



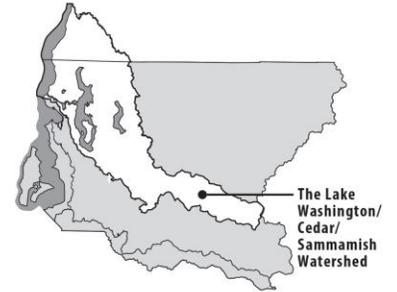
Beaux Arts Village
Bellevue
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Hunts Point
Issaquah
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Cedar River Council
Friends of the Cedar River Watershed
Friends of the Issaquah Salmon Hatchery
Greater Seattle Chamber of Commerce
Long Live the Kings
Mid-Sound Fisheries Enhancement Group
Mountains to Sound Greenway
Northwest Marine Trade Association
Sno-King Watershed Council
Trout Unlimited
Water Tenders

Alderwood Water and Wastewater District
National Oceanic and Atmospheric Administration
US Army Corps of Engineers
Washington Departments:
Ecology
Fish and Wildlife
Natural Resources
Washington Association of Sewer and Water Districts
King Conservation District

November XX, 2018

Kelly Susewind
Director
Washington Department of Fish and Wildlife
1111 Washington Street SE
Olympia, WA 98504



RE: Watershed-based salmon recovery monitoring and research priorities for WDFW support and funding consideration

Dear Director Susewind:

On behalf of the Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Salmon Recovery Council, we are writing to bring to your attention several fisheries monitoring, research, and management priorities listed below and described in detail in the attachment. We request Washington Department of Fish and Wildlife (WDFW) lead on implementing these items and include them in future agency budget requests and work planning.

The WRIA 8 Salmon Recovery Council is a regional partnership between 28 local governments and stakeholder representatives from community groups, business, citizens and state and federal agency partners – including WDFW – working collaboratively to recover Chinook salmon. We appreciate WDFW’s leadership and engagement as a partner in WRIA 8 and in watersheds across the state, and we look forward to continuing to work with you and your staff to make progress on salmon recovery goals. WRIA 8 is the most populous watershed in the state, and addressing these priorities offers WDFW the opportunity to assume a leadership role in addressing critical data gaps and fisheries management challenges in particularly urban, highly visible areas of our watershed.

In 2017, the WRIA 8 Salmon Recovery Council approved a 10-year update to the WRIA 8 Chinook Salmon Conservation Plan (WRIA 8 Plan). The updated WRIA 8 Plan includes new habitat restoration goals, new and refined recovery strategies, an updated habitat project list, updated land use and education and outreach actions, and a monitoring and assessment plan that ensures we are tracking our efforts and making timely and appropriate course corrections.

In addition to maintaining a focus on priority habitat restoration efforts, the WRIA 8 Plan update identified several monitoring, research, and fisheries management priorities that need to be addressed to reduce threats to salmon survival in the watershed. These priorities, listed below, support our overarching recovery efforts and will increase

fishing opportunities and improve prey availability for the ailing Southern Resident Orca population. Given WDFW's role as Co-Manager of the state's fisheries resources, we request WDFW fund, lead implementation of, and/or participate in the following activities in WRIA 8:

Current/ongoing efforts

- **Juvenile Chinook monitoring and sampling** – continue operating Cedar River and Bear Creek smolt traps, but identify funding sources other than annual WRIA 8 grant funds (which are uncertain year-to-year) to support the work
- **Adult Chinook spawner surveys** – continue existing surveys in Bear Creek and Cottage Lake Creek and add surveys in upper Issaquah Creek
- **Non-native piscivorous fish monitoring and management in Lake Washington Ship Canal** – continue and expand predator monitoring efforts in the Ship Canal to improve the understanding of predator presence, assemblages, and impact on juvenile salmon, and identify potential management solutions
- **Effects of artificial light on salmon survival in Lake Washington, Lake Sammamish, and the Ship Canal** – fund and participate in efforts to further quantify harmful effects of artificial nighttime light on salmon, synthesize and summarize best available science on the topic, and work with stakeholders to develop solutions to address impacts

Additional WRIA 8 Plan update priorities

- **Technical studies to fill data gaps related to causes of salmon mortality in the Lake Sammamish watershed** – fund and lead a series of technical studies of disease, fish assemblages, and predation associated with elevated temperatures and low dissolved oxygen in the Lake Sammamish watershed
- **Comprehensive management strategy for Cedar River sockeye** – lead development of a comprehensive, science-based management strategy to improve conditions for sockeye in the Cedar River basin

The attachment provides context and details for each of these current efforts and emerging priorities, and describes WRIA 8's request of WDFW for each topic.

We encourage WDFW to include these priorities in future budget requests and programming of existing work and resources. Prioritizing and allocating resources to address these issues supports the collaborative salmon recovery effort in WRIA 8 and regional Puget Sound salmon recovery. Investing in these priorities also supports conditions needed to increase fish returns and fishing opportunities for multiple species, as well as increasing prey availability for Southern Resident Orcas.

Thank you for considering the above priorities in future agency budget requests and work planning. Please let us know how we can partner with WDFW on addressing these critical priorities. If you have any questions about these priorities or about salmon recovery in WRIA 8,

Susewind
November XX, 2018
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please contact Jason Mulvihill-Kuntz, the WRIA 8 Salmon Recovery Manager, at 206-477-4780 or jason.mulvihill-kuntz@kingcounty.gov.

