



King County

Water and Land Resources Division

Department of Natural Resources and Parks

King Street Center

201 South Jackson Street, Suite 5600

Seattle, WA 98104-3855

206-477-4800 Fax 206-296-0192

TTY Relay: 711

Cedar River Council DRAFT Meeting Notes

**November 16, 2021 – 6:30 pm to 8:30 pm (scheduled)
Meeting/Video Conference Call via Zoom (King County account)**

I) Call to Order / Welcome

Chair Max Prinsen called the meeting to order at 6:34 p.m. and asked attendees to share information about the CRC to the public.

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

Larry Reymann reported the Landsburg Hatchery captured roughly 1.5 million salmon eggs prior to the recent major rain event, three times more than last year. Survival in the riverbed was less optimistic, but restoration being performed along the river could give juvenile salmon some refuge. The hatchery has a capacity of 34 million fish eggs.

Cedar River Councilmember Jeff Neuner clarified the Cedar Rapids acquisition mentioned last meeting was in reference to the Skyfire Rapids development on Jones Road. Neuner sent a news article to Nathan Brown that was considered critical to hatchery policy adoption. As a result, Brown announced a report from King County Basin Stewards and the Open Space Acquisitions group will be distributed first quarter of 2022. The report will discuss King County acquisition strategies along the Cedar River.

Cedar River Councilmember Frank Urabeck added that per the Landsburg Hatchery manager, total fish egg intake for 2021 thus far is 2.6 million. However, with recent high river flows due to heavy rain, sockeye redd (egg nest) damage exceeded the threshold of 2,200 cubic feet per second (c.f.s.) at just under 3,000 c.f.s. Such an event is anticipated at this time of year, but it was a relief that damage was minor.

III) Riverbend Levee Setback and Floodplain Restoration, Project Update (Jon Hansen, King County DNRP)

A) Presentation

Jon Hansen is a Capital Projects Managing Supervisor from King County Department of Natural Resources and Parks (DNRP). The Riverbend project is located by Cavanaugh Pond Natural Area near Maple Valley. The project site is 52 acres with levees built along portions of the Cedar River to keep the river in place in the event of a flood. Its goal is to reverse some of the past levee work to recover floodplain function and river side channels. The original 2020 construction plans were to remove a portion of the levees both upstream by the former mobile home park and downstream by Cavanaugh Pond while retaining the middle portion of the levee. With the construction of side channels, water would then flow into the floodplain. Side channels and alternate flow paths would reduce the flow energy that was originally confined in the mainstem.

The storm and flooding of the Cedar in February 2020 eroded a portion of the downstream levee, changing the dynamics of the entire reach. Design and construction needed to be recalibrated since the river was lowered because of this levee failure. A portion of the project site intended for restoration now became part of the river, which was ultimately beneficial to the project, but it changed the circumstances of the project site. While it also was helpful for local habitat, the flood head-cut the channel, resetting bed elevation for the entire reach and undermining the remaining levee. The Cedar River Trail (CRT) and State Route 169 downstream embankment were also destabilized. Factors such as hydrology, elevation, and overall project approach required a reassessment and redesign.

The design has been revised with the same premise and is going into Phase 2 of construction. Side channels are still being constructed into the floodplain and any surrounding private residences and infrastructure are intended to be protected. Elevation and the project extent have been adjusted to create a better and more long-term restoration of reach conditions. The middle section of the levee that was intended to remain as an interim step will now be removed as it is failing and falling into the river. Removing the levee material would give the river the opportunity

to manage its own elevations within the reach while preventing future cleanup of materials. There was discussion to consider repairing the levee, however, such repairs would be both costly and non-functional.

A setback structure will be constructed along the CRT and SR 169 to provide the same protection to infrastructure as originally intended instead of the middle levee. This will allow the river to navigate and work on its floodplain in a more natural manner. In King County's partnership with the King County Flood Control District (FCD), protection of the CRT downstream will also be added using engineered log jams and installing bumper logs to redirect flow and reduce scour. This extension will not only be more habitat friendly, but more cost effective.

