



CWAC Subcommittee

November 20, 2025

Committee Members in Attendance: Jenny DeGroot, Bob Eagan, Vicki Heater, Ann Jarrell, Richard Locke, Kim Sundberg

Ex-officio, County support staff, and members of public: Krista Chavez, Tyler Davis, Susan Eshelman, Paul Hart, Ethan Schmidt, Kendra Smith, Nick Walsh, Lynn Bahrych

9:00 AM **Convene Groundwater Subcommittee Meeting** *Ethan Schmidt*

9:01 AM **Public Comment** (Please limit to 2 minutes or less) *none*

9:01 AM **Groundwater Subcommittee Business**

• **Hannah Heights update** *Ethan Schmidt*

Bob: the dry season pump test has been completed and the Dept. of Ecology has published that report
Paul: I'm a member on the Hannah Heights HOA board; I had volunteered to oversee water before the March 2023 PFAS crisis now approaching three years ago. Regular water was cut off then. Now two processes, -the recently published Ecology report is under review, Ecology is receiving input, they'll assess, and then a final draft will be issued which will also be open to a 30-day review period. That process is ongoing.

-We also have a new source application in progress with Dept. of Health. Once submitted, Health will review. The initial draft of Ecology report proposed between 7-8 gallons per minute. At the end of this year the grant supporting our trucked-in water will end and it will then cost residents an unaffordable 19-cents per gallon

Ethan: there was an agreement with a closer well site in early 2024 that fell through. Then Health inspected four sites where wells could be drilled closer to Hannah Heights. The current site was inspected in February.

Kim: any lessons learned about the source of the PFAS and how this can be avoided in future?

Paul: Ecology confirmed the source is legacy firefighting foam (FFF), a highly toxic first generation of FFF which has since been replaced. Our well is the most contaminated with PFAS in the State. This must have come from the SJI Fire Department., and the current fire chief has been cooperative. Until 2018 no one knew PFAS was an issue and there weren't special requirements for disposal. Ecology oversees the site, responsible for clean-up

Richard: as the president of the Fish Bay society how can we get on this for our system?

Paul: PFAS testing is required for systems of a certain size. As far as I know no other site has had levels like this. Many in our community had blood tests done and the results were many times the normal load.

Ann: is there any threat of future migration of PFAS?

Paul: they did test-borings, but no formal study. Most of Ecology's data was given voluntarily by neighbors who allowed PFAS-testing on their wells and nearby areas show considerably lower levels.

Kendra: it's worth delineating where firehouses have been, where foam has been used and not drill there

Paul: good idea but nobody knows exactly where and when some tests were done. Friends of SJ's put some mussels at our beach and a few other locations which were extracted and analyzed and showed no evidence of PFAS contamination in other locations around Hannah Heights

Kim: airstrips are also a good place to check. what about Lopez and Eastsound?

Paul: Ecology did a check near the SJ airport and its associated well

Ethan: Here is a link to a map with the Group A wells that have reported PFAS results:

<https://doh.wa.gov/data-and-statistical-reports/washington-tracking-network-wtn/pfas/dashboard>

We started mapping the fire houses around the County shortly after the Hannah Heights contamination came to light, so if any more work is done on that, please get in touch with our department. We also identified wells in the vicinity of those firehouses. In the Eastsound basin there has been some testing and PFAS was found to be below actionable levels. PFAS tests are more expensive than a lot of other types of water testing, e.g. standard \$600 per test and that's a potential hurdle to a significant amount of testing

