SAMMAMISH RIVER AND ISSAQUAH CREEK

Flooding and Erosion Conditions

- Sammamish River is a low-gradient river between two lakes, channelized and straightened.
- River is flanked by farmlands, regional parks, and the well-used Sammamish River Trail through its central valley, and by residences, parks, light industry and businesses near cities' cores.
- Rare floods bring minor overtopping of agricultural and recreational lands in the valley; docks and lawns overtop on Lake Sammamish; few threats to public safety.
- Issaquah Creek flows from its largely rural upper watershed to the City's urban core in its lower reaches. Rapid residential growth in the basin means flooding now significantly affects parts of downtown. Flood risk reduction consists mostly of hardened banks within city.
- Issaquah Creek is a significant salmonid resource for both native and hatchery stocks; lands acquired for flood mitigation also provide important habitat protection.

Vision & Strategy

- Maintain Sammamish River channel, banks, and weir for flood conveyance per the 1964 USACE maintenance plan while improving conditions for fish and wildlife.
- In cooperation with USACE and cities of Kenmore, Redmond, Woodinville and Bothell, remove invasives and set banks back to accommodate flows and establish a riparian corridor of native vegetation.
- Restore floodplain connectivity, channel meander, riparian vegetation and instream wood to improve habitat consistent with a commitment to flood conveyance.
- Improve transition zone between Lake Sammamish and Sammamish River to address flood concerns of Lake Sammamish and improve fish and wildlife habitat consistent with Endangered Species Act recovery efforts.
- Reduce risks to flood-prone homes and commercial buildings near Issaquah Creek through buyouts, structural retrofits and setting back levees as much as possible.
- Prevent new at-risk development along Issaquah Creek through land use policies and strategic acquisitions.

Proposed Actions

- The Willowmoor floodplain restoration will reconfigure the outflow from Lake Sammamish into the river to maintain or reduce flood risk in a manner that lessens impacts on fish and wildlife in the transition zone and supports recovery of endangered species, particularly fish migrating upstream through the weir into Lake Sammamish and Issaquah Creek.
- Sammamish Riverbank restoration will continue, with the USACE, Redmond, Woodinville, Bothell and Kenmore working with King County to take advantage of benchback, setback and meander opportunities and revegetation with native plants. Work with the USACE to maintain the Sammamish River project consistent with the 1964 project and the endangered species listing for native salmon.
- The City of Issaquah acquires, elevates and redevelops at-risk structures to reduce flood risks, and acquires undeveloped property in known flood hazard areas to prevent new at-risk construction.

Accomplishments 2006 through 2012

- King County and the cities of Redmond, Woodinville, Bothell and Kenmore have enhanced recreational, aesthetic and habitat values along the Sammamish River with a series of riverbank restorations, replacing invasive plants with Northwest natives. City projects have added instream wood, recontoured banks, and planted native vegetation along the river to improve habitat and enhance recreational user's experience consistent with flood conveyance.
- The frequency and extent of vegetation maintenance in the transition zone between Lake Sammamish and the Sammamish River has been increased significantly to make sure the lake drains as intended during high water conditions. Maintenance in 2011 has shown a marked improvement for measured lake levels in 2012.
- The City of Issaquah has acquired parcels, elevated buildings, set back levees and stabilized banks to reduce flood risks. Projects include an acquisition and partial levee removal in the Sycamore neighborhood in 2010. Overall, the city has preserved 100 acres of floodplain as permanent open space.