Final design and permitting for Phase 2 are underway; plans were submitted to partners for possible additions and should take one month before procuring or obtaining contractor bids this December. Project construction is anticipated to begin in Spring 2022 and last two years, however, with a possible earlier start date, it may be shortened to one construction season, depending on natural conditions. Tree and shrub planting are expected to take place in either Fall 2022 or Fall 2023 as soon as construction ends. Finally, monitoring and maintenance of the site will occur for ten years post-construction. Hansen invited CRC members to tour the site before and during construction to provide feedback and see the benefits of the Riverbend project firsthand.

B) CRC Member and Public Comment / Q & A

- **Q:** What will channel construction look like in terms of affecting sockeye and Chinook spawning ability during regular river flows versus during high river flows?

JH: We never want to do restoration that undoes natural benefits. We believe—and I will let Sarah [McCarthy] respond more since she is the brains of the operation in relative terms of salmon benefits—that by recapturing the floodplain by spreading the water out, you are reducing the energy across all the channels. When we had this event, all the energy was in the mainstem, in places where you have levees. Where in one reach, you may have one threshold with roughly 2,000 c.f.s. being the trigger for certain sediment to move and damage redds. When you spread the water out, it creates twice as many pathways and the 2,000 c.f.s. flow is split.

Sarah McCarthy: In terms of scour and the flows in which it initiates, that's exactly how I would answer that question. We saw through our modelling of project alternatives that once we open the floodplain up, it raises that flow level in which we start to see scour initiating. We are increasing the resilience of the system to accommodate floods and not see the same levels of scour in the river. The vision is that as we do these larger scale projects piece-by-piece through the river system, we're spreading the flow out and reducing those velocities and increasing the flow in which we can see the scour.

What I am encouraged by through the redesign is that because we are not trying to maintain a static state, there is far less riverbed control and armoring than there was in the original design. We were really trying to moderate that rate of change. I suspect it's going to be more dynamic than the original design. We expect sockeye to be using and homing in on this site because it is bigger and allows the habitat to change over time. New protected areas will appear throughout the site over time. The dynamism of the site combined with the lower velocities will be a benefit for sockeye.

- **Q:** Did you check spawning in that area before the flood to get a sense of what is there?

SM: King County did no spawning surveys there this year. The existence of the remaining levee is short-lived because the tow rock on it has scoured away. To maintain that feature, we would be going back and re-armoring a levee that isn't protecting anyone. Mother Nature made the choice for us in 2020 to take out the levee and so we're trying to adapt the design to work with the system as best we can.

- **Q:** Can you tell everyone what your role is on the project?

JH: I work for King County Ecological Restoration and Engineering Services and I am the Capital Projects Managing Supervisor for this project. I get to do the presentations, talk to people and get them excited, and then I have Sarah and the team do the design, the permitting, etc.

SM: I am an Ecologist with King County and I have had the pleasure of being Lead Ecologist on this project since it started. I wish my counterparts were here tonight so I could introduce you to them as they are going to be helping significantly through the construction process.

- **Q:** Any plan to replace the CRT or other recreation access on the levee?

SM: The trail has become destabilized and unsafe to walk upon, so it has been closed since the February 2020 flood. Because construction of a trail near the current alignment of the river would require significant armoring to keep it in place and would therefore be incompatible with the habitat restoration goals, we decided to remove that element. There will still be a parking lot for the public for trail access and signage to educate the public about the project.

