Lake Sammamish Kokanee Tributaries Restoration and Enhancement of

Keep Our Kokanee — Protect, Reconnect, Restore

in the watershed. Community to educate others on kokanee needs restoration projects, and reached out to the larger supplementation program, supported a series of habitat assessments, implemented a short-term population assemblage such that it is viable and self-sustaining, extinction and improve the health of native kokanee prevent the to reverse the decline. The KWG established a goal for rebuilding the population: prevent the extinction and improve the health of native kokanee population such that it is viable and self-sustaining, and then supports fishery opportunities. Over the past several years, the KWG and its members have assembled the best science available, conducted assessments, implemented a short-term population supplementation program, supported a series of habitat restoration projects, and reached out to the larger community to educate others on kokanee needs in the watershed.

Native kokanee are now known to spawn consistently in only Ebright Creek, Laughing Jacobs Creek, Lewis Creek, Pine Lake Creek, occasionally in Tibbetts and Vasa creeks, and along some shoreline areas in Lake Sammamish. This drastic reduction in the geographic distribution of spawning areas significantly raises the potential for a single catastrophic event—whether natural or human-caused—to completely eradicate native kokanee from the watershed. In fact, recent data indicate that two runs of native Lake Sammamish kokanee are likely already extinct. It appears that only the winter/late run kokanee still remains. In 2007, local jurisdictions, government agencies, tribes, community groups, area residents, and kokanee advocates in the watershed formed the Lake Sammamish Kokanee Work Group (KWG) to work together to reverse the decline. The KWG established a goal for rebuilding the population: prevent the extinction and improve the health of native kokanee population such that it is viable and self-sustaining, and then supports fishery opportunities. Over the past several years, the KWG and its members have assembled the best science available, conducted assessments, implemented a short-term population supplementation program, supported a series of habitat restoration projects, and reached out to the larger community to educate others on kokanee needs in the watershed.

Habitat improvements are essential to restoring a stable and self-sustaining population, both in tributaries that currently support spawning as well as in tributaries infrequently or never used but that could provide spawning opportunities. Building on the latest science and a range of efforts to recover kokanee, the KWG recently compiled The Blueprint for the Restoration and Enhancement of Lake Sammamish Kokanee Tributaries. The Blueprint describes and maps a variety of potential habitat projects that will contribute directly to the revitalization of kokanee salmon in Lake Sammamish. It is critical to have sufficient habitat restored to support a robust, self-sustaining population, particularly once the supplementation program is discontinued by 2021. Because the native kokanee salmon spend their entire lifecycle in the Lake Sammamish basin, our actions have a measureable and direct impact on kokanee recovery and sustainability. It is up to us to ensure that these little red fish do not go extinct.

Time is running out to recover our little red fish. We need to act now.

Our Lake Sammamish native kokanee salmon population is declining precipitously. Unlike their larger relative sockeye salmon, kokanee do not go out to the ocean but spend their entire lifecycle in fresh water. They migrate from streams as inch-long fry and spend three to four years in Lake Sammamish before returning to spawn in the late fall and early winter in their natal streams. In recent decades, kokanee numbers have plummeted, and their distribution has been reduced from a large section of the Lake Washington watershed to only Lake Sammamish and several of its tributary streams.

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Kokanee habitat projects are ready for action. Our native Lake Sammamish kokanee salmon are in trouble. To help address the problem, the Lake Sammamish Kokanee Work Group—an ad hoc partnership of of local jurisdictions, government agencies, tribes, community groups, area residents, and kokanee advocates—has assembled a list of potential habitat projects that will be essential to recover the little red fish. Called The Blueprint for the Restoration and Enhancement of Lake Sammamish Kokanee Tributaries, the report contains descriptions and maps of science-based habitat projects that will directly benefit kokanee.

To see The Blueprint, visit www.kingcounty.gov/kokanee-habitat-blueprint


Or contact David St. John, Lake Sammamish Kokanee Work Group at 206-477-4517 or david.st.john@kingcounty.gov.

