CD

Jay Mirro
Matt Maria
Carrie King
Laura Redmond
Elizabeth Clark

Washington State Department of Agriculture

Michael Isensee

City of Enumclaw

Darren Chromey
Eric Palmer

King County

Rick Reinlasoder
Meagan Jackson
Todd Hundsdoerfer
Cameron Chapman
Jeanne Dorn

USDA NRCS

Lynn Khuat

Bernie McKinney
Tim Obrien

Partner Updates

Molly Gleason, Ecology- Water Quality Monitoring Updates

- See [Puyallup River Tributaries Effectiveness Monitoring 2021-22 Water Quality Data Summary](#)
- To answer a question about what is considered a high level of phosphorus: EPA has established a recommended limit of 0.1 mg/L for total phosphorus in flowing waters. The annual median phosphorus (2021-22) for Second Creek = 0.35 mg/L, Pussyfoot Creek = 0.15 mg/L.
- Currently, Washington State does not set total phosphorus standards. In absence of a set criteria, water quality issues caused by excess total phosphorus may first be detected by more sensitive criteria that are already in place. For example, dissolved oxygen and bacteria are usually associated with similar impacts that arise from high phosphorus levels, thus Ecology typically uses bacteria and pH impairments to determine if there are nutrient challenges. The criteria for these parameters are already designed to be reliable indicators of trophic health.

Donovan Grey, Ecology- White River pH TMDL

- The White River pH TMDL addresses sources of nutrients to the White River and focuses on pH exceedances of 8.5 in White River. White River pH is the main focus of the TMDL, regardless of whether or not there are exceedances in tributaries.
- Nutrient loading, in particular phosphorus loading, reductions are needed in the tributaries in the Enumclaw Plateau to improve pH conditions.
- Reducing high bacterial discharges could also reduce excessive phosphorous in stormwater runoff; therefore, many of the approaches are the same for addressing both FC and pH TMDLs.
- Bacteria sampling may still be the main way for investigating pollution sources instead of nutrient sampling (which can be expensive) or measuring for pH (which can be dynamic and difficult to capture from discrete measurements).
- pH exceedances are likely a summertime problem due to increased productivity of aquatic plants that thrive under high nutrient conditions and from increased temperature.
- Wasteload allocations
- Muckleshoot tribe is attempting to increase fish production.
- In response to question related to funding availability:
 - [Ecology Water Quality Combined Funding Program](#)¹

¹ <https://ecology.wa.gov/About-us/Payments-contracts-grants/Grants-loans/Find-a-grant-or-loan/Water-Quality-grants-and-loans>

- [King County Flood Control District- Flood Control Grants²](#)

- **Jeanne Dorn:** We have to be careful about effectively communicating these issues to landowners in a way that they care.
- **Michael Isensee:** A large amount of nonpoint phosphorus is related to commercial fertilizer use which is typically highly soluble and where there would not be a fecal source.

Casey Vaughn, Ecology- Nonpoint Project Updates

- High priority areas were identified in Pussyfoot and Second Creeks and southern drainages to White River. Contact has been with properties in some way (i.e. letter, direct contact).
- An educational StoryMap is currently in development, which will incorporate information on water quality impacts, water quality law/regulation, and resources for funding. A finished product is expected by fall and links will be shared via letters to landowners.

