



If you received this brochure by mail, your property is in or near a floodplain.

2014 - 2015

FLOOD UPDATE

Flood Warning Information for Major Rivers in King County



Message from the Flood Control District:

Since the creation of the King County Flood Control District in 2007, we have worked in partnership with cities, businesses and residents living in floodplains to help prevent and mitigate the impact of flooding. This Flood Update will tell you about the projects in your community that are protecting lives, property and businesses.

This is a partnership, and you play an important role in reducing your vulnerability to flood-related damages and disruption.

So we're asking for your help.

Sign up for flood alerts. Make sure you have an emergency kit that would last several days. Designate an out-of-state contact for your whole family to call in an emergency.

Get flood insurance to adequately cover losses from even one inch of floodwaters. Homeowners and renters insurance does not cover flood damage. Check online to see where to get sand bags to protect your property, and watch our video to learn how to use them.

Look for the nearest storm drain where you live and keep it clear of debris. Flooding isn't caused just by rising rivers. It can also happen when storm drains get clogged, and the results can be just as damaging or deadly.

The information for all of these actions is in the Flood Update – please take the opportunity to see what's inside.

Being prepared means being resilient. In King County – with our legendary rain and multitude of rivers – flooding is not a matter of "if." It is a matter of when.

Reagan Dunn, Chair
King County Flood Control District

More information about the Flood District can be found at www.kingcountyfloodcontrol.org.



Reddington

King County Flood Control District project spotlight: Major projects to reduce flood risks near you. Details are at www.kingcounty.gov/rivers

- 1 Snoqualmie Basin** - The South Fork Snoqualmie Corridor Plan was approved with implementation starting in 2016, and a similar plan – the Tolt River Corridor Action Plan – is in progress.
- 2 Cedar River** - The recently completed Rainbow Bend project lowers the threat of flooding to downstream residents and protects the Cedar River Trail and SR 169. The City of Renton will soon remove river sediment from the mouth of the Cedar River to the Williams Street Bridge, and repair an unstable riverbank in that area. The Elliott Bridge Reach Project will reduce downstream flood risks from State Route 169 and Southeast Jones Place, and near 154th Place Southeast.
- 3 Green River** - In 2015, the Green River System-Wide Improvement Framework (SWIF) will begin to implement a set of prioritized projects and recommendations to protect against flooding. Projects such as the Briscoe-Desimone Levee Setback and the Lower Russell Road project are part of the SWIF. The new Reddington Levee in Auburn provides increased flood protection for 300 residential properties and 275 commercial properties with a combined value of \$680 million.
- 4 White River** - Two large-scale, complementary capital projects are being planned for the Lower White River near the King-Pierce county line. The Countyline Levee Setback and Right Bank Levee Setback projects will ultimately reconnect more than 150 acres of floodplain to the White River channel and reduce flood risks for the City of Pacific.

Este folleto contiene información importante sobre inundaciones en el King County. Favor de llamar al 206-477-4812 para solicitar un intérprete para su traducción.

