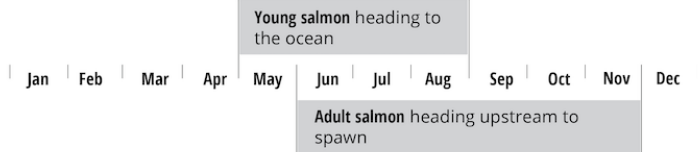
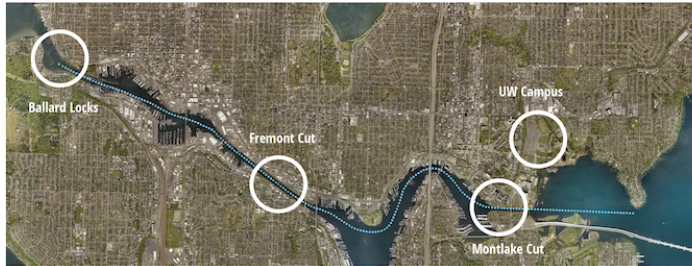


COOLING THE CAMPUS, HELPING THE SALMON

The University of Washington Seattle campus is exploring an innovative solution to the challenge of cooling the campus that will have technical, economic and environmental benefits.

May–November salmon pass through the canal



The canal is too warm for salmon

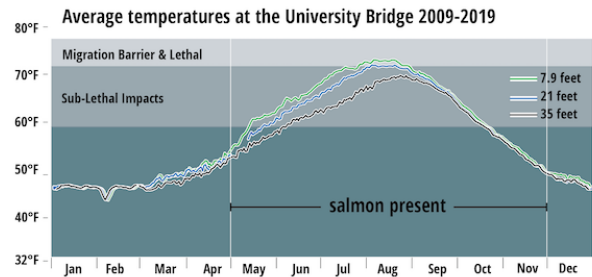


Chart adapted from: Urgenson, L., Kubo, J., Degasper, C. 2021. Synthesis of Best Available Science: Temperature and Dissolved Oxygen Conditions in the Lake Washington Ship Canal and Impacts on Salmon. Prepared for the Lake Washington, Cedar, Sammamish Watershed (WRIA 8) Salmon Recovery Council.

A COOPERATIVE EFFORT
 Representatives from over a dozen organizations are contributing to this work and tribal governments are being consulted. The organizations include federal, state, city non-profit, academic, and community groups.

Emergency measures are being taken

In July, 2022, the Seattle Times reported on the work being carried out by local tribes and government agencies to transport salmon in trucks to bypass the canal.



Environment | Local News | Northwest
Salmon are still migrating through Seattle – but they’re in trucks
 July 2, 2022 at 6:00 am | Updated July 2, 2022 at 10:27 am

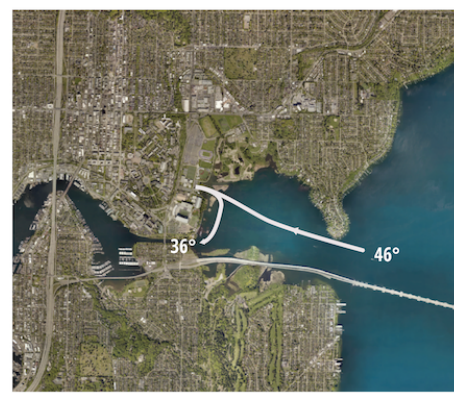
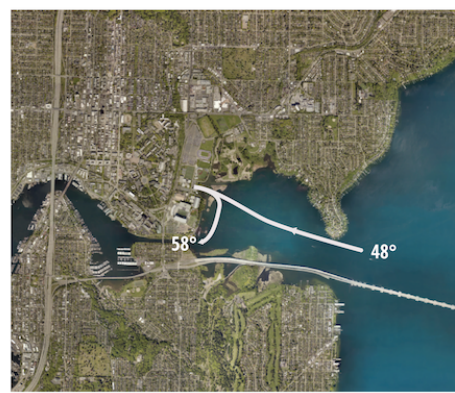


2 of 8 | Returning sockeye salmon at the Ballard Locks fish ladder are stacked up behind a screen where they can be netted and put in a truck for further migration. (Greg Gilbert / The Seattle Times)

Pumping cold water from deep in the lake for cooling will lower electricity consumption and may help salmon

In summer, cold water could be pumped from deep in the lake for cooling and returned to the Montlake Cut considerably cooler than the surrounding water.

In winter, “cold” water pumped from deep in the lake is warm enough to help heat the campus using modern heat pump technology.



Acknowledgments:
 This work was coordinated by Long Live the Kings and WRIA 8 Salmon Recovery Council
 Concept pre-development and modeling of the integrated energy / habitat infrastructure to date has been led by djoule and DSI in close collaboration with the UW, WRIA8, and LLTK.