Michael Isensee, Department of Agriculture – Dairy Nutrient Management Program

- During the February historical rain-event, he viewed inappropriate timing for application at the southern edge of the Plateau. He is also addressing overtopping of manure lagoons in the southern drainages.
- Collected samples at outfalls including at a culvert near White River; foam was evident at the site, but the results came in as no detect.
- During March sampling, more high bacteria hits and identified areas.
- This has been a challenging season with late rain events.
- Worked hard to get state funding from Department of Health and Terry Hussman funds for Whatcom County projects. This could be the future for the Enumclaw Plateau and recommends emergency management line of thinking to make corrections before the issue becomes a problem.
- Recommending enforcement on certain properties with manure management issues (cannot name here). Jeanne Dorne recommends for partners to financially support this effort to handle manure.
- Some properties partner with digester and may be receiving more digestate than that they can safely handle.
- In response to question related to nutrient restrictions or monitoring requirements placed on digesters:
The current regulatory system for the Enumclaw digester is broken. They are granted an exemption from solid waste requirements and County Health permitting IF they are associated with a dairy and the dairy's plan is updated to account for the digester and use of digestate. The Enumclaw digester is "associated" with 4 different dairies. All the digestate is "supposed" to go to a dairy and be applied based upon their nutrient management plan. At the current time, not all of the digestate is managed this way.

Lynn Khuat, Resource Conservationist with USDA NRCS

- See [NRCS Presentation](#) for more details on the NRCS restoration projects and funding programs
- In a non-regulatory function, NRCS support restoration projects with funding and technical resources.
- Provides cost-share program and helps develop CNMP - Comprehensive Nutrient Management Plan.
- Currently working with Megan Wheldon to develop relationships in the Plateau.

Cameron Chapman, King County Stormwater Services

- See [King County Stormwater Services Presentation](#) for more details.
- To meet NPDES permit requirements, King County Stormwater Service screens the stormwater systems for bacteria sources during the wet season when tables are high and attempt to detect failing septic systems.
- Tackles: horse boarding facilities/ equestrian farms, alpaca farms and dog boarding facilities.
- Does not tackle: dairies or hobby farms.
- King County is working to build a dataset in the Second Creek subwatershed:
 - All reaches violate WQ standards for bacteria.
 - Many properties in the watershed lack fencing and buffers.
 - Did not find failing septic systems in Second Creek watershed.
- Found failing septic systems near drainages to White River- Meagan Jackson is responding to those issues.
- Brown water in ditch to 228th Ave SE-> found manure had been applied and was in standing puddles and flowing to ditch.

² <https://kingcountyfloodcontrol.org/grant-programs-funding/flood-reduction-grants-open/>

Meagan Jackson, King County Environmental Health Services

- There are currently six active properties working with septic designers for a replacement – three are under continued investigation.

Rick Reinlasoder, King County Agriculture Program

- Discussed specific properties (cannot be named here) that King County is currently working with to manage manure and implement other BMPs.

Eric Palmer, City of Enumclaw

- Bacterial source tracing along the laterals. The focus has been on Lateral A which is the main source of flow.
- During the winter sampling, elevated bacteria runoff from south of Warner Ave from unincorporated rural properties. This year looked better than past winters in terms of bacteria levels.
- There seems to be elevated bacteria along Lateral A between Watson and Blake St. The sewer main runs close to Lateral A in that section. The City is going to follow-up with DNA monitoring to determine whether there is a source and whether there is leakage from the main.
- See [Restoration Activities in the Enumclaw Golf Course](#) for more details on the City's restoration projects
 - Boise Creek is historically a productive tributary to White River, yet has limited riparian cover and has a highly modified channel routing established for recreational and agricultural purposes.
 - The proposed solution is to restore Boise Creek to its historical channel and daylight Chappel Creek.
 - Ecology monitored for temperature at Boise Creek and Chappel Creek at sites the bracket the golf course in 2019-2020. There were temperature exceedances particularly downstream of Boise Creek, which may be from the discharge of warm water from Chappel Creek and the influence of exposure on the golf course.
 - 450K from Flood Reduction Grants for the 2021 grant cycle- will be applying for 2022 cycle.
 - Still needs 1.5M to complete funding goal.

Jay Mirro, Liz Clarke, King Conservation District

- The CD Increasing cost-share rate.
- Outreach events will be person; including at the King County Fair.
- Land and water stewardship classes- keep an eye out on the website for updated schedule.
- Peer to Peer Engagement- farm tours, looking for willing farmers to give tours.
- Riparian Restoration updates- project manager is in a transition stage
 - There are currently 10 rural and 10 urban/incorporated projects throughout the county.
 - Possibly focused at Newaukum Creek.
- Liz encouraged partner involvement with King CD events: <https://kingcd.org/get-involved/events/partners/>
- King County will be at the Enumclaw Fair and coordination with partners would be great to prepare.