**King County
FLOOD
ALERT**

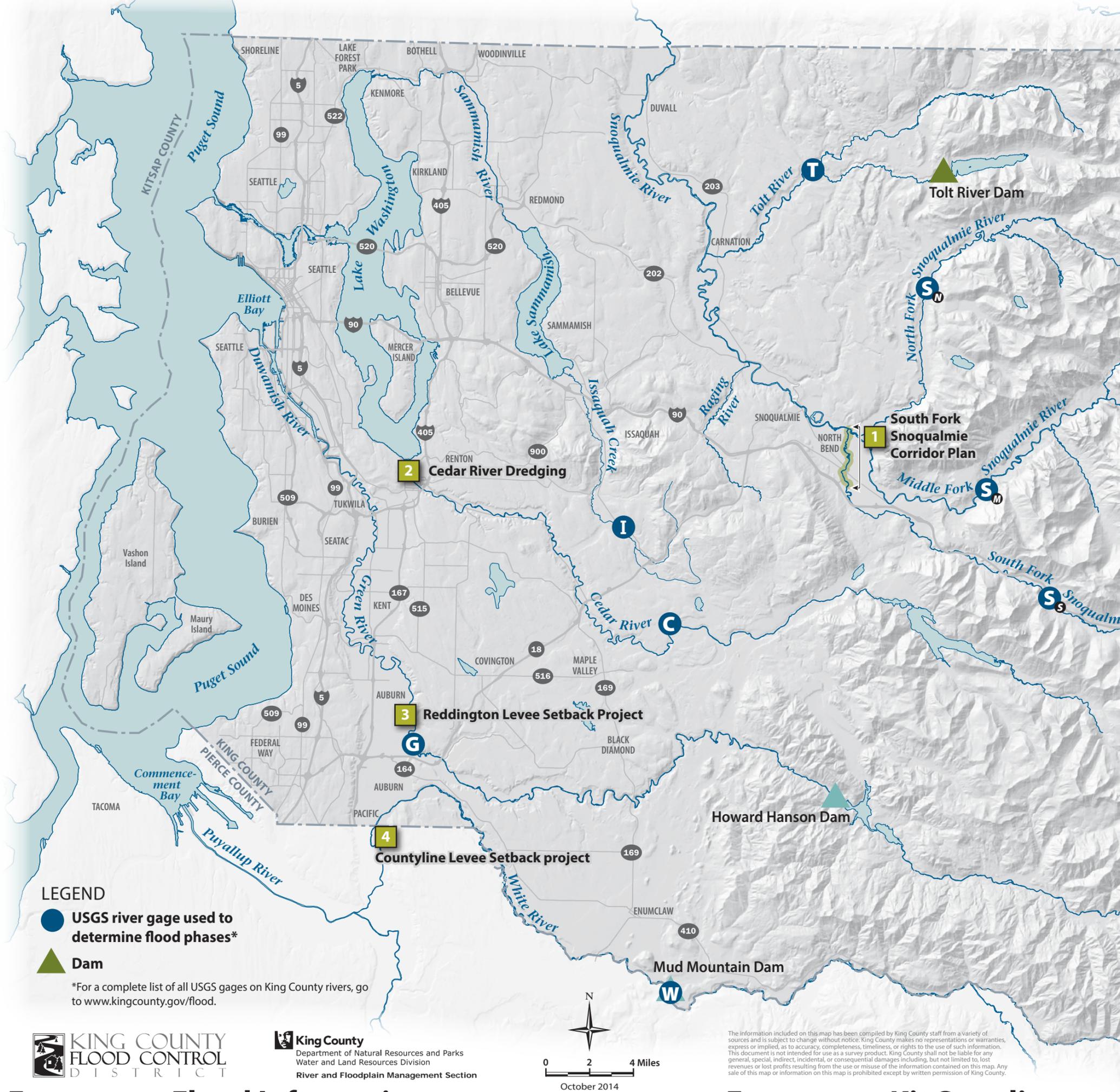
Sign up today to receive automated flood alerts by phone, text message or email when a river near you starts to rise.

www.kingcounty.gov/flood
206-477-4899

FOLLOW KING COUNTY RIVERS ON FACEBOOK & TWITTER

@KCDNRP @KCFloodDistrict

KING COUNTY RIVERS



Emergency Flood Information

American Red Cross
206-323-2345 or 360-377-3761
www.seattleredcross.org

How to Prepare for a Flood
www.kingcounty.gov/floodservices

King County Flood Alerts
206-477-4899
www.kingcounty.gov/flood

King County Flood Warning Center
206-296-8200 or 1-800-945-9263

King County Housing Repair Program
Funding for major necessary housing repairs to low-income, eligible homeowners. 206-263-9095
www.kingcounty.gov/housingrepairs

