

APPROVED DRMT Zoom Meeting Notes October 13, 2021

Prepared by Shawn Hines, Jamestown S'Klallam Tribe

DRMT Members Present: Hansi Hals/Jamestown S'Klallam Tribe, Ben Smith/Dungeness Water Users Association, Shawn Hines/JST (alt), Judy Larson/ Protect the Peninsula's Future, Tony Corrado/Protect the Peninsula's Future (alt), Tom Martin/Clallam PUD, Lorenz Sollmann/USFWS, Jenna Ziogas/Dungeness River Audubon Center (alt), Robert Beebe/Riverside Property Owner, Lance Vail/Olympic Peninsula Audubon Society (alt), Robert Phreaner/Olympic Peninsula Audubon Society, Cathy Lear/Clallam County, Ann Soule/City of Sequim, Danielle Zitomer/WDFW

Others Present: Aaron Brooks/JST, Rebecca Benjamin/NOSC, Marguerite Glover/Sequim Realtors, Kim Williams/Clallam Conservation District, Phil Martin/resident, Genie Mixon/Dungeness Meadows, Jaimie Tippet/Riverside Landowner, Alex Scagliotti/Graysmarsh, Randy Johnson/JST

I. Introductions

Hansi called meeting to order, introductions were made, and September 8 DRMT meeting notes were reviewed. Following some edits, Judy Larson made a motion and Tony Corrado seconded the motion to approve the notes. Notes were approved as edited.

Public Comment

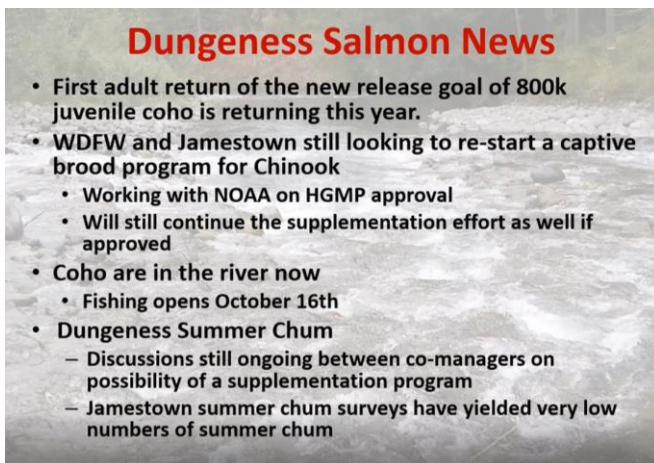
- Judy Larson encouraged those who are so inclined to comment in support of Dr. Berry's efforts to protect the community's health.

II. Chinook Returns/Surveys, Local Drought Observations, Future Outlook

Aaron Brooks/JST, Chris Burns/JST, Danielle Zitomer/WDFW

Smolt Surveys, Aaron Brooks:

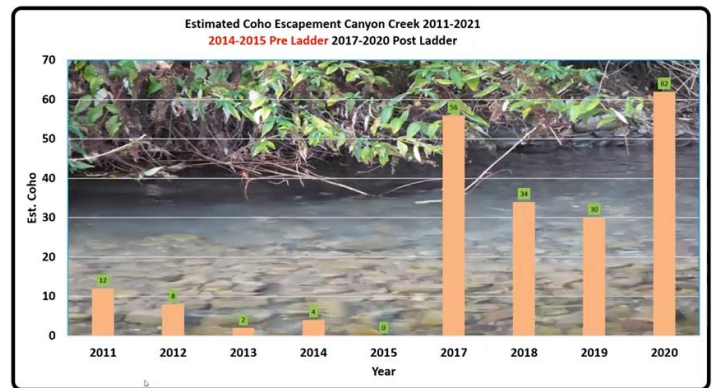
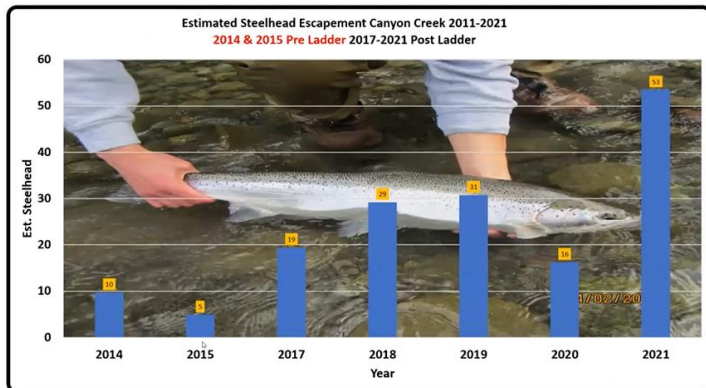
- Smolt traps: capture outmigrating smolts to assess freshwater production, full spanning weir traps, checked daily, measurements and DNA fin clips
- 5 streams: JCL, Matriotti, Siebert, McDonald, Bell, but this year did not trap Bell Ck. Mix of results, with some streams seeing some of the highest recorded smolt outmigrations, and some seeing the lowest, depending on species and creek.
- Preliminary number for Dungeness Chinook Salmon Escapement is 705. Since 2017, returns all above 700. Hopefully trend continues. Escapement goal is 925.
- Smolt survival vs peak flow – graph shows at times of peak flows (such as with flood events), chinook egg survival plummets. All the habitat work in the lower river going on now should help to protect those eggs by slowing down flows. With flows above 3,000cfs, see a big reduction in egg production.
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Dungeness Steelhead and Coho Escapement, Chris Burns:

