Position Statements Regarding Our Hatchery Chinook Run in Capitol Lake

May 27, 2016

- For the last 60 years using Capitol Lake, this watershed has annually produced more salmon than at any time throughout recorded history. These numbers will likely increase with the new hatchery.
- Any potential advantage gained for fish by dam removal is quite small compared to the benefits which those hundreds of millions of dollars would provide if they are directed at improving other more productive rearing and spawning areas in Puget Sound. This position is supported by PSNERP.
- 3. With the exception of modest spawning in Percival Creek, there has never been significant spawning of native salmon in the entire Deschutes River watershed, including the Capitol Lake basin. CLIPA's proposed "Coho Habitat Restoration Project" in lower Percival Creek could provide a sustainable fishery for wild coho in this watershed.
- 4. Predation is recognized as a problem for juvenile and adult salmon in this run. Re-converting Capitol Lake to an intertidal mudflat will double or triple the number of compression points available to predators such as harbor seals, otters, and cormorants.
- 5. The following excerpt is from "Diet and Bioenergetics of Lake-Rearing Chinook Salmon in Lake Washington" (which also hosts a hatchery Chinook run). "Despite the heavily altered nature of Lake Washington and the relatively short time Chinook salmon have used this system, [like Capitol Lake] feeding and growth performance of juvenile salmon in littoral habitats [lake bottom receiving sunlight] of

Lake Washington were comparable to those for Chinook salmon rearing in estuarine and riverine environments."

- The fishing community is benefitting from this salmon run.
 <u>All</u> of us are benefitting from the vast array of other qualities of the Lake. This win-win strategy through sharing serves the community and environment well.
- The Chinook hatchery run and necessary infrastructure (fish ladders, holding pens, pumps, and piping) were introduced in 1954, three years <u>after</u> Capitol Lake was constructed.
- 8. According to the Capitol Lake Alternatives Analysis Public Review Draft and other experts, these fish would benefit from dredging Capitol Lake.
- 9. According to Thurston County Health Department data, Capitol Lake is well oxygenated throughout the year, especially during the "Critical Period", July through September, when these fish return (mostly September). (Milne)
- Aquatic insects, an important source of food for juvenile Chinook (and Yuma and Little Brown bats), thrive in Capitol Lake in great part due to the Lake's high oxygen content. (Milne)
- 11. A new fish hatchery is being planned for the Deschutes River at Pioneer Park with full knowledge that Capitol Lake will likely play a part.
- 12. Tidal flows for improved ingress of stray juvenile salmon for rearing could be increased by re-channeling Percival Creek directly to Budd Inlet.

13. The 5th Avenue tide-lock does not have either a turbine or spillway, the characteristics considered almost totally responsible for juvenile mortality in Columbia River dams.