Vicki: I'm curious about the pump test and Ecology's examination process. There's a neighbor of the new well site who was quite concerned for the size of development this well would provide water for. It sounds like Paul has reached out to generate communication/cooperation. But I wonder about the capacity of that well Paul: the Ecology report (available on their website) says we should be able to extract 7-8 gallons per minute from that well without impacting any others. We monitored another well while we did that test. Ecology suggests that in the fractured rock environment here, and the distances involved from the concerned neighbors, that there would be no risk of impairment. We're not big water users and we've been even more conservative since this crisis. But 8 gallons per minute is not a vast amount. As I said we've been told that with a second well we could have up to 15 but we have absolutely no ability to fund that second well. We have a reserve well on MacGinitie which only produces reliably in the wet season. But in combination with the new Bailer Hill well it should be sufficient. We're just 44 homes. We'll need to re-assess after a few years

Bob: There was a follow up meeting after testing with the neighboring property owners. Even though Hannah Heights has a water right, they don't have the right to impair. But impact is not impairment.

Paul: Bailer Hill wasn't our first choice. One place with 50 gallons/minutes was blocked by single owner

Richard: but that 7-8 gallons from the Bailer Hill site, is that water contaminated?

Paul: the contamination is localized at the Little Mountain firehouse site. In March 2023 our initial Hannah Heights well was found to be contaminated; we shut down our water system and have been using trucked water since. Ongoing testing showed the plume hadn't reached our reserve well. But its productivity is low.

Kendra: question for Krista, recognizing this as an ongoing problem, particularly in places without a municipal system. Can one individual blocking access to a basic human need?

Krista: Ecology has a process for meeting with concerned neighbors. There was a potential source on someone else's lot but we can't force anyone to sell. Raquel and I have been working on consolidating small systems so that they may have access to larger infrastructure – that's the hope

Paul: once we're through this epic, we'll replace our distribution system and incorporate into the design the means to hook up with an adjoining group A system at some point in future

ACTION: Ethan has a few more questions to email to Paul offline

Kim: water laws are antiquated and create all kinds of problems. Inadequate water for salmon. Washington needs to revamp its water laws. I think other counties feel similar like in Yakima valley, issues wherein a few people own all the water. And Ecology handed out rights in the past with no view to future needs.

Vicki: This is an acute situation with the PFAS but not an unusual one when it comes to development

Paul: we're very grateful for the support we've had from the County, Ecology, Health, and Commerce

9:51 AM **USGS Groundwater Recharge Study update**

Vicki Heater

They're back at work and wrapping up the report

9:53 AM **2024 Lopez Monitoring Report**

Ethan Schmidt

We just had our field visit. There are eight wells in the network, we download water level data (manual measurement), then groundwater quality samples. Since 2008, then in 2015 dataloggers were replaced In 2021 annual report, increases in chloride were identified at seven of the wells.

-Ethan describes several more details about the data including the analytes monitored.

The network consists of cabled continuous dataloggers. We also have a barometric monitor in one well. In the report are various graphs showing seasonal fluctuations, pumping events and graphics to evaluate the change in water chemistry e.g. one looks at specific conductance vs. chloride levels

We discussed whether intrusion is happening at a very slow rate with our hydrogeologist, could be due to either sea level intrusion, or sea level rise which would bring that interface upward.

Kim: did they discuss the process of 'up-coning' (drawing more freshwater than the well can support)?

Ethan: that could help explain some of the unequal distribution in the network; it's not necessarily the wells closest to the shore showing the highest chloride levels

10:03 AM **Evaluating areas for monitoring and study**

Vicki Heater

I'd like to share two reports from the past that played different roles with our water use and development.

We did a watershed action plan and because of water rights having been issued for years with no analysis, we did a county wide water resource management plan. We found two obvious urban growth areas where we did evaluations of water systems and infrastructure, Eastsound and Fish Bay. We did two years of those studies on each location as well as an evaluation of Cascade and Mountain lakes and cascade creek. - Vicki shares map with major basins on SJI, Orcas, and Lopez. On Lopez, Vicki shows monitoring network and how shallow the groundwater basin is. Some wells show higher chlorides are in the middle of that basin (furthest from shore).