Sincerely,

John Stokes
Chair, WRIA 8 Salmon Recovery Council
Councilmember, City of Bellevue

Mark Phillips
Vice-Chair, WRIA 8 Salmon Recovery Council
Councilmember, City of Lake Forest Park

Enclosure: Addendum of WRIA 8 Monitoring and Research Priorities for WDFW Funding and Implementation

cc: Erik Neatherlin, Science Manager, WDFW
Ron Warren, Assistant Director, Fish Program, WDFW
Kelly Cunningham, Deputy Assistant Director, Fish Program, WDFW
Amy Windrope, Region 4 Director, WDFW
Edward Eleazer, Fish Program Manager, Region 4, WDFW
Raquel Crosier, Legislative Director, WDFW
Stewart Reinbold, Region 4 Habitat Biologist Program Supervisor, WDFW
Aaron Bosworth, Region 4 District Biologist, WDFW
Sheida Sahandy, Executive Director, Puget Sound Partnership
David Troutt, Chair, Puget Sound Salmon Recovery Council

Attachment: WRIA 8 Monitoring and Research Priorities for WDFW Funding and Implementation

Current/Ongoing Efforts:

Juvenile Chinook monitoring and sampling

Tracking the status of juvenile Chinook productivity has been a priority for WRIA 8 since 1999, as this work helps us gauge our progress toward improving habitat and provides insights into the types of actions that are most needed to improve juvenile survival. Since 2005, WRIA 8 has awarded local grant funds to WDFW to operate smolt traps on the Cedar River and Bear Creek. WRIA 8 grant funds also support PIT tagging efforts performed by WDFW. To our knowledge, we provide a significantly higher local funding contribution than is provided by any other watershed in Puget Sound. In recent years, WRIA 8 grant funds have provided nearly 100% of WDFW's operational costs (average of \$243,369 per year over the past four grant cycles; total grant funding of \$973,474), and costs have grown to a level such that we cannot fully support the program any longer. Moreover, our updated recovery plan highlights other important monitoring and research needs that are critical to our salmon recovery efforts and present added competition for our limited monitoring funds. While we support WDFW continuing to conduct juvenile outmigrant monitoring in the watershed and find great value in the data and analysis provided by WDFW biologists, we encourage WDFW to identify other funding sources given the uncertainty of WRIA 8's ability to support the work at historic funding levels.

Adult spawner surveys

Increasing the number of returning adult Chinook salmon is WRIA 8's primary salmon population recovery goal. WRIA 8 funds the annual monitoring of adult abundance in several streams. WDFW has been an important partner in this work, specifically in conducting surveys on Bear Creek and Cottage Lake Creek. With the removal of the Issaquah fish hatchery intake dam on Issaquah Creek in 2014, expanding spawner surveys to upper Issaquah Creek is important to understand how Chinook salmon are recolonizing the upper basin. WRIA 8 requests WDFW perform spawner surveys on upper Issaquah Creek, which will inform recovery progress and operations of the Issaquah Hatchery to support recovery of the Sammamish Chinook population.

Non-native piscivorous fish monitoring and management in Lake Washington Ship Canal

Predation risk to juvenile Chinook salmon in the Lake Washington Ship Canal has been identified in many WRIA 8 technical workshops and forums as a key uncertainty and potentially major limitation to Chinook recovery in WRIA 8. The issue was studied in 1999, but predator fish communities have changed over the last 20 years, temperatures in the Lake Washington Ship Canal have increased, and predation of juvenile salmon is identified in the WRIA 8 Plan as a priority issue. WRIA 8 supports WDFW predator monitoring work in the Ship Canal, and we contributed funds this year to add a predator diet analysis to WDFW's piscivorous fish assessment. We encourage WDFW to continue investing in these efforts. Doing so will provide a better understanding of predator assemblages and the degree of impact on juvenile salmon and will help to identify potential management options.

Effects of artificial light on salmon survival in Lake Washington, Lake Sammamish, and the Ship Canal

Better understanding the effects of artificial light on the behavior of salmon, primarily juveniles, as well as effects on the behavior of native and non-native fish predators in the lakes and Ship Canal, will inform management actions and recovery priorities. WRIA 8 has been a key partner in early efforts by the U.S. Geologic Survey, U.S. Fish and Wildlife Service, NOAA National Marine Fisheries Service, and others to investigate this issue. WRIA 8 requests WDFW fund and participate in efforts to further quantify harmful effects of artificial nighttime light on salmon, to synthesize and summarize best available science on the topic, and to work with stakeholders to develop solutions to address the impacts of artificial light.

Additional WRIA 8 Plan Update Priorities:

Technical studies to fill data gaps related to causes of salmon mortality in the Lake Sammamish watershed

The Sammamish River and Lake Sammamish are key migratory corridors for the Sammamish population of Chinook salmon. WRIA 8 requests WDFW fund and lead a series of technical studies to fill data gaps for disease, fish assemblages, and predation associated with elevated temperatures and low dissolved oxygen in the Lake Sammamish watershed. These studies would also support and inform emergency actions to recover Lake Sammamish kokanee.

Comprehensive management strategy for Cedar River sockeye

The decline of the Cedar River sockeye population is concerning. There has not been a fishery on this population since 2006, and the returns since then have been poor. As with Chinook salmon, there are likely many factors affecting sockeye survival, including elevated water temperatures in the Lake Washington Ship Canal, loss of rearing and refuge habitat, predation from non-native piscivorous fish, altered behavior from artificial light, etc. WRIA 8 supports WDFW leading an effort to work with partners to develop a comprehensive management strategy to improve conditions for sockeye in the Cedar River basin.