King County

Water & Land Resources Division
Department of Natural Resources & Parks
King Street Center
201 S. Jackson St., Ste. 600
Seattle, WA 98104-3855
(206) 477-4800 Office | (206) 296-0192 Fax

MEETING NOTES

CEDAR RIVER COUNCIL

April 24th, 2018 – 7:00 PM - 9:00 PM
Maplewood Greens Golf Course
4050 Maple Valley Hwy., Renton, WA 98058

The meeting was called to order at approximately 7:00 pm.

1st Public Comment Period

One citizen posed the idea of running salmon fisheries with a lower run size. Another asked if avian fish predation would be addressed. Another asked how to make hatcheries more viable, saying heavy investment in them has seen poor fish returns. CRC Chair Max Prinsen said all such questions should be addressed by tonight's panelists.

Speaker Panel: Cedar River Salmon and Steelhead; Viability and Future

- ***Amy Windrope, Aaron Bosworth, and Neala Kendall, WDFW; Scott Stolnack, WRIA 8***

Amy Windrope, deputy director for WA Department of Fish and Wildlife (WDFW), moderated a panel on current conditions and outlook for salmon in the Cedar River basin. The panel consisted of presentations by each speaker, each followed by an audience question/answer period.

The first speaker was Aaron Bosworth, a WDFW biologist, who presented a spawning escapement data update for Chinook, Coho, sockeye, and steelhead, and loss of sport and tribal fishing in Lake Washington.

- Chinook: 2017 was a good year for Chinook in the Cedar basin, with over 2,000 spawners counted, the highest since 2000. Counts indicated a normal split of 76% natural vs. 24% hatchery spawners. Most were in the 3-4 year old age range, also normal. Findings for Issaquah Creek in the Sammamish River Chinook population indicated an 86/14 split of hatchery vs. natural spawners. He also noted the number of returning fish for both Cedar and Sammamish populations were dwarfed by the number returning to the Issaquah hatchery, that the hatchery is where most Chinook in the basin return to.
- Coho: There is less data available; Coho are harder to study due to spawning in small tributaries instead of mainstems. The last data from Seattle Public Utilities' counts above Landsburg Dam in 2009 seemed to show an upward trend in the population. In 2017 about 15,000 Coho were counted at the Ballard Locks, mostly Issaquah hatchery in origin.
- Steelhead: Numbers in the Cedar continue to be low; numbers in the several hundreds were recorded in the 1990s. Counts were so low in 2017 – less than 10 spawners – that graphs were not updated.
- Sockeye: 2017 was considered generally poor for sockeye in the Cedar, with an overall decline in population since the early 2000s. In 2002 over 200,000 returning sockeye were counted; in 2017, it was only 38,000. The split between spawner types was typical, about 62% natural vs. 38% hatchery. 75% of spawners are 4 years of age, with most of the remaining 25% 5 years of age. He said a minimum of 350,000 fish are needed to support a sport fishery; the last such year in Lake Washington was 2006.

One question asked if WDFW has determined or will address causes of decline in the steelhead population. Mr. Bosworth said most major predation factors have been removed, and his best theory is that steelhead are not going past Lake Washington due to ample food in the lake. He noted steelhead are not truly extinct in the Cedar, but are not expressing as an anadromous life form. Another question proposed a Cedar steelhead recovery program seeded with related stock from the Green River; Mr. Bosworth said an advisory group is discussing several such ideas but he is unaware of any conclusions they may have reached. CRC Vice Chair Tom Allyn asked about the ratio of sockeye smolts to returning adults, if it is declining or if there is a known cause. Mr. Bosworth said returning rates had declined. A prevailing theory is major predation of young sockeye in Lake Washington; pre-spawn mortality is a growing threat.

The next speaker was Neala Kendall, a sockeye salmon lifecycle modeling specialist with WDFW. Dr. Kendall reviewed the modeling process, which factors are observed and incorporated, and how totals are calculated. She said

modeling indicates that by increasing sockeye fry-to-pre-smolt survival in Lake Washington from its current 1-4% rate to 7-8%, the population would stabilize and even grow. However, most models show the effective death of the local sockeye population within 20 years. She concluded that maintaining a Cedar River sockeye run and restoring fisheries, while challenging, would not be impossible.

She replied to one question that climate change was not directly factored into WDFW's modeling, as they do not anticipate its effects becoming significant until around the 2050s. Mr. Bosworth observed climate change may be indirectly factored into the modeling in some respects, such as pre-spawn mortality tied to warm water temperatures in the Ship Canal. Another questioner asked how accuracy of the modeling is verified. Dr. Kendall said much of this is done by comparisons to samplings of recent data, but admitted there is a lot of predictive variability.