Ecology had shut down water rights statewide but opened them to support our process. - Vicki shows map of water rights for SJI, then map with wetlands and streams to show surface water dynamic, then map with Group A & B water systems. Consider the overlay of what should go into water rights. The next data we'll get from USGS will show cells with recharge, where a certain amount of water is stored underground

Part of the dynamic is that water from the False Bay basin is being used to serve the urban area of FH.

Adding more information into where the water is, where is the demand, and how to best make decisions.

Ethan: were those basins determined by rainfall collection? Or aquifer flow subsurface?

Vicki: it's static water level, can extrapolate that to think about flow and dynamic of how groundwater flows.

Kim: we also have the hydrogeological model developed for San Juan Valley about a decade ago, showed what surface flow you'd get under different rainfall regimes. The County has some analytical tools

Ann: is this report available online?

Ethan: yes, <https://sanjuancountywa.gov/DocumentCenter/View/29460/2011-SJI-Groundwater-Basin-Report>

10:15 AM **Adjourn Groundwater Subcommittee Meeting**

(Paul Hart and Bob Eagan depart, Jenny DeGroot joins the meeting)

10:15 AM **Convene Surface Water Subcommittee Meeting**

Kimbal Sundberg

10:16 AM **Public Comment** (Please limit to 2 minutes or less)

none

10:16 AM **Surface Water Subcommittee Business**

• **Fisherman Bay/Lopez Village Stormwater**

Kendra Smith

Richard: discussion of rainwater moving off new development close to shore and offsite, ready to talk about capturing that water to better charge aquifer, support community. I should know more in the weeks ahead.

Kendra: that's great. The site he's referring to is Lopez Landing. They're far down in the watershed and they're not detaining water currently. But the CIP scheduled to start this year is taking a critical eye to Lopez Village and maybe also L-14 (Tyler and Nick will be involved). We recognize from looking at climate scenarios in the Village that our drainage system isn't necessarily equipped to handle our winter situation We have pipes built under Lopez Village Road, this project is meant to integrate the surface water/storm water/and ground water needs. We don't want upgrade pipe systems if we could divert high quality rainwater somewhere it could be used as potable water. The scope of the Lopez distribution project we have in the CIP is to do some engineering, analysis, and possible water storage. And work with Fish Bay Water District which is working to get more water

Richard: we hope to have some resolution in the next month on the idea of capturing that water. And we can't imagine the County would approve the same kind of decision in 2025 as in 2016, shunting off water like this.

Kendra: we'll do some internal scoping and then reach out to Fish Bay to meet to make sure we're leveraging resources appropriately. We hope to kick that off in the new year

- Richard describes the location of this development i.e. across from the grocery store and to the north

ACTION: Vicki will send the aquifer study for North Lopez to Richard and Kendra

Vicki: What you have there is basically just 50' before there's bedrock. There may be an opportunity to capture that water on the landscape because there won't really be capacity to inject it.

Richard: and we should absolutely preserve the aquifer we do have, , it's the only one we've got

Kendra: yes, we could do surface water storage but one key aspect to consider is that surface storage will be at risk of algal blooms. We need to dig into our existing stormwater codes with a climate change lens

- **Comp Plan Minority Report**

Kim Sundberg

Bill Bangs attended one of our CWAC meetings and produced a Minority Report for the Planning Commission on the Comprehensive (comp) Plan. His main concern is that we had not considered the implications of a particular court case on the water element, counties needing to consider water availability with respect to proposed development. He's saying the comp plan needs to do a better job in the water resources section of addressing the Hirst decision (Hirst v. Whatcom County, 2016). E.g. we need enforceable standards rather than aspirational language. Do we have concerns about trying to implement this? The comp plan isn't being revised to incorporate this report as it goes toward final review. This would be great but don't have the resources.

Kendra: Ethan, Sophia, and I went through these point by point. What he's seeking is already in the language of either the climate or the water elements. There are one or two changes he sought that we didn't make. But we understand the desire to go forth having a better understanding of our water resource.