King County Office of Emergency Management - Shelter Information
206-296-3830

King County Road 24/7 Helpline
206-296-8100 or 1-800-KC-Roads
www.kingcounty.gov/roadalert

King County Road Alerts
www.kingcounty.gov/roadalert

Metro Transit Disruptions
www.kingcounty.gov/metro

National Flood Insurance Program
1-888-379-9531
www.floodsmart.gov

Public Health - Seattle & King County - Septic Tank and Well Problems
206-296-4932

Take Winter By Storm
www.takewinterbystorm.org

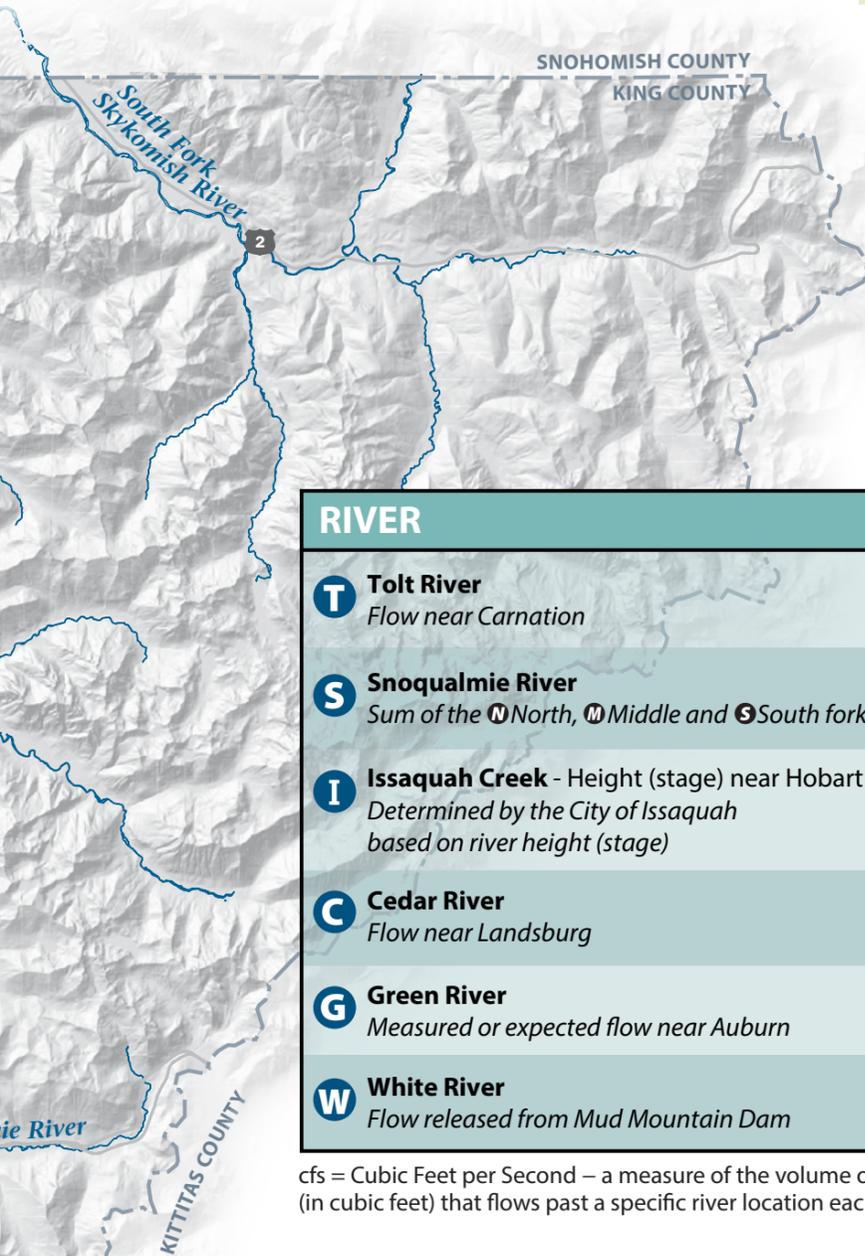
Emergency Kit Supplies

- Battery or crank-operated radio and extra batteries
- First aid supplies and a whistle
- Flashlight with extra batteries
- Copies of important documents in a plastic bag (driver's license, insurance information, family bank and other contact information)
- Several day supply of water and non-perishable food for your family and animals
- Warm clothing, sturdy shoes/boots and blankets
- Personal hygiene and sanitation supplies
- Prescription medicines
- Comfort items for children (blanket, books, toys)

King County Flood Warning Center



206-296-8200 or 1-800-945-9263



King County's Flood Warning Phases

- PHASE 1:** No flooding typically occurs. King County staff are on alert for a possible flood event.
- PHASE 2:** Minor flooding. The King County Flood Warning Center opens and staff are available 24 hours a day to provide assistance.