Bernie McKinney, Enumclaw Plateau Community Association

- Recently presented on work to the City of Enumclaw.
- The association is focused on riparian restoration.
- The project is two years along and around 1800 plants in the ground along and involves the help of 30 community members and two regular contractors (veterans) to prepare for fall planting.
- Grant with the Muckleshoot Tribe.
- Tight on funding, yet the group is on third grant from Rose Grant.

Todd Hunsdorfer, King County, Peer to Peer Engagement

- Peer to Peer Engagement discussions have been focused on trying to find ways the local agricultural community needs in terms of water quality outcomes.
- Outreach is not framed around water quality issues due to the difficulty to communicate those issues to landowners.
- Many of the agencies are involved to represent dialogue.
- There was a suggestion to create a survey, however the group is trying to find other ways to communicate with landowners rather than asking for survey completion.
- Farm Tours and stormwater parks may be a useful tool:
 - Provides an example location to demonstrate common BMPs that property owners can copy and incorporate in their own property.

- Connects folks to agricultural history of the Plateau while demonstrating improvements.
- Next Steps are to get funding and develop proposals for design and input.

Poll Questions

What were some successes this past year?

- Collectively sharing bacteria data in a single map platform.
- A few more failing septic systems found; good collaboration with other folks.
- Directly correlating runoff from pastures to water quality issues around Lateral A. Slope maintenance along the laterals. A good start to keep the invasive species down.
- Creation of the Peer-to-Peer Engagement group.
- Comprehensive Nutrient Management Plan (CNMP) or updated dairy plans at a few plateau dairies. Documenting discharges as it helps document problems and move toward solutions.
- King CD increased cost share rates for BMPs.
- Better, more deliberate, consistent communication.

What are some of the challenges and limitations you faced this last year?

- Limited staff and financial resources to address the magnitude of the problem, which are often socio-economic/cultural in nature.
- Landowner speed in installing practices.
- Time and inability to meet in person due to COVID.
- Challenges or limitations could be where the source of pollution may be coming from. If a creek or drainage ditch comes back with high hits that's one or two days that has gone by. Given time and funds is it necessary to walk the ditches more often?
- Generational transfer at farms has not been well planned; dairies have not reinvested in facilities. Average plateau dairy is not very efficient which reduces income. Megan's leave mean less technical assistance available.
- We've been unable to get farm sites of concern to apply for BMP match funding.

How would you like to see partners (please name) address those challenges in 2022?

- Transparent data in map format that explains in simple terms issues for the public to access that can also direct folks to simple funding processes for BMPs.
- Manure management seems like a huge issue. A lagoon failure or inappropriate application has much more impact on bacteria loading to river than many failing septic (tanks). Possibly more (robust) storage is needed for dairies and other facilities.
- I don't know how to get the resources to those facilities for improved manure storage- other people might have better ideas.

How can we improve coordination and information sharing?

- It would be good to have a discussion about what information should be shared. It would depend on what the partners think. For our part, we are happy to share any info we have as long as practical and useful to others.
- Getting water quality data in a shared location, whether via story map, online results map, or something else is also super useful.
- Maybe a moderated email list serv?
- We are sharing information between teams. That is great. The public still seems to need more information to be willing to change. I heard that you are doing flyers-great. Fair- great. More the better.
- Finding a shared system where site information can be shared and stored would be great; MS teams may have that functionality in the future. Whatcom continues to use a free version of Asana, and it is super useful.
- I think we're doing a decent job of coordinating at this time.

What's the desired frequency for this meeting?

- Every 2 months.
- Quarterly.
- Bi-monthly.
- Twice per season; dry season and wet season.