



## **King County**

### **Water and Land Resources Division**

Department of Natural Resources and Parks

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## **Cedar River Council DRAFT Meeting Notes**

**February 22, 2022 – 6:30 pm to 8:30 pm (scheduled)  
Meeting/Video Conference Call via Zoom (King County account)**

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### **I) Call to Order / Welcome**

Chair Max Prinsen called the meeting to order at 6:35 p.m. and acknowledged the unusually cold weather generating conversation about climate change, specifically snowpacks, which are instrumental to the Cedar River.

### **II) General CRC Announcements / Information (Open to All)**

No announcements were made during this topic.

### **III) Topic Discussion – CRC Sockeye Emergency Response Effort**

Nathan Brown welcomed returning guest speakers Jim Scott, Special Assistant to the Director for the Washington Department of Fish and Wildlife (WDFW), and Paul Faulds, a Water Resources Manager for Seattle Public Utilities (SPU). Both Scott and Faulds provided sockeye management updates and responses to the letter written by the CRC to Cedar River sockeye co-managers on how to rebuild Cedar River sockeye salmon runs on November 23, 2021.

#### **A) Washington Department of Fish and Wildlife (WDFW) Update (Jim Scott, WDFW)**

Scott reiterated the WDFW co-manages the sockeye resources with the Muckleshoot Tribe and has a close relationship with SPU, operating the Cedar River (Landsburg) Hatchery under contract with them. WDFW was impressed by CRC's depth of knowledge and engagement and Director Kelly Susewind requested to meet with CRC members to discuss recommendations. Scott's response began with an analysis of each of the eight proposals outlined in the CRC letter and CRC members were invited to ask questions as the discussion went along. Per CRC's letter, the first three proposals outlined the transport of adult sockeye from either the Ballard Locks or the Cedar River weir directly to the Landsburg Hatchery. Co-managers initiated a transport operation in Summer 2021 with the help of SPU from the locks to the hatchery, bypassing the Lake Washington Ship Canal (LWSC) and resulting in a 97% contribution rate to spawning. Of those fish not transported, there was a 50-60% spawning contribution rate.

The first proposal of the CRC letter suggested the transfer of 350 adult sockeye from the Ballard Locks to spring-fed tanks at the hatchery, while the second proposal recommended to transfer 300 adults from the Cedar River weir to the hatchery tanks. Scott stated these methods are something that the co-managers are planning to implement this year and are currently examining logistic details. The highest priority is to get as many adults and eggs to the hatchery as possible as the salmon run return rate is projected to be very poor, with 10,000-15,000 returning adults forecasted. Last year's transportation was an incredible effort on the part of the Muckleshoot Tribe, who collected the fish at the Ballard Locks. Once at the hatchery, the salmon were monitored for two to three months before spawning.

The third proposal outlined the purchase of two fiberglass holding tanks and the use of river water instead of spring water, as well as transfer 300 adult sockeye from the fish weir to the tanks. An alternative to this proposal would be to put spring water in the concrete raceways. Scott stated the idea here would be to continue to learn and discover further improvements for WDFW to make to understand specific causes for pre-spawn mortality (PSM). WDFW was not able to determine the cause of PSM from last year's project. There is value in said proposal, but WDFW is concerned that there will not be a location for the tanks and to fill them with river water in time for the Summer 2022 return. The location of the tanks could also potentially reduce the amount of sockeye egg intake.

Regarding the transport of roughly 500 adult sockeye from the Ballard Locks to Lake Washington as outlined in the fourth proposal, Scott restated the proposal's question of: 'What is causing the high loss of fish?' Is the loss primarily due to migration through Lake Washington, LWSC, or both? WDFW is working with tribal co-managers

to determine how many fish will need to be tagged and its logistics to make the experiment effective. There has been initial discussion and a response from statisticians is anticipated. The downsides to this proposal are that it would take a lot of work to collect and transport and there is a risk of fish and/or staff shortages, especially since the goal is to maximize egg intake. However, WDFW sees great value in this proposal.