- PHASE 3:** Moderate flooding. King County Flood Patrol staff are dispatched to monitor flood protection facilities, such as levees, in person.
- PHASE 4:** Severe flooding. Flood patrols continue to monitor conditions and the Flood Warning Center remains open.

Flood Phases by River

RIVER	1	2	3	4	RECENT PEAK	PEAK FLOOD*
T Tolt River <i>Flow near Carnation</i>	2,500 cfs	3,500 cfs	5,000 cfs	8,500 cfs	13,800 cfs Jan. 2009	17,400 cfs Dec. 1959
S Snoqualmie River <i>Sum of the NNorth, MMiddle and SSouth forks</i>	6,000 cfs	12,000 cfs	20,000 cfs	38,000 cfs	54,110 cfs Jan. 2009	
I Issaquah Creek - Height (stage) near Hobart <i>Determined by the City of Issaquah based on river height (stage)</i>	6.5 ft.	7.5 ft.	8.5 ft.	9.0 ft.	9.31 ft. Nov. 2006	
C Cedar River <i>Flow near Landsburg</i>	1,800 cfs	2,800 cfs	4,200 cfs	5,000 cfs	7,870 cfs Jan. 2009	14,200 cfs Nov. 1911
G Green River <i>Measured or expected flow near Auburn</i>	5,000 cfs	7,000 cfs	9,000 cfs	12,000 cfs	12,200 cfs Nov. 2006	28,100 cfs Nov. 1959
W White River <i>Flow released from Mud Mountain Dam</i>	5,000 cfs	8,000 cfs	10,000 cfs	12,000 cfs	11,700 cfs Jan. 2009**	28,000 cfs Dec. 1933***

cfs = Cubic Feet per Second – a measure of the volume of water (in cubic feet) that flows past a specific river location each second.

* Before significant dams were constructed.