- **Q:** What filtration systems are being provided along SR 169 or the trail? Rubber tire runoff seems to be a big issue with salmon.
JH: Runoff is a problem that exists everywhere where we have roads. The good part of the natural floodplain settings that we build is that we will have natural vegetation in-soil to provide a buffer between the impervious surfaces and the “bad stuff” before it gets into the water. There are a lot of negative things being studied and their effects. I think some good information being released on that topic is suggesting strongly there are some filtration methods that do work and they largely depend upon natural filtration through organic materials, which seem to have some benefits. We have not designed anything specific with this project, the idea is the natural buffer would provide those functions.
SM: Overall, this project is reducing impervious surface through the floodplain with the removal of all the roads through the former mobile home park. Any runoff coming off of SR 169 wouldn’t be changed, although it still would have been entering Cavanaugh Pond before, which was connected to the river and arguably had less filtration through it because it was isolated from the river.
- **Q:** How will the wood placement be secured? Will the logs and/or method be provided with a means to identify where they came from if they are dislodged in the future?
JH: In the way we’ve approached the design, some projects go with the intent of building a structure that is permanent and immovable. There are some places where that is necessary and some where that, to me, is a mistake because you’re putting construction in a floodplain that needs to be more natural. In the floodplain, we have tried to use only natural materials and bury things such as trees vertically in the ground so they provide resistance and anchoring into the surrounding earth. Downstream areas along the CRT don’t have that leeway and we can’t really have that moved. They will be putting some piles in which will be more “stout” so that they stay put. Our hope is that wood in the major floodplain--when and if the river moves like in February 2020—moves in a more natural way and deposits elsewhere in the floodplain. If you provide a broad floodplain, wood tends to deposit or move too far, except in extreme circumstances.
Regarding identification of the wood, we’ve gotten away from that because when wood washes away and you find a bunch of cut-end wood somewhere, everyone in Renton knows where they came from. If we do it right, those things are landing in the next site or broadened floodplain, creating habitat there. We don’t “stamp our name/number” on the logs, but all the logs with cut ends will have come from a restoration or flood protection project.
- **Q:** How might you envision this location if the Seattle Aquarium’s ‘Cedar River Salmon Journey’ program might return when the work is done?
JH: The wonderful part about this work is that, if we have done what I hope, 10-20 years from now, it will look like a natural floodplain with natural vegetation and side channels with fish galore! That really is what you see in the natural setting: the side channel spreads out, deposits gravel, and you should be able to see multiple flow paths this time of year with no shortage of fish both spawning and emerging in those areas. I expect this to be like the Rainbow Bend project (KC DNRP) in side channel formation with good fish utilization and distribution and to Frank [Urabeck]’s point, it should be more resilient to higher flows because it is not concentrated in one main area.
- **Q:** Will the buffer be higher than SR 169 or the trail to provide the filtration asked in the previous question?
JH: Long term, you will see a lot of improvements in the greenery of the site. The upper third of the site was a mobile home park with driveways, roadways, and septic systems, which are going away. We are planting 20+ acres of new vegetation across the site which will aid natural filtration.
- **Q:** What kind of access might be possible for this former site for the Aquarium’s ‘Salmon Journey’ program?
JH: One benefit we thought in leaving that partial levee in place was that you still get to do some of those activities. The river suggested otherwise. There will still be access in the current location, the parking lot will be reconfigured to the old clubhouse parking lot to allow people to come in. We are working with King County Parks to figure out how to manage that, but it will be less formal than a gravel walkway along the river. I encourage people to come out with us and look at what we could do. You are not going to see a cooler space as visible from the trail than you will see at this site. It will be a natural laboratory for people to watch the change and bring a lot of positives, but it will be harder to get in because it’s not as “manicured” as other sites.
- **Q:** The berm installed on the upstream end has been incredibly effective in reducing noise from the highway. Is that berm going to be extended downstream?

JH: No, to my understanding. We will add some vegetation to add to the potential benefits of that, but as of now, we used up the space we had. I don't see that expanding dramatically; we may do additional plantings, but not in terms of a berm.

- **Q:** What happens, if anything, to the "old channel" that is now all gravel? There is a lot of real estate that is just gravel and it is up against peoples' houses.

SM: You can see in the photo where the old channel was and is now temporarily abandoned for the new channel. What was the left bank of the river is now the right bank. There is a piece of levee that's still out there that we intended to take out because we wanted to minimize impact on that side of the river. We're not going to take it out now but we or the Rivers team will take the levee out as there could be an opportunity for side channel flow through that area. Our project will be increasing roughness on the left bank and hopefully shunting water back out into the floodplain to allow the river to access as much of the area as possible. It may be an active channel in the future, but we are not planning to do anything over there in this phase.

Councilmember Neuner asked Hansen to look at opportunities to extend a berm downstream, citing the environmental impact statement that there would be no roadway noise on the project. Hansen stated the project goal is to have the site be the best and functional as it can and was willing to discuss perspectives and ideas. The noise issue will not be addressed in the immediate future due to the challenges created by the river moving in the flood. Pieces of levee once on the left bank are now on the right bank and there is potential to look at additional things, but at this time, there is nothing in the design plan for a berm.

Regarding the levee remnants protecting Cavanaugh Pond, Neuner indicated homes across from the former mobile home park were protected by the levees, which were cut by the 2020 flood. As a result, the river dropped roughly five feet and now the revetments are unstable. Residents are not receiving adequate responses from the FCD for concerns or preparation. Hansen assured that with removal of the levee on the riverbank opposite the homes, it would potentially take pressure off those residents. A retrofitting repair is something the FCD was considering, however, Hansen did not know the details and offered to contact FCD engineers to discuss concerns.

Councilmember Larry Phillips complimented Hansen on the data presented and suggested a written recap of observations and information. Phillips also recommended King County provide more hard data on fish counts, redds, and productivity over time to date. The benefits of the redesign have not gone unnoticed; however, the biggest issue is that the river has created challenges for fish and fish productivity. Phillips stated there needs to be a refocus on what is happening to fish and that the redesign seems more of a measure of hope than what may be faced in the long term. Hansen was determined to make sure expectations were met, citing the Rainbow Bend project as a success story with the benefits of presenting meaningful safe and secure habitat for fish. Appreciation of the CRC holding others accountable was also expressed.

Charles Ruthford of the Cedar River Naturalists showed interest in discussing more with Hansen and McCarthy about the project and getting naturalists involved. Cavanaugh Pond has been an area of interest for the group. Chair Prinsen seconded Phillips's point on refocusing on the fish and advised having a conversation on offering an opportunity for tracking hatchery fish in that area. Including hatchery fish will aid in population growth.

IV) CRC Draft Letter Review and Discussion

A sockeye recovery sub-committee consisting of Chair Prinsen and Councilmembers Phillips and Urabeck sought CRC consensus and approval on drafting and sending a letter to the Cedar River – Lake Washington Fish Co-Managers. In June 2021, the CRC submitted a letter to Governor Jay Inslee suggesting cost-effective ideas to save sockeye salmon that could be implemented quickly. This new letter will build on the success of the previous letter and outline the work of various collaborative recovery groups to encourage government officials to try new ideas and take action.

Urabeck reiterated fantastic results from the summer 2021 experiment of transferring 300 sockeye salmon directly from the Ballard Locks to holding tubs at the Landsburg Hatchery in a short period of time. Little to no pre-spawn mortality (PSM) occurred in the tubs and the salmon produced roughly 2.5 million eggs. Such results hold great potential for more fry (babies) and Urabeck urged the experiment methods be repeated. The proposed draft letter will outline suggestions such as the transfer of roughly 300 total adult sockeye from either the Ballard Locks or the I-405 fish weir, the purchase of new fiberglass holding tanks filled with river water, and the release of 500 marked adult sockeye into Lake Washington via Rainier Beach. Other alternatives include the continuation of the limited fry rearing program, the removal of Northern Pike Minnow from Lake Washington, or the completion of a new well to supplement a cold pathogen-free water supply for sockeye egg incubation and reduction of adult PSM. The final suggestion would be to request the transfer of surplus sockeye eggs from Baker Lake Hatchery to the Cedar River Hatchery to rapidly restore fry production.

Urabeck assured these options could occur immediately and noted that advocates will need to push hard to ensure action, especially while the CRC is engaged in these issues. If momentum continues and action is taken by the co-managers (with governmental support), the goal will be to have sockeye salmon return to fishable levels within ten years. Phillips indicated the eight points would do two things: build on the success of the CRC to highlight what is to come and, most importantly, help promote the CRC's mission in preserving the health of the Cedar River.

Chair Prinsen restated that this letter is a continuation of the June 2021 letter and encourages both fish management co-managers and government officials to continue their work and consider new and cost-effective ideas. The process would lead the public in accessing better information and allow them to track both improvements and pitfalls in a more efficient manner. These solutions would only estimate spending in the thousands as opposed to billions. Nathan Brown called to the council for an approval decision by verbal consensus, with all councilmembers in favor. The letter will be finalized in a few days and all councilmembers will receive a copy once it is signed by Chair Prinsen.

V) CRC Updates (As Needed)

- **Lakeside Industries Asphalt Plant**

There were no updates about this topic.

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

There were no updates about this topic.

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

There were no updates about this topic.

- **Cedar River Watershed**

Amy LaBarge, CRC liaison for Seattle Public Utilities (SPU), stated there had been heavy precipitation in the last few weeks but the latest big rain event fortunately missed the Cedar River. Conditions were very mild; however, this rain heavily impacted the Skagit and Nooksack Rivers to the north, resulting in major flooding. SPU has been monitoring the situation closely. There was some overnight response over the weekend to prevent wood piling up on the Landsburg Dam; any wood that began to collect was then passed down the Cedar River.

- **Maple Valley Property Rezoning**

Nathan Brown welcomed back Cedar River Councilmember Steve Hiester after a period of absence and thanked Hiester for contributions to the CRC on behalf of the Greater Maple Valley Unincorporated Area Council (GMVUAC). Brown stated he would add any news from the GMVUAC as a standing item for future CRC meetings. Hiester inquired on the zoning status of two pieces of the Fletcher properties near the Cedar River. A docket request was submitted for the third time at the beginning of the year to rezone the properties from "neighborhood business" to "industrial." Per Hiester's understanding, the executive decision was that the request would not be reviewed until the 2024 update of the King County Comprehensive Plan.

Councilmember Phillips elaborated that each jurisdiction has their own process regarding zoning; in King County, there are roughly 725,000 land parcels, many of which are still unincorporated. King County Council (KCC) has jurisdiction over the unincorporated areas. Phillips raised the issue years ago that docket requests needed to be done in the context of a plan revision due to overwhelming requests from citizens, which led to the KCC's decision of a zoning plan revision every four years. A typical rezone request would be docketed every four years, not every year, and the request would be measured against the criteria of the King County Comprehensive Plan recommended by the King County Executive.

Hiester understood that three of the four years were just technical revisions with major revisions done every four years, the next update being in 2024. Phillips confirmed, saying that was how the system was designed to function. Hiester added that the GMVUAC also monitors these yearly requests very closely and responds to them quickly.

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

Nathan Brown anticipated more information in the new year. A King County staff member was recently hired to help manage the project and they are preparing for the plan update.

- **Membership Updates**

Nathan Brown announced that the CRC membership survey is almost ready for distribution and will be sent to members shortly. There was a delay due to a personal emergency. The survey will ascertain feedback on information such as membership status, recruitment, participation, and meeting formatting.

VI) Public Comment Period

Larry Reymann commented that there were almost 10,000 visitors to the Seattle Aquarium's 'Cedar River Salmon Journey' events at five sites along the river in October, many more than last year. Reymann observed more fish spawning than in the last ten years, particularly by Landsburg Park. Over 500 people attended the Riverview Park site in one day, with more up by the fish weir at Belmondo Reach. Nathan Brown requested Reymann share pictures and/or video of the events to the CRC.

VII) Closing/Adjourn

Chair Prinsen concluded that a bullet was dodged with fish spawning and the recent rainstorm. A closer eye is being kept on reservoir management and it was a huge relief that the Cedar River did not suffer the same fate as the Skagit and Nooksack Rivers. The next meeting will be on January 25, 2022. Nathan Brown said he planned to add the Cedar River Land Acquisition Conservation Report to the list of main discussion topics. The Cedar Grove Road culvert and gas pipeline would also be added for discussion. Meeting adjourned at 8:13 p.m.