**Expected timeline for recovery of Lake Sammamish kokanee**

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Restoration and Enhancement of Lake Sammamish Kokanee Tributaries www.kingcounty.gov/kokanee-habitat-blueprint

<table>
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<th>Name of Project</th>
<th>Description</th>
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| EBRIGHT CREEK - Category One Stream (primary spawning streams) | **Lower Reach Habitat Restoration** Improve lower reach conditions to protect kokanee habitat.  
**Culvert Replacement at East Lake Sammamish Parkway** Replace culvert to improve fish passage and sediment transport.  
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**Driveway Bridge Replacement** Replace or repair driveway bridge for fish passage and sediment transport.  
**Culvert Replacement at 178th Street** Replace culvert to improve fish passage and sediment transport.  
**Lower Reach Habitat Restoration** Protect spawning habitat and prevent or minimize direct impacts to kokanee eggs.  |
| LAUGHING JACOBS CREEK - Category One Stream | **Assessment of Potential Option** Evaluate feasibility of tunneling stream.  
**Lower Reach Restoration** Remove channel or enhance current channel to improve spawning.  
**Assessment of Parkway Culvert** Evaluate hydraulics and fish passage of culvert under parkway.  
**Restoration in Harry J Enright Park** Install pool-forming structures and spawning gravel to enhance stream channel.  |
| LEVING CREEK - Category One Stream | **Lower Spawning Reach Restoration** Install a series of moderate grade control structures.  
**Upper Spawning Reach Restoration** Install a series of moderate grade control structures.  
**Protection of Riparian Corridor** Develop a stewardship project to protect riparian corridor.  
**Teeth Rack at 196th Culvert** Replace or modify existing teeth rack.  
**Upper Reach in Neighborhood** Assess upper basin to improve stormwater management.  |
| LIME CREEK - Category One Stream | **Pine Lake Creek Reintroduction** Assess watershed to identify limiting factors for kokanee.  
**Reach Restoration Downstream of Parkway** Restore or enhance kokanee spawning and staging habitat.  
**Culvert Replacement/Improvement at East Lake Sammamish Shore Lane SE** Replace or modify culvert to improve fish passage.  
**Culvert Replacement/Improvement at East Lake Sammamish Trail** Replace or modify culvert to improve fish passage.  
**Reach Protection (Lake Sammamish Parkway)** Restore or enhance kokanee spawning and staging habitat.  
**Pine Creek Reinforcement** Supplement or reintroduce kokanee into this creek system.  |
| ISSAQAH CREEK - Category Two Stream (potential spawning – larger streams) | **Pickering Reach Habitat Restoration** Improve habitat, remove riprap, add large woody debris, restore native vegetation.  
**Upper-Middle Reach Restoration** Improve habitat, remove riprap, add large woody debris, create fish channel.  
**East Fork Issaquah Confluence Reach Restoration** Improve habitat, remove riprap, add large woody debris and gravel.  
**Issaquah Creek Reinforcement** Supplement or reintroduce kokanee into this creek system.  |
| TIBRETT CREEK - Category Two Stream | **Water Quality Monitoring and Assessment** Continue water quality sampling.  
**Nut Riprap Wi Stream Reinforcement** Add nut riprap stream channel.  
**Lower Reach in Lake Sammamish Lower Reach** Supplement or reintroduce kokanee into this creek system.  |
| BOYDWOOD CREEK - Category Three Stream | **Habitat Assessment** Assess habitat conditions to determine potential for kokanee use.  |
| VASA CREEK - Category Three Stream | **Hydraulics and Habitat Assessment** Assess hydraulics and habitat conditions for potential kokanee use.  
**Culvert Replacement at East Lake Sammamish Shore Lane** Replace culvert to improve fish passage and natural sediment transport.  
**Culvert Replacement at East Lake Sammamish Parkway** Replace culvert to improve fish passage and natural sediment transport.  
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| ZACCUSE CREEK - Category Three Stream | **Culvert Replacement** Supplement or reintroduce kokanee into this creek system.  |

Habitat projects that support recovery of Lake Sammamish kokanee. *Note: Project numbers indicate location from downstream to upstream, NOT priority or schedule.*