Ethan: the County can't issue building permits to exempt wells if they impact senior water rights

Kim: the only issue could come up with Cascade Creek because of senior water right holder

Ethan: if Cascade Creek was granted an instream flow, then future exempt wells would be subjected to the Hirst decision if their establishment impacted Cascade Creek

Kim: in that case I can't think of a current impact from exempt wells that could be a problem for instream flows

Kendra: in future, it could be ag wells. The Hirst case was about a certain type of large open substrate

Jenny: I like the sentiment in this report, and I feel we made a mistake in SJC when we thought we had no self-sustaining salmonids. When you look at our salmon recovery goals now, we're trying to get those instream flow requirements however we can. Now the pressing issue is Cascade Creek, but I agree with Kendra that this'll be an issue for other watersheds like Crow valley that didn't go dry in the past. We don't have all this information, and the County is actively working on that. This comp plan update may not be the right time

Ethan: I agree with his assertion that we're subject to the determination, but legally until we have rivers and streams that are designated by the instream flow this isn't an issue for exempt wells.

-more discussion of legal issue regarding exempt wells and instream flows according to state law. What's needed is getting Ecology to designate these streams, may involve engagement with Tribes

Kim: we have an approved salmon recovery plan. specifically mentioning the six watersheds on SJC with policies to protect instream flow in those streams, with target dates. we have six streams in the County that need in-stream flow designations by 2030 so maybe the County as lead-entity can work on that

-some discussion of the benefits/efficacy of working with Tribes on this issue

San Juan County Erosion & Sediment BMPs

Kim Sundberg

There was a major road construction project this summer on Bailer Hill Road. The impetus was to raise the road up because it floods periodically in winter, both due to freshwater but also occasionally to king tides.

(Kim shares photos of flooding.) The road was closed for a while this summer (open to one lane), completed in September. There was a requirement for sediment control in the contract due to False Bay creek nearby. They weren't doing it, so Kim followed up with Elizabeth Tate, WDFW and they put in some Coir logs right at the creek. Then County went in after the contractor work and eliminated the ditch on one side and put in additional culverts under Bailer Hill Road to fix drainage and steep edge. All that happened after the contract ended. The road had to be closed again, and ditch filled in with dirt. The work continued into October-November when fall rains started. Exposed soils were eroding and draining towards False Bay Creek. Kim brought this to the attention of Elizabeth Tate and Kendra. Public Works was not using Best Management Practices (BMPs) for erosion control. They subsequently spread hay on the graded area and ditch, but no wattles or check dams.

Does this committee need or want to send any letter to County Council about this? Need to use BMP's for work like this close to large surface water area. State BMPs for highway construction can be found online. County should use these BMPs and set a good example for private development

Kendra: they are required to follow Washington State Department of Transportation. Our department doesn't regulate the activity in road right of way because Public Works is meant to be following state standards. But we don't police them regarding erosion control practices. Where did they put the culvert? Is it adequate capacity

Kim: they put in two culverts – Kim describes location, they're in the lowest location

Kendra: ok so because they raised the road, they put in culverts that allowed them to make that ditch shallower. But it will likely drain slower now because must first reach height of those new culverts and tide could influence how it drains. We could ask Public Works about how they're going to tidy that up. The contractor built what was designed and it was designed in house, no consultant stamped plans

Kim: the design error caused this project to extend further into rainy season than needed

ACTION: Kendra will look at the site and tell Public Works there's concern and it was discussed at this meeting

Kim: the issue is that erosion control is needed around streams and wetlands that are sensitive to turbidity

Kendra: yes, and we want to move toward straw bales and switch away from plastics, even though it's allowed in Ecology code. Maybe in this context we can make a better plug for that with County forces

ACTION: Kendra to follow up on this at next CWAC meeting

Note: see you at next full CWAC and remember it's the second Thursday of the month, December 11th

11:10 AM **Adjourn Surface Water Subcommittee Meeting**