WDFW strongly supports the fifth proposal and desires to increase the extended fry (baby salmon) rearing program. WDFW hopes to work with SPU to initiate some extended rearing at the Landsburg Hatchery. The biggest challenge for sockeye is getting juvenile salmon out of the system, who risk a 97% PSM before reaching the ocean. It would be difficult to build their numbers based on that percentage. This leads to the sixth proposal of removing Northern Pike Minnow (NPM). Scott emphasized this as fundamentally important and this could be worked on two sides: remove predators eating sockeye such as NPM or rear sockeye to a larger size to evade NPM more effectively. This will call for new resources to have a significant effect. Scott encouraged CRC members to put forth interest and research funding resources to aid WDFW in the 2023 state legislative cycle. Cedar River Councilmembers Larry Phillips and Frank Urabeck showed full support and offered a potential funding source.

Scott indicated that WDFW strongly supports the seventh proposal of completing a new well to supply cold, pathogen-free water and could have a multiple uses of holding fish at different ages. The well could also be used as a backup water supply to the spring water from the other side of the river. The eighth and final proposal of requesting sockeye eggs from the Baker Lake Hatchery to the Landsburg Hatchery would require approval under the Endangered Species Act (ESA). These hatcheries were recently included in an action proposal WDFW submitted to the National Marine Fisheries Service regarding salmon programs where aid would be needed from other sources. Scott reassured this proposal would not be ruled out, however, there is a lot of interest on the issue of egg distribution from various organizations and would involve considerable mutual agreements.

#### **B) CRC Member and Public Comment / Q & A**

- **Q:** Is the cold spring water or the round tubs the biggest factor in survival?

**JS:** We don't know for sure. My guess is probably both. The ability to provide cold water and hold fish in the tubs for two to three months must be contributing factors. When you look at the fish that were held in the raceways, they frequently ran into the concrete sides, which contributes to injury and mortality.

Urabeck commented the fish co-managers will need to go in the direction of removing the raceways to achieve ideal survival rates. Phillips remarked much was learned in that minimal effort of taking fish and bypassing the LWSC as it resulted in a higher percentage of survival and hoped that such efforts will continue to have a positive impact. Chair Prinsen iterated CRC's approach is to take known information and create logical, common-sense approaches that could be tried while also being scientific and provide data that may help sockeye in the future.

Regarding the third proposal, Phillips advised taking small steps to increase returning adults, as there is uncertainty the river will be able to sustain the 300-350 returning adults until the water is tested, leaving the efforts dependent upon the Landsburg Hatchery. With dire situations, there is not enough being done to increase numbers and thinking must be broadened to utilize the entire system to do so. Phillips insisted that the hatchery is not the conclusion of getting sockeye numbers to fishable levels and requested different types of testing based on what has already occurred. Scott acknowledged the challenges due to the trade-off between maximizing eggs for the next generation and trying to learn more. Using spring water in the new tanks for the coming year with fish collected at the locks is preferred as it will give WDFW several dates for the coming cycle.

- **Q:** What water source has been used for rearing these fish since the initial operation of the hatchery?

**JS:** We have always used river water for the adults and spring water for the juveniles. For the tanks, you would have to think about where the tanks are located and how to get river water to them. Right now, I don't believe the river water goes up to the location of the tanks.

- **Q:** Is it a requirement that the tanks be at the Landsburg Hatchery? Is there a reason why the tanks couldn't be put on King County or SPU land downriver and pump in river water?

**JS:** That is a good idea! We would need to pursue security as there has been a record of vandalism at facilities and go through permitting, but I hadn't thought of that!

Urabeck and Phillips urged to Scott the need for persuasiveness to co-managers and pursuing big, urgent action in finding solutions as these proposals will have a tremendous benefit for immense recovery.

- **Q:** Won't this year be the first four-year-old fish from the first extended rearing that show up in the return?

**JS:** That's correct. In 2018, we brought a small number of sockeye eggs from the Baker Lake Hatchery, reared them, and released them. There were 25,000 eggs and it was a pilot program at the Issaquah Hatchery. This will be the first year seeing any potential significant returns from that release.

Cedar River Councilmember Tom Allyn expressed great support for the fry rearing program and recalled a computer expert from WDFW advised to substantially increase the fry to smolt ratio, which is the program's purpose. Chair Prinsen advocated a type of bounty program for NPM, with Scott mentioning the success of such a program in the Columbia River, however, doing something similar would take time. WDFW Fisheries Biologist Aaron Bosworth will initiate a pilot program to catch NPM in Spring 2022.

- **Q:** The objective of the CRC letter is to do what needs to be done quickly to achieve fishable levels by 2032. The last successful fishery was in 2006. What is possible based on what you know now and do we have your commitment to achieve this?

**JS:** Yes, you have my full commitment. I don't want to leave you with the idea that this will be an easy task. Based on the number of fry that were released in the last three years, we are in an incredible hole, and that is going to be a challenging set of years. To change the trajectory of numbers going up to have a fishery is a very difficult task. I agree with you on the concept of a forced mechanism. The story of salmon runs bouncing back isn't always true, notably the steelhead and the kokanee in Lake Sammamish. We are on a bad path, and if good things aren't done soon, the sockeye that I love and grew up watching will be gone.

Phillips observed with the implementation of the fourth proposal and if it is concluded that Cedar River water is not an issue, then the third, seventh, and eighth proposal would not be necessary. If situations are critical, the fourth proposal would be important, to which Scott seconded. There was concern that an ESA listing for sockeye would be imminent if no action was taken, but Scott assured that would not be the case if sockeye were coming from other sources. Scott highly suggested the CRC meet with Director Susewind.

#### **C) Seattle Public Utilities (SPU) Update (Paul Faulds, SPU)**

Faulds thanked the CRC and the co-managers in working together to install tanks at the Landsburg Hatchery and having their efforts prove to be a great success. The City of Seattle has met regularly with the Muckleshoot Tribe and WDFW for 2022 sockeye emergency efforts. The pre-season forecast for sockeye return is expected to be the worst on record. There are plans to move sockeye adults from the locks to the circular hatchery tanks this year.

Faulds recognized the CRC's 'refreshing' proposals in moving forward to save the sockeye, most notably on the much-needed regional effort to save the run and the water quality issues in the LWSC. SPU is open to new ideas on installing new tanks in the region, particularly in new locations on the Cedar River and their viability in holding adults. There are plans to epoxy the four rectangular ponds at the Landsburg Hatchery as they are presently only made of cement and not 'fish friendly.' The epoxy liners will be tested to see if they aid in the reduction of PSM.

#### **D) CRC Member and Public Comment / Q & A**

- **Q:** We need to narrow down where the problem is and direct those resources to save the run. Does SPU feel like they have the resources necessary to move forward with co-managers? If so, how can the CRC help you?  
**PF:** I appreciate the CRC's science-based approach to determine where the impacts might be in these different areas. We need to determine where to spend our resources. For the City of Seattle, our agreement is in place for mitigation for the Landsburg Hatchery and we're really looking to the co-managers on how to prioritize spending going forward. There has been discussion about a new supply of water to help supplement the spring water supply we have already. We had an initial project to drill test wells and there is a good supply of water to supplement or replace the spring water completely. We're working with the Department of Ecology on our pending water rights application and I'm anticipating that we will be required to do impact studies on groundwater. The cost of a production well producing up to 2,000 gallons per minute is roughly between \$2-3 million. We want to figure out how to prioritize funding that gets the biggest "bang for our buck" and have rapid and efficient response to the emergency sockeye recovery effort.
- **Q:** How do the wells pumping 2,000 gallons per minute compare to the water quantity from the springs?  
**PF:** It's about another 50% more, depending on the time of year. It is tricky how the program might change. Changing the program focused on bringing fish to fry to rearing potentially larger fish like smolts has a lot of steps involved. I'm thinking of a supply that could be used to hold adult fish and juveniles. If this were agreed upon right away and became a high priority, it would take 2-3 years to implement due to permitting.
- **Q:** Is there a financial constraint on SPU's side on how much more money can be expended on the fish weir?  
**PF:** There was a commitment amount in the mitigation agreement and we are nearing that cost. The initial analysis fell short on where costs were going to be with the hatchery's operations. The hatchery's operations cost \$900,000 per year, three times as much as anticipated, funding WDFW costs, facility maintenance, and equipment. There are opportunities to amend agreements, but the City of Seattle must be conscious of our rate payers and figure out a way to extend dollars such as the co-managers contributing their resources. It's going to be a team effort to continue to fund this sockeye hatchery in the long term.