** Based on U.S. Army Corps of Engineers data on flow releases from Mud Mountain Dam.

*** Reported at White River near Buckley.

Expected Flood Impacts by River

RIVER	PHASE 2	PHASE 3	PHASE 4
T Tolt River <i>Flow near City of Carnation</i>	3,500 cfs San Souci area homes may be inaccessible; 353rd Avenue NE may experience high water depths and velocities where side channels cross the road. The levee on the south bank between Snoqualmie Valley Trail bridge and Highway 203 bridge near NE 3rd Street may experience seepage.	5,000 cfs Increased water depth and velocity over 353rd Avenue NE in San Souci area; water across Tolt River Road NE in vicinity of San Souci neighborhood. Increased seepage and potential backyard flooding at the levee on the south bank between Snoqualmie Valley Trail bridge and Highway 203 bridge near 323rd Place NE.	8,500 cfs Levees may overtop near City of Carnation. Flows from seepage at the levee on the south bank between Snoqualmie Valley Trail bridge and Highway 203 bridge near 323rd Place NE may cross NE 32nd Street. Channel changes may occur between upstream extent of Tolt River Road NE/361st Avenue NE and the eastern boundary of the City of Carnation.
S Snoqualmie River <i>Sum of the NNorth, MMiddle and SSouth forks</i>	12,000 cfs Lowland flooding. Roads that may overtop include Neal Road SE; Reinig Road; West Snoqualmie River Road NE (Walker Road); Snoqualmie Meadowbrook Road; and Mill Pond Road.	20,000 cfs Flooding of varied depth occurs in the entire Snoqualmie Valley. Roads that may overtop include Fall City-Carnation Road; Tolt Hill Road; and Novelty Flats Road.	38,000 cfs Some residential areas may experience dangerous high velocities and flooding of homes. Roads that may overtop include Woodinville-Duvall Road, Carnation-Duvall Road, and Moon Valley Road.
C Cedar River <i>Flow near Landsburg</i>	2,800 cfs Jones Road near 156th Place SE may overtop and close.	4,200 cfs Lower Dorre Don Way and Byers Road SE may overtop and close. These roads provide access to several neighborhoods where residents may become trapped and require evacuation.	5,000 cfs Additional roads may overtop and close including Cedar Grove Road SE, Maxwell Road SE and SR-169 near the intersection with Cedar Grove Road SE. Dead end streets may overtop and close including Jan Road SE (SE 197th Street), SE 203rd Street, SE 206th Street, and SE 207th Street. Fast and deep flows can create dangerous conditions throughout the floodplain.
G Green River <i>Measured or expected flow near City of Auburn</i>	7,000 cfs Lowland flooding in the valley upstream of the City of Auburn.	9,000 cfs Flooding of varied depths occurs in the valley upstream of Auburn and lower Mill Creek basin. Southeast Green Valley Road and West Valley Road may overtop.	12,000 cfs Critical flood control levees may exhibit seepage and/or weaken from saturation.
W White River <i>Flow released from Mud Mountain Dam</i>	8,000 cfs Red Creek area residents may experience overtopped roads and high water. Overbank flooding in the City of Pacific may occur.	10,000 cfs Red Creek area residents may experience dangerously high velocities, debris flows and residential flooding. Overbank flooding is likely to occur in the City of Pacific.	12,000 cfs Dangerously high velocity and debris flows may occur throughout the river system. Overbank flooding is likely to occur in the City of Pacific and near the City of Auburn. Damages may occur at the fish hatchery near the City of Enumclaw. Floodwater is likely to overtop SR-410 upstream of Mud Mountain Dam near Greenwater.

Know your flood hazard

Knowledge is power, they say.

Flooding is inevitable, we know.

You may have already experienced flooding in King County. Or you may have lived here for years without incident. (The last federally declared flood disaster declaration in King County was 2012.) But that's the thing about flooding. There are weather predictions, forecasts, and alerts. But the bottom line is flooding is unpredictable.

So the more you understand your susceptibility to flood hazards the better you can prepare.

Here are four ways to get more information at kingcounty.gov/flood:

- **iMap** – Look up any parcel and overlay floodplain and other data in this interactive mapping tool. View floodways, the 100-year floodplain, channel migration hazard areas for rivers and aerial photos from 2009 and earlier.
- **FEMA Flood Hazard Maps** – Find local Flood Insurance Rate Maps, learn how to read them, or request a map change.
- **Flood photo viewer** – Look up historical photos of flooding for your area or throughout King County.
- **Flood inundation viewer** – Use this tool to see the range of impact to a specific location along the Cedar River in a variety of flooding scenarios. This is a pilot project and currently contains only Cedar River data.

Need help? If you have questions about how to look up a property, whether your property is in the floodplain or if you would like information about FEMA Elevation Certificates contact 206-477-4732.

3 Ways to protect the natural floodplain

Floodplains are nature's way of managing water. Floodplains reduce the frequency, severity and duration of flooding which reduces risks to people and property. They recharge our groundwater supply needