

SAMMAMISH RIVER ACTION PLAN

Partners:

U.S. Army Corps of Engineers,
King County,
Cities of Kenmore, Bothell,
Woodinville & Redmond

Goals

- Restore and create conditions that will allow the river to function effectively as a migratory corridor for fish and wildlife, within the constraints of a highly urbanized watershed.
- Provide additional habitat restoration to ensure the corridor has a diversity of well-connected habitats to sustain fish and wildlife species over the long-term and enhance human use.

Historic Conditions

- Vast wetland and slough complex with a diversity of habitat types
- River and sloughs would have provided excellent rearing habitat for salmon species, and some spawning habitat
- Likely historic temperatures of 60° F or less, in spite of large, shallow Lake Sammamish



Sammamish River boating.

Human-Induced Changes

- Lake Washington lowered by 9 feet; Lake Sammamish by 6 feet
- Valley and hillslopes logged by early 1900s
- LWD and riparian zone removed for navigation and agriculture
- Channel straightened from 1900 on, culminating in deepening and channelization project in 1960s

Existing Conditions

- High water temperatures (frequently lethal for salmon)
- Uniform aquatic habitat
- Little to no riparian zone
- Significantly reduced floodplain and wetland interactions
- Fish barriers and water quality problems (other than temperature)

Strategic Approach to Restoration

- Focus on most urgent problems
- Recognize that historic conditions can never be restored
- Ensure restoration is designed to provide long-term sustainability

Five Strategies

- Restore riparian areas throughout the corridor
- Create pools and other features in the channel
- Evaluate engineered solutions to cool the river upstream of Bear Creek
- Protect all major tributaries to the river
- Apply research, monitoring, and adaptive management across all jurisdictions in the corridor

Recommendations

Core Recommendations	Potential Lead Implementing Agency	Relative Scale of Cost
P1. Restore riparian areas throughout the entire river corridor	King County/Corps	High
P2. Create and enhance pools in the river channel	King County/Corps	High
P3. Protect and improve buffers along the river, tributaries, and wetlands	King County/Corps	Low
P4. Evaluate engineered solutions to cool the river upstream of Bear Creek	Corps/King County	High
P5. Increased water conservations in the Sammamish watershed (particularly Bear Creek basin)	Cities/WDOE/King County	Medium/High
P6. Acquisition of existing high-value habitats or areas with high likelihood of restoration success	King County	High
High Priority Site-Specific Recommendations		
1-3. Swamp Creek Regional Park wetland and stream restoration	King County/Corps	High
5-2. Lower Bear Creek floodplain and channel restoration	Corps/City of Redmond	High

Non-Core Recommendations	Potential Lead Implementing Agency	Relative Scale of Cost
P7. Designate significant resource areas within the corridor	King County	Minimal
P8. Construct demonstration reclaimed water production facility	King County	High
P9. Tight line stormwater above landslide hazards and steep slopes	King County/Cities	Low
P10. Reduce unauthorized water withdrawals	WDOE	Low/Medium
P11. Education and incentive program for property owners along the Sammamish River Corridor	King County/Cities	Medium
Medium Priority Site-Specific Recommendations		
1-4. Wildcliff Shores wetland and riparian restoration	City of Kenmore	Medium
2-1. Tributary 0068 confluence and upstream reaches	City of Bothell	Medium
3-1. I-405/Hwy 522 interchange wetland and riparian restoration	City of Bothell/WSDOT	Medium
3-2. Side channel/wetland restoration near Gold Creek	King County	Medium
3-3. minor tributaries, Reach 3	City of Woodinville	Medium
4-2. Minor tributaries, Reach 4	City of Redmond	Medium
4-3. Agricultural infiltration basin	King County	Low
4-4. Wetland restoration across from Willows Run	City of Redmond	High
4-5. Willows Run riparian and wetland restoration	City of Redmond	Low
5-1. Minor tributaries, Reach 5	City of Redmond	Medium
6-1. Transition zone channel and riparian restoration	King County/Corps	High

Low Priority Site-Specific Recommendations	Potential Lead Implementing Agency	Relative Scale of Cost
1-1. Sammamish River mouth wetlands	King County	Low
1-2. Lakepointe property riparian and shoreline restoration	Private Developer	Medium
2-2. Right bank wetland and riparian restoration in Bothell	City of Bothell	Medium
2-3. Side channel at 102 nd Avenue	King County	Medium
4-1. Small meanders in Reach 4	King County	Medium/High

Research, Monitoring, & Adaptive Management

- Additional studies are primarily intended to further address high temperatures and water quantity (i.e. groundwater)
- Monitoring will be conducted at both site scale and corridor scale – and will particularly provide information to implement the programmatic recs
- Adaptive management implemented as needed; we recommend the Action Team oversee and make recommendations based on research and monitoring

Next Steps

- Final draft plan available in February
- Final plan February-March