#### IV) CRC Updates (As Needed)

- **Lakeside Industries Asphalt Plant**

Hugh Brown noted an informational presentation on February 10, 2022, with the City of Renton discussing various issues associated with the plant. Negotiations with multiple governmental entities and partners to block development are still ongoing. Nathan Brown acknowledged a video shared by King County Administrative Specialist Lauren Triplett from social media platform TikTok of someone raising awareness of the asphalt plant. Brown invited others to share any media concerning CRC topics and reflected on CRC's virtual presence.

Cedar River Councilmember Steve Hiester announced site work being performed on the property but was unclear if it was asphalt plant related. A recent meeting with King County Department of Local Services (DLS) occurred requesting DLS to review the possibility of non-hydroelectric generating facilities and fossil fuel plants (specifically natural gas) in a rural area could be built under a special use permit. A proposal for public comment will be on March 30, 2022. Brown asked Hiester if this was related to the King County 2024 Comprehensive Plan Update (KCCP), to which Hiester denied. Hiester informed the CRC that the scoping process for the KCCP has begun and the King County Council will be sending in scoping ideas. Chair Prinsen questioned if the site work was due to the Cedar Hills Landfill wanting to use methane gas to create electric power. Hiester confirmed DLS's response that it was unlikely as it would be difficult to turn the facility into a power generating station.

- **WRIA (Water Resource Inventory Area) 8**

Cedar River Councilmember Corinne Helmer provided a link in the Zoom chat to the WRIA 8 website that discusses WRIA 8 reforms. The link can be found here:

<https://www.govlink.org/watersheds/8/committees/2201/default%20-%20Copy.aspx>.

- **Fish Habitat Conservation/Restoration (Sockeye)**

There were no updates provided during this topic as it was previously discussed earlier in the meeting.

- **Sockeye Emergency Operation Observation**

There were no updates provided during this topic as it was previously discussed earlier in the meeting.

- **Cedar River Watershed**

Faulds commented on the noticeable amount of snowfall from the previous weekend and that more snow is expected in the forecast. The snow pack is now close to 100% of normal and the snow water equivalent appears promising. A more robust snow pack is anticipated due to this year's La Niña weather pattern.

Allyn remarked on a recent news story regarding predicted declining snow packs in the coming decades and the progress of the Yakima Basin Integrated Plan (YBIP). Allyn asked Faulds if anything like the YBIP was happening in the Cedar River Watershed and if there were ways of storing water outside current reservoirs to help prevent declining snow packs. Faulds recommended SPU's 2019 Water System Plan, which evaluates alternative water sources, water demand forecasts, and far yields (the amount of water available) in both the near and distant future. Current water supply analysis shows solid availability up to the year 2060 with current facilities in place. Alternative water supplies are being speculated and water rights applications are underway.

- **King County Flood Hazard Management Plan Update**

There were no updates provided during this topic.

- **Membership Updates**

Nathan Brown announced that the survey for CRC membership participation will be sent out in the next couple of months. Hugh Brown expressed interest in becoming a CRC member. Hugh is a resident of the Woodside neighborhood in Renton and holds a PhD from Iowa State University. Brown taught at Ball State University in Muncie, Indiana, for over 20 years, with experience in local water quality monitoring in the White River and Shadow Lake. Land use and watershed planning are of particular interest to Brown. CRC members showed great interest in having Hugh join the CRC. Nathan Brown will email the procedures on CRC membership and the CRC will decide at the March meeting.

- **Maple Valley Area Council**

There were no updates provided during this topic.

#### V) Public Comment Period

There were no public comments made during this topic.

#### VI) Closing/Adjourn

Chair Prinsen thanked attendees for being on the Zoom call and encouraged them to bring others to future meetings. The next meeting will be on March 22, 2022. Meeting adjourned at 8:15 p.m.