- Steelhead starts mid-Feb, survey as long as we can, usually until first week of May, until snowmelt begins and we can't access river.
- Coho begins mid-October, through January.

- Steelhead escapement = 329, not great, but stable.
- Coho numbers have been very low for a long time; 400 in 2020.
- Canyon Creek pre and post fish ladder: 2014 and 2015 was pre construction:



- October 1, following some water, observed many pinks in Canyon Ck during spot survey. First time he has seen pinks in Canyon Ck. 134 dead, 46 live. 23 redds. One day spot survey. With pinks, don't usually count redds, rather only live/dead counts, since they aggregate spawn (spawn in groups, not individually).

Q/A:

- Q: What is an HGMP? A: Hatchery Genetic Management Plan. NOAA requires that every Hatchery program have one in order to go ahead with program. Outlines what managers are doing to limit interactions between hatchery and wild fish. Need one before any captive brood released.
- Q: Captive Brood currently at Hurd Creek for Chinook? A: WDFW started collecting fish for hatchery broodstock a few years ago. But need the HGMP before those fish can be released. First group set to be released next spring, pending HGMP.
- Q: Regarding Chinook smolts in Matriotti Ck, does that mean adults are using it, or were those stray fry or parr? A: Matriotti is key lower river off-channel habitat for Dungeness salmon. WE do find juvenile Chinook in there every year, usually a product of off channel river habitat. Last year caught around 50. Could be potentially using it for both spawning and off channel habitat, but not the best spawning habitat for Chinook, better for Chum.
- Q: Why are pink being found in Canyon Ck after so many years? A: Think its probably due to the new fish ladder.
- Q: The numbers for Matriotti are lower than we would hope, given the habitat. Are we concerned water quality could be contributing to low numbers? A: One contributing factor is that beavers have been using the creek heavily recently; beaver dams make it difficult for adult salmon to pass.

Drought/low flow conditions, observations, actions, Danielle Zitomer:

- Were cautiously optimistic pre-season with significant snowpack. As season progressed, had low flow challenges. Noticed potential issues developing around mid-July during snorkel surveys. Identified areas where broodstock netting would be good option, and also identifying potential chokepoints if flows continued to drop. Noticed chinook distributing pretty successfully throughout river. This success, as compared to distributions from previous drought years, may have been contributed by the fact that the screw trap was relocated from Game Farm area upstream to hatchery area this season, allowing for better access. By mid-August, flows dropping very quickly each day. Anything below 110cfs appears to be range where Chinook have trouble moving upstream. By end of August, Chinook were not moving any further upstream.
- In August, Dungeness was at 94% forecast for streamflow. However, SWE actually took a dive latter half of April. Danielle showed graphs from NRCS depicting this.
- Actions taken by WDFW and Tribe during drought:

2021 Drought Actions Recap

- WDFW Fish Program relocated adult trap upriver from Olympic Game Farm location to hatchery
 - JSKT identified potential choke points
 - Monitored conditions and forecast, included in WDFW Drought Response
 - WDFW, JSKT, Sequim Prairie ID, and Independence ID, balance ID water needs and fish protection
 - Dawley Side Channel
 - Removed recreational rock dams, public awareness
 - WDFW requested Drought Impact Reporting
 - JSKT and WDFW monitored fish passage conditions through Irrigation season shut down
- WDFW Drought Response: monitors water supply conditions, participates on Exec Water Emergency Committee, Coordinates internally and externally to ID and ameliorate drought impacts, may expend drought response money if available. No reports this year.
 - Attempted to observe fish behavior right before and after irrigation shut-down. At same time, however, rains came, so the confounding conditions made it difficult to relate fish movement to irrigation shut-down. Still, a worthy effort that we hope to continue to document in future.

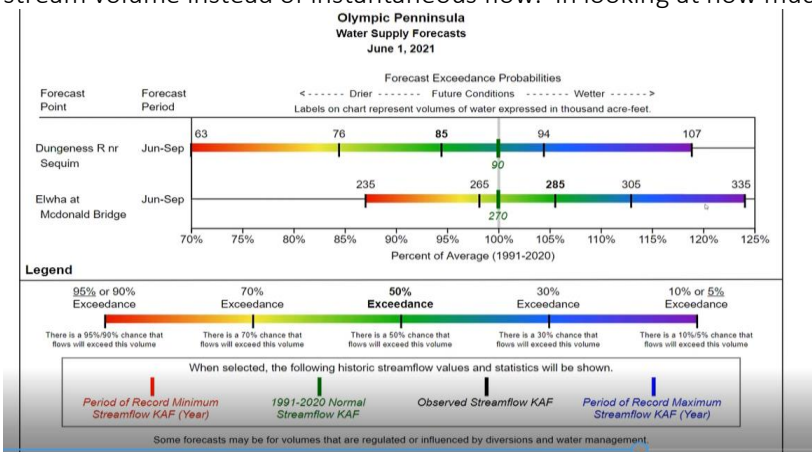
Q/A:

- Q: Why weren't the forecast predictions closer to accurate? A: The model that this is based off of is strongly influenced by snowpack, so the strong snowpack earlier in season skewed the forecast. Plus the lack of precipitation. The heat dome effect zapped the snowpack early on. Had we just been going off the model, we wouldn't have been closely monitoring, but we realized early on that drought conditions were imminent. Drought advisory issued in May, and declaration in July.
- Chris B. commented that most of the choke points are accumulated along lower section of River which happens to be in area of Game Farm and levee. When the levee setback projects are completed, the chokepoints in that area will be alleviated. Fish seem to be getting stuck during low flows near the chokepoint areas and spawning there. These areas have increased risk for scouring, and thus potential for low survivability. No complexity in that area; it's like one long riffle.

III. Water Year Flow, Snow, Rain Data Review + New Format Idea

Ann Soule, City of Sequim

- 252% of normal in mountains on April 1, then heat wave in June and much reduced snowpack/melt off.
- Cumulative precip in mountains was 40.8 inches, 88% of median. High snowpack was very temporary.
- ~19 in. in lowlands, usually 16-17. SNOTELs showed much higher amounts than normal at start of season.
- Entire water year, Dungeness River flow: 244,000 acre-ft (AF) and 85,000 AF from Jun-Sept. NRCS looks at stream volume instead of instantaneous flow. In looking at how much was stored vs runoff:



The NRCS tool shows, for July-Sept, using the new normal data (now 1991-2020 data), “normal” (100% of average) would be 90 KAF (thousand acre ft). 50 % exceedance (median) would expect to be 85. Looking at observed values after the fact, actually had right around 85 KAF come out between June-Sept. The problem is that it all came at one time, and sooner than expected. Pointing out a concept of looking at river in terms of volume. However, drawback is that it doesn’t account for timing.

- September was difficult, irrigators had to cut back diversions, fish were having trouble.
- Suggesting to hear about whatever tools WDFW has regarding runoff forecasting. Would be useful to hear more regularly.
- Hansi noted that USGS forecasting workshop discussed some modeling.

IV. River’s Edge Dike-Setback/Floodplain Restoration – Project Update

Randy Johnson, Jamestown S’Klallam Tribe

- Randy showed aerial photo of Dungeness mainstem, in the area of the levees and reminded group that the east side levee (Army Corps dike) was constructed in 1965, and the west side levee began construction 1983. This area was once an area of 500+ acres of floodplain; floodplain in this area has functionally been reduced to about zero.
- Floodplains are extremely important for salmon productivity in rivers that have a large ratio between high flows and low flows. In the Dungeness, where flows can range from 100 cfs (or lower) in summer/fall to 5,000cfs in rainy season, having a functional floodplain is very important in order for the river to spread the high flow out and allow productive habitat to form for fish.
- River restoration biologists have long been planning to relocate this levee away from the river to expand floodplain. Project is underway, two areas. River’s Edge Setback levee is Tribe’s portion of levee setback (5,000 feet long), and Phase 1/Towne road setback levee downstream is County’s project.
- Tribe had opportunity to purchase 65 acres in May 2020. Designed, permitted, bid in late spring 2021. Construction of setback levee in July 2021. Filled, graded, inspected ever 7 inches deep. Installed riprap toe and blanket on face of new levee. Nine-inch blanket of salvaged top soil on side slopes.
- Tribe’s project will begin demolishing the River’s Edge portion of Corps dike in May 2022.
- Temporary access road has been constructed in order to access the Corps dike.
- A few hundred feet of the old levee on the upstream end will remain in place due to lack of landowner willingness at the upstream end. New levee designed to contain the 100 year flood. The new levee will actually be able to contain three times what would come down in 100 year flood, due to requirements for levee construction. Thus, new levee not likely to ever overtop; good climate resilience.
- All of the land between new and old levee will be reforested, starting most likely in February 2022.
- Four access roads between the new and old levee. Three will be removed by the time project is complete.

V. Lower River (Phase 1) Dike-Setback/Floodplain Restoration – Project Update

Cathy Lear, Clallam County

- Began work 6 wks ago by putting a 72 inch high x 57.5 feet long culvert into west tributary of Meadowbrook Creek. Plugged one of several irrigation ditches on Washington Department of Transportation wetland mitigation property.

Characteristics

- West Tributary and Meadowbrook Creek are historic distributaries (and main channels) of the post-glacial Dungeness River. Well before that time (given lacustrine soils found at the site), the West Trib may have been part of a post-glacial lake.
- Located in a wetland complex: defined beds and banks were created by previous farming/drainage/irrigation actions.
- Of 3,500 feet, 750’ has some channel; current gradient = 0.7%; current velocity ~ 0.8CFS; culvert is 57.5’ long
- Future contributing drainage area will be reduced by about 90%, limited to a few acres along the area north of the new North Levee with the majority of the existing drainage being returned to the Dungeness River floodplain (restoration area) and river to the west.

Expected future West Tributary conditions:
 Backwater / ponded wetland area with little to no velocity that fish can travel freely.
 Little to no transport of sediment / bed material (likely deposition) or large woody materials (except by beavers).
Seek

- Side note that beaver carcass was found on Meadowbrook trib culvert field trip, and much beaver activity.
- De-fished sites prior to dewatering and culvert installation. No salmonids found, oxygen too low.
- Monitored water quality of both irrigation ditch and trib. Ditch was plugged last week, in-water work is now complete.

Q/A:

- Q: Will there be any re-creation of side channels or ELJ's installed in River's Edge project? A: 5 ELJs are planned for an existing side channel of the River's Edge project, per Randy. Not proposing, at least at this time, to create any floodplain features for River's Edge project. The County's project will be adding wood complexes and other floodplain features to guide the river in its historic channels, but no in water wood complexes planned at this time.
- Q: Now that Bagley/Seibert Ck projects are winding down, will contractors be working more on Phase 1? A: Yes, that's the plan. Hope to be done in spring. Goal is that removing the levee for both projects will segue pretty seamlessly.
- Q: Are the Phase 2 activities contracted out now? A: Just the design and permitting, no way of going to construction yet, need to get okays from Corps regarding changes.
- Q to Randy: Will there be anything added to slow the water down after old levee removed. A: There will be a flourishing floodplain forest that will slow things down. The reconnected floodplain area will be available for river to migrate within and to create its own side channels over time, but we won't be intentionally constructing new channels.
- Rebecca Benjamin gave her praise of the projects, and offered NOSC's support.
- Hansi acknowledged the collaborative and cooperative nature of these projects, and highlighted the County, NOSC, Tribe, NOLT, DRMT, and that we have distinguished ourselves in our area as being able to work together, which has improved our ability to get things done. This includes guests in the audience who have shown interest and support. Thanks to all.

Next/Future Agenda Items:

- Shawn reminded Team that the whole month of November is open nominations for 2022 DRMT Chair and Executive Committee. Nominations can happen via email during November, or at next meeting. November's agenda items: JSKT Shellfish Program/Shellfish surveys during heat wave, Green crab updates, WDFW presentations on Hatchery Operations/Goals and Dungeness Salmon Life Histories.

Public Comment

- Judy would like to hear an update about Sporseen Project at a future meeting. Ann Soule said she could provide that update in December (she won't be at November meeting).
- Cathy noted that on October 28 they will be drilling pot holes along Towne Road for environmental testing to prepare for removing the road.

Meeting Adjourned