Another question asked if there would be any action taken on the predation study, which has been out for a year. Mr. Bosworth said he wasn't certain the department had resources to implement a full predator removal program in Lake Washington, and many are difficult to catch anyway. It was then asked what specifically could be done to bring up fry survival rates as suggested in the modeling. One comment suggested capturing adults at the Locks and transporting them to the Cedar. While Mr. Bosworth indicated this was not really feasible, Dr. Kendall noted there has been discussion about establishing cold-water troughs through the lakes to assist the fish. Mike Grijalva asked if moving large wood into the lake instead of the river would help provide habitat for the sockeye fry to hide from predators. Mr. Bosworth replied that the wood was also placed in rivers to disperse scour flows, which are harmful to sockeye eggs and fry. The next question asked why, with the years of data available for sockeye in the basin, there was not a recovery action plan already in place. Mr. Bosworth replied that this ties into how the hatchery programs are run, which the state has little control over.

Frank Urabeck noted that, while invited, City of Seattle did not send a representative to tonight's meeting. He also posed whether it is worthwhile to spend resources strategizing how to rebuild the sockeye fisheries. One citizen stressed the local economic consequences of not having a sockeye fishery in the lake. He said while WDFW is doing good work, more help is needed from other jurisdictions. Another citizen asked why sockeye hatcheries in the Cedar were not raising fish to a larger size before releasing them into the lake, like Coho and Chinook hatcheries. Mr. Prinsen proposed the cleaning of the lake water over the years might be causing a reduction in available nutrients for the fish. Dr. Kendall and Mr. Bosworth observed in response to multiple questions that ocean conditions are crucial to salmon survival rates, but local authorities have little control over those.

The last speaker was Scott Stolnack, watershed ecologist and the technical coordinator for WRIA 8, who reported on the updated Chinook recovery plan. He noted between the Cedar and Sammamish Chinook populations, more priority is given to the Cedar's due to its high percentage of natural spawners. The Chinook action plan was driven by the Endangered Species Act; they were listed as endangered in 1999. The original plan was ratified by participating jurisdictions in 2005, and approved by NOAA in 2007. The plan is watershed-based due to jurisdictions not having control over the open ocean. It consists of restoration projects, land use, outreach, and education on the importance of fish as a resource for this area. He briefly listed several aspects of projects, including: floodplain reconnection, levee setbacks, large wood for habitats, riparian planting, and invasive species control. He noted the Cedar is one of the few rivers in western Washington where knotweed control is being achieved.

He said for Cedar juvenile salmon, floodplain refuge/rearing areas are very important. Projects have been successful in increasing fish numbers in those areas. Setting back levees also aids in flood control, and a conscious effort is also made to maintain a compromise with recreational uses as well as for restoration purposes. He continued that the importance of more rearing/refuge habitat is due to young salmon who remain in the river several months longer before migrating to the lake having a five-times higher survival rate when returning from the ocean as adults.

He said general conclusions from the 2015 review of the 2005 plan indicated the plan was on the right track, but that actions were not moving fast enough, and work needed to be completed at almost twice the current rate to start seeing improvements in Chinook returns. He noted two particular projects, Rainbow Bend and Riverbend, the latter of which should have more impact on the Chinook population due to being further downstream in the watershed. Mr. Allyn asked if more projects were planned for the Cedar, citing property acquisitions by the City of Seattle and King County. Mr. Stolnack replied that while several areas are in the works, these would still take time due to the willingness or lack thereof from landowners in the desired project areas to sell their property.

King County

One questioner asked about flood impacts on sockeye hatcheries. Mr. Stolnack replied that hatchery fish were generally not impacted, but gravel-based fish in the river could be affected. Another topic, raised by Ms. Windrope, was active research on reducing light pollution in the Cedar. All light attracts juvenile salmon, and artificial light pollution means predators can feed almost round the clock; there are fewer, if any, safe times for salmon fry to feed.

Mr. Urabeck asked for a general audience response on if it is worthwhile to continue investing in sockeye recovery. The general response favored this. Ms. Windrope stressed her department's concern that if the current approach to sockeye recovery does not change, it will be dire for the species. She said the best option is to target their resources on increasing fry-smolt survival rates in the lake. The next step will be to determine costs for this, and muster community support to drive political, financial, and technical will to achieve this.

Updates and Announcements

- CRC Asphalt Plant Letter Update: Nathan Brown reported on a CRC letter to County leadership regarding Lakeside Industries' planned asphalt plant in Maple Valley. The letter, including public comments, was sent to the Executive and several Councilmembers, and was available via email and hard copy at tonight's meeting.
- Officer Elections: Mr. Prinsen and Mr. Allyn's terms as Chair and Vice Chair respectively end this year. Mr. Brown said this would be addressed at an upcoming meeting.
- CRC Work Plan Update: This was not addressed due to time constraints.
- WRIA 8: This was not addressed due to time constraints.
- Fish Counts/Issues: This was not addressed due to time constraints.
- River Conditions/Issues: This was not addressed due to time constraints.

2nd Public Comment Period

This was not addressed due to time constraints.

The meeting adjourned at approximately 9:00 pm.

Next Meeting

May 22nd, 2018, 7:00 to 9:00 pm – Riverbend Club House, Renton