

# SOUTH FORK SNOQUALMIE CORRIDOR PLAN

## COMMUNITY MEETING

Mount Si Senior Center  
411 Main Ave S, North Bend

Open House beginning at 5:30 informational meeting beginning at 6:30

**Goal / Purpose:** Share updated information about flood risk. Get the communities' feedback on identified problem areas, approaches, tools and goals.

**6:30 – 6:35 Welcome & Introduction** – Kathy Lambert

**6:35 – 7:00 Presentation of Existing Conditions**

- Problems identified through technical studies
- Problems identified through meetings with neighborhood groups, local cities, tribes, other agencies and interested parties.
- Important factors to Implementing Flood Risk Reduction - goals

**Community Feedback Discussion**

Are there other problem areas?  
What are your goals?

**7:00 – 7:45 Possible Corridor Approaches**

- Continue Existing Management Practices
- Raise the Levees in Place
- Corridor Wide Levee Setbacks
- Moving towards a recommended corridor alternative

**Community Feedback Discussion**

Does this make sense?  
Do you have specific concerns?  
What other thoughts or ideas would you like to share?

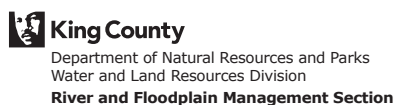
**7:45 – 8:00 Next Steps and Wrap Up**

- Incorporate your feedback
- Continue outreach to neighborhood groups, local cities, tribes, other agencies and interested parties
- Apply approaches and tools to develop a recommended corridor alternative
- Share the recommended corridor alternative and get feedback from the community.

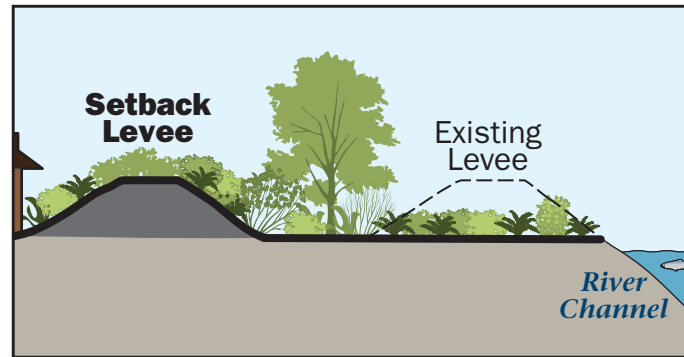
**Community Feedback Discussion**

Are there additional groups we should be talking to?  
What other thoughts or ideas would you like to share?

**8:00 - Adjourn**

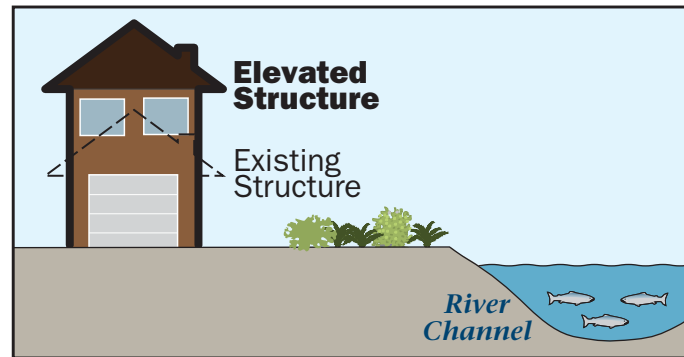


# TOOLS FOR RIVER MANAGEMENT



## LEVEE SETBACK

Remove an older flood protection facility and reconstruct it some distance from the edge of the river bank using updated techniques. A levee setback can open up the previously cut-off floodplain for reoccupation by inundation and conveyance, lowering floodwater velocities and water surface elevations, and providing a larger area for sediment to accumulate. This technique addresses multiple objectives, has great ecological benefits, and is cost effective long term but has high implementation costs.



## STRUCTURE ELEVATION

Elevate an existing structure so that the living space is above the water when flooding occurs. Elevation projects are appropriate in areas where structures are subjected to ponded or low-velocity floodwaters. This tool does not completely eliminate risk as homes are still in the flooded area. Implementation costs are low and this allows more room for flood water. Most elevation projects are managed by the homeowner with substantial cost-sharing assistance.

## MAINTAIN AND REPAIR EXISTING FACILITIES

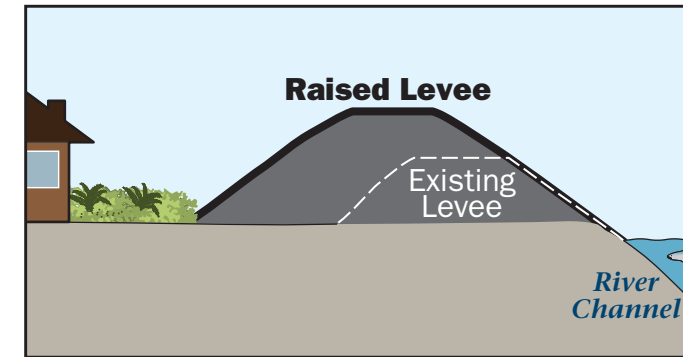
Maintain the existing levees and revetments as needed. These facilities were constructed fifty years ago, and do not meet current design or flood protection standards which results in seepage, frequent damage, and risk of failure during a large event. Short term costs are difficult to predict as the system continues to age. Additionally, as gravel continues to deposit within the channel, flood risks increase.

## PROPERTY ACQUISITION

Relocation and acquisition projects provide permanent and complete protection from flood and channel migration hazards. These projects are proven to be successful at addressing risk, meeting multiple objectives, provide long-term cost savings by reducing flood insurance claims, and reduce public expenditures for flood warning and emergency response. Most projects are implemented on a willing seller basis and purchases are always at fair market value.

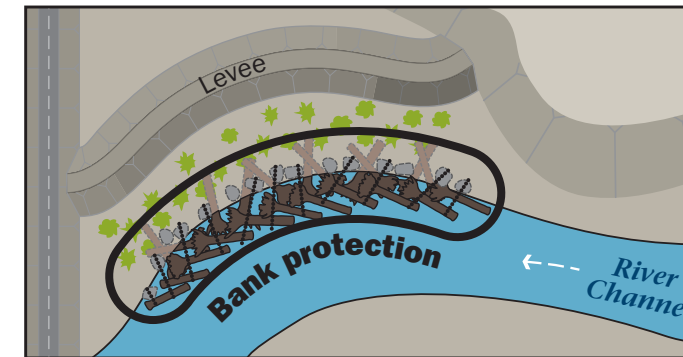
## GRAVEL REMOVAL

Excavating gravel from gravel bars within the river channel allows more room for flood waters. Gravel removal can locally reduce flood elevations for a limited time, but has documented negative ecological consequences and may have stability impacts on existing levees. Gravel removal is very difficult and expensive to permit, and likely requires repeated action to maintain any flood risk reduction benefits.



## RAISE LEVEES IN PLACE

Raise or widen a levee as close to the original location as feasible. The new levee would be constructed to higher standards but creates additional limits on conveyance and storage of flood flows, reduces natural river processes and impairs habitat conditions. While this technique can be locally effective at reducing flood risk, it has significant downstream impacts due to containment of flows.



## NEW IN STREAM STRUCTURES

Instream structures are placed in the channel to modify hydraulic conditions and designed to mimic naturally occurring logams providing ecological benefits. Structures may be used to deflect flows to reduce scour or erosion, hinder or prevent channel avulsions, or create scour pools or sediment deposition and provide habitat diversity.

## LAND USE MANAGEMENT

Develop and implement regulations to prevent new or expanded development in high risk areas. Provide technical information and assistance to private citizens and public entities located in or adjacent to high risk areas. Develop capital projects and acquisitions that eliminate or reduce the extent of existing at-risk development or prevent creation of new at-risk development.

## BRIDGE, ROAD AND CULVERT MODIFICATIONS

Replace or modify at-risk infrastructure to provide more flood conveyance and less risk of road overtopping and upstream impacts of flow blockage at undersized structures. Widespread flooding currently overwhelms culverts in the corridor and miles of roadways are frequently impacted. Bridges are low, narrow and old and replacement or modifications should be considered in coordination with levee modifications.

## **Background**

The upper Snoqualmie Valley has experienced several destructive floods in the last 20-years. King County is analyzing the best way to reduce hazards and risks across the Upper Snoqualmie Valley. Our efforts on the South Fork Snoqualmie River are focused from the mouth of the river upstream to Interstate 90. This project was initiated to address concerns that the 1960s era levees could fail catastrophically. New analysis indicates that the levees are less prone to catastrophic failure but has revealed significant flooding problems in neighborhoods, commercial areas, and for critical infrastructure due to the original configuration. Additionally, the river corridor has degraded ecological conditions due to the confining levees. The new analysis has highlighted the potential flooding of Interstate 90. This potential flooding risk is being addressed by a related but separate effort as an early action.

King County is moving forward with planning an integrated river and floodplain management strategy to meet the following goals;

- Reduce risks to people and infrastructure from flooding, erosion and channel migration
- Improve ecological conditions
- Form and maintain partnerships with the community, cities and resource agencies
- Reduce the long term costs of maintaining the levee system

## **Related Projects**

South Fork Snoqualmie River Corridor Early Action Project

Home Elevations – Shamrock Park, Clough Creek

Circle River Ranch – Risk Analysis Update

Middle Fork Corridor Study

South Fork Gravel Removal Study

Channel Migration in the Three Forks Area of the  
Snoqualmie River

King County Flood Hazard Management Plan

## **Ongoing Activities**

Continuing annual and post-flood inspections, maintenance, and repairs

Continued operation of the King County Flood Warning Center and dissemination of information related to flood hazards.

Gathering feedback and suggestions from stakeholders.

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