

APPROVED DRMT Zoom Meeting Notes June 8, 2022

Prepared by Shawn Hines, Jamestown S'Klallam Tribe

DRMT Members Present: Hansi Hals/Jamestown S'Klallam Tribe, Shawn Hines/JST (alt), Judy Larson/ Protect the Peninsula's Future, Tony Corrado/Protect the Peninsula's Future (alt), Cathy Lear/Clallam County, Robert Beebe/Riverside Property Owners, Rebecca Mahan/Clallam County (alt), Judy Larson/PPF, Lorenz, Matt Heins/Estuary/Tidelands, Michele Canale/NOLT (alt), Danielle Zitomer/WDFW, Kim Williams/Clallam Conservation District

Others Present: Genie Mixon/Dungeness Meadows resident, Marguerite Glover/Sequim Realtors, Joel Green/Streamkeepers, Joe Holtrop/Jefferson and Clallam Conservation Districts, Christina St. John/ECY, Phil Martin/resident, Nate Roberts/NOSC, Mike Dashiell/PDN, Deirdra Hahn/ECY, Robert Knapp/JST, Eric Daiber/ECY, John Perch/ECY, Carol Creasey/Clallam County, Ron Gilles/guest, Neil Harrington/JST, Jamie Tippet/river property owner

I. Introductions

Tony Corrado chaired the meeting, as Hansi would arrive at meeting later from in the field. Tony reviewed agenda and noted the first item, JST Habitat Program updates will be postponed to future meeting TBD.

Reviewed Draft meeting notes. There were no comments or suggested changes, so Tony announced those as accepted. [Note, the group did not go through process of making motion to approve.]

Public Comment

Matt Heins commented that that the WA Department of Health's Shoreline Survey of the Dungeness Bay Shellfish Growing Area that was distributed during Clean Water Work Group meeting has some misinformation, such as description of agricultural users in that focus area. He also noted some outdated information that was used.

Judy Larson noted that Clallam Transit now offers transportation to Hurricane Ridge from Gateway Transit Center in Port Angeles. Shuttle bus is free through June, and then \$1 during July 1- September 30 it will cost \$1.

Michele Canale announced NOLT's Family Picnic will be July 31, 1-4pm at Olympic Cellars. Details on their website. Please RSVP.

Shawn noted the flows listed at top of agenda for the Ecology gage are not accurate. Since the time those were posted to agenda, Shawn had been in touch with Tyler Burks at Ecology and learned the manual measurement taken in May was far enough off to require a rating curve shift which hasn't been applied yet. Tyler will update that ASAP and will let Shawn know when that happens. [Shawn followed up two days later that the update went live on Friday, 6/10, and the updated flow for 6/8 is 694 cfs].

Following Public Comments, Tony proposed getting through the other administrative-type items ("Other Orders of Business", etc.) first, and then possibly taking a break and coming back to stay on track with the guest-speaker time slots. Those in attendance agreed.

II. Other Orders of Business, Announcements & Standing Agenda Items

- **Standing Item: Project Updates**

Water Resources Technical Group update: Tony Corrado, WRTG Chair, provided status review of WRTG efforts. Since the last update, Tony noted the group has completed a Draft report. WRTG made a final review of the report and had their final meeting on 6/3. WRTG made one format change, which was to keep the report as a summary that includes the approach and the 13 topics and recommendations (~15 pages), but to move the background, comments and references for the topics/recommendations into an Appendix (~35 pages). The documents will be presented to DRMT in July.

- Project Update Levee Setback: Phase 1: After a long hiatus, Towne Road levee construction back in action now. There will be a lot of activity in the area, such as trucks hauling gravel/materials. Streamkeepers have been helping with beaver dam removal. However, beavers have continued to rebuild. Next will attempt live trapping, and relocating the beavers upriver, somewhere in vicinity of Nature Center. Phase 2: Design project went out to bid. Bid opens yesterday. One bid. Considering options. Cathy elaborated that once

the levee is completed, the beaver activity could be great. But during construction it has been a challenge, due to their effect on the hydrology, and consequential delays in the project. Matt noted the beaver population on Meadowbrook is very active. Rebecca Mahan mentioned that Methow Beaver Project offered to come to a presentation at some point regarding options for preventing beaver from doing work at certain times.

- **Standing Item: Team additions to next agenda, or suggestions for future agendas.**

- Possible presentation by Methow Beaver project
- Judy had ideas for possible future field trips or agenda items: Hurd Creek Hatchery improvements, levee.
- Send others to Shawn or DRMT Executive Committee

III. Weeds in the Dungeness Watershed

Christina St John/Clallam County Noxious Weed Control Board

Christina introduced herself as the new Coordinator for the Clallam County Noxious Weed Control Program. Cathy Lucero is retiring at the end of this summer. Christina provided a very thorough Powerpoint presentation (**attached**).

Q/A:

- Is scotch broom particularly bad this year on the Dungeness? Seems to be a lot more of it, also along the highway. *It's been problematic for a long time. If you have large plants that are too difficult to remove, the Noxious Weed Control Board has tools (weed wrenches) that they rent out that help with removal of those larger patches. We have removed a lot of Old Olympic Hwy. It tends to come in after clear cut. The seeds can stay viable in ground for over 50 years.*
- How has the application of herbicides affected things? *County only started using them in 2015. Weeds were getting out of control. We do spot-spraying. We have seen a huge decrease in regulated reeds along County roads. Report on website shows locations and trends of treatment, monitoring results, etc.*
- What are the names of the herbicides being used? *They are listed on website, all aquatically approved, and only used on our County roads.*
- Is Milfoil a native or nonnative vegetation? Can it be controlled? *Cathy Lucero has been spearheading effort to remove Eurasian Milfoil (non-native) from Lake Southerland. More info on website.*
- Any efforts to make it so that Butterfly Bush cannot be sold in our area, since it is non-native? *You can no longer sell Butterfly Bush that provide viable seeds. They have bread varieties that have sterile seeds, and those are the ones being sold in nurseries. WSDA has a plant quarantine list, and they monitor nurseries.*
- Do you coordinate with irrigation districts/companies to control propagation? *We work with all landowners. Please feel free to contact Christina with further questions: Christina.stjohn@clallamcountywa.gov.*
- Is there a list showing which weeds are highest priority? *Yes, our website has a brochure called, "2022 Clallam County Noxious Weed List" that classifies them based on how invasive and how much damage.*

VI. Groundwater Monitoring in Dungeness Watershed

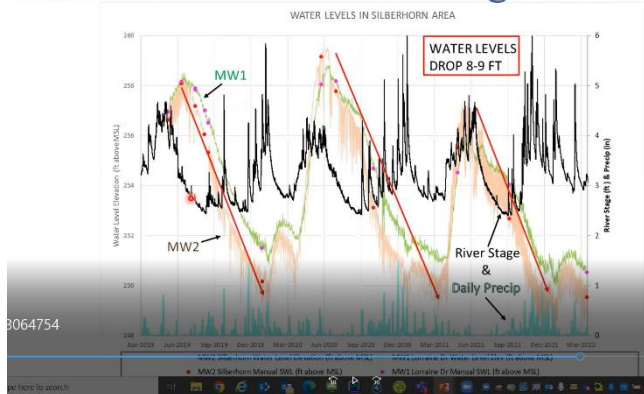
Mike Gallagher and John Pearch, Washington Department of Ecology

- Following introductions, John showed a Powerpoint presentation. Points covered included Ecology's Quality Assurance Monitoring Plan, manual water level monitoring in private domestic wells 1978-2019 (discontinued), Clallam County piezometers – pressure transducer monitoring 2009-2022, new monitoring wells drilled in 2019 near managed aquifer recharge areas and other areas, water level trends in aquifer recharge areas (2019-022).
- Monitoring Plan – collect water levels in wells twice/year, also use pressure transducers, quality controlled and then entered into EIM database
- Manual water measurements – they were dropped for a variety of reasons. Many of the well's water levels showed declines, but eventually started to stabilize. As they continued to show stabilizing trend, they were

dropped. Some were showing unreliable static water levels, as well, (due to pumping during test) and so they were dropped. Also stopped monitoring due to Covid 19. Felt there was good representation in the area.

- Piezometers – in 2008, Clallam County drilled 12 monitoring wells across the watershed. Monitored from 2009-2012. Also 4 monitoring wells installed pressure transducers 2015-2017. Clallam PUD monitoring well from 2007-2017 in 3rd aquifer (the others were shallow). Generally, they show trends in how they fluctuate on annual basis.
- Clallam PUD well in 3rd aquifer was monitored by Clallam County, 2007-2013, then by Ecology 2013-2017. Water levels in 3rd aquifer respond to Dungeness River flows. USGS monitors it now, since 2018. It is considered a good well for climate monitoring.
- 2019 monitoring wells – targeted monitoring aquifer recharge sites. 6 monitoring wells in shallow aquifer.
- Targeted Silberhorn area (for 2 monitoring wells) because, not only were the water levels showing decline (1993-2009), primarily because of piping unlined ditches), but some had to be drilled deeper (2000-2009) because they were drying up. Water levels stabilized starting in 2009 (after piping of unlined ditches stopped). City continues to monitor. The off-channel reservoir is the other reason monitoring continues here. Water levels go up during irrigation, peaks at peak of irrigation season.

Silberhorn Area with River Stage & Precip



- Showed graph representing that the water levels in the Silberhorn wells drop when the flows and precipitation are increasing. John stated the graph showed how irrigation is a large source of recharge in this area, whereas other areas have a larger source of recharge from precipitation.
- Pinnel recharge site – well installed 2017. Mitigation water applied at this site. But more investigation would be beneficial. Berreth well data shows water levels drop when McDonald Ck is rising and with more precipitation.

- Carlsborg area – 2 monitoring wells, side by side. This recharge site is more complex, with regard to responses from river.

- Generally, no water level declining trends recently.

- Mike discussed the managed aquifer recharge rates, for both mitigation and restoration purposes. Table shows the recharge amounts have improved since 2017-2021.

Perforated pipe buried in ground, connecting to one of the irrigation districts. Early in irrigation season, if flows high enough, irrigators are asked to direct some water to these sites. Operated by Dungeness Water Exchange. Creates artificial mound in the water table which dissipates over time, to help stream flows in late summer.

MANAGED AQUIFER RECHARGE RATES 2017-20

2021 MITIGATION RECHARGE

District	Site	AFY
Sequim Prairie-Tri Irrigation Assn	Silberhorn Rd	8
Sequim Prairie-Tri Irrigation Assn	River Rd	8
Agnew Irrigation District	Pinnell Rd	96.72
Dungeness Irrigation District	McComb Rd	8
Dungeness Irrigation District	Towne Rd	9.28

2021 Total:	130
2020 Total:	130
2019 Total:	130
2018 Total:	114.21
2017 Total:	54.68

2021 RESTORATION RECHARGE

District	Site	AFY
Clallam Ditch Association	Jake Way	273.72
Sequim Prairie-Tri Irrigation Assn	Silberhorn Rd	31.30
Sequim Prairie-Tri Irrigation Assn	River Rd	70.22
Agnew Irrigation District	Pinnell Rd	-
Dungeness Irrigation District	McComb Rd	47.54
Dungeness Irrigation District	Towne Rd	31.93

2021 Total:	454.71
2020 Total:	265.22
2019 Total:	334.99
2018 Total:	131.90

Conclusions

- Water level peak in Silberhorn and Pinnell areas primarily from irrigation recharge
- Water level fluctuate in Carlsborg area from a mix of precipitation, snowmelt and irrigation recharge
- Water levels recovered in Carlsborg and Pinnell wells each year but Silberhorn wells did not fully recover in 2021 (for further investigation)
- Managed Aquifer Recharge (MAR) projects may need additional investigation to distinguish between leaky ditches and recharge rates
- Ecology will continue to use pressure transducers to monitor long term water level trends to help better understand aquifer conditions throughout the Dungeness watershed

References



- 2008, Pacific Groundwater Group (PGG) Technical Memorandum, Installation of monitoring wells and staff gages in the lower Dungeness watershed, To Clallam County
- 1999, Thomas B.E, Goodman L.A, and Olsen, T.D., Hydrogeologic assessment of the Sequim-Dungeness area, Clallam County, USGS Washington, Water-Resources Investigations Report 99-4048 <https://pubs.er.usgs.gov/publication/wri994048>
- 2017, Ecology Water Resources Integrated Statewide Groundwater Monitoring Strategy, Quality Assurance Management Plan, <https://apps.ecology.wa.gov/publications/documents/1711005.pdf>
- Precipitation from Community Collaborative Rain, Hail & Snow Network (CoCoRaHS) <https://www.cocorahs.org/>
- Ecology EIM GROUNDWATER SEARCH PAGE: <https://apps.ecology.wa.gov/eim/search/Groundwater/GWSearch.aspx?SearchType=Groundwater&State=newsearch&Section=all>
- Ecology's Freshwater Stream Gages: <https://apps.ecology.wa.gov/continuousflowandwq/>
- USGS Clallam PUD Monitoring Well water levels <https://waterdata.usgs.gov/monitoring-location/480546123100901/#parameterCode=72019&period=P7D>
- USGS Dungeness River Gage: <https://waterdata.usgs.gov/nwis/uv?12048000>

Q/A

- How much of a decline has occurred in Silberhorn area? *The well levels go up and down every year, but the declining trend occurred in the late 1990's until 2009 and then stabilized. That declining trend was from piping the open irrigation ditches.*
- Is the City meeting its efficiency requirements for withdrawals? *All cities in Washington, all Group A water systems, required to do a Water System Plan every 10 years. Must document leakage rate. Most strive for a 10 percent or better leakage rate.*
- Is perforated pipe being used for recharge in areas where homeowners' wells are no longer (due to ditch piping) at the water levels they were previously? *As long as the aquifer hasn't dried up, its not considered impairment, and there haven't been any cases where private owner has been compensated due to their well drying up. Joe Holtrop also responded that perforated pipe is only installed for shallow aquifer recharge sites. When an irrigation ditch is piped, its solid pipe. But whenever there is opportunity to do aquifer recharge, we try to do that. Also, in Silberhorn area, the irrigation ditches that were piped in the 1990s and 2000s, those only carried small amounts of water. Joe commented that the assumption that the declines in the well levels being due to ditch piping should be reexamined.*
- Comment that some of the early irrigation piping projects were done for water quality, not quantity, which made a huge difference in the area.
- Is there a plan by Ecology to study the Silberhorn area in any greater detail? *No plans for more drilling. Perhaps there will be more investigation in relation to the off-channel reservoir.*
- What well water levels would trigger an impairment? *If any well is completed down to full depth of aquifer, and another well pumping impacts that and affects water right, that would imply impairment.*

- Status of the well the County/PUD have put in 4th aquifer and mitigation? *PUD is convening a meeting next week and including other parties that might be interested in the mitigation being proposed for their new water right application. Contact Tom for meeting details.*
- Has Ecology been contacted by County regarding detached dwelling units, and has Ecology explained that a separate water right would be needed for a detached dwelling unit to meet requirements of Dungeness Rule?

Public Comment

None.

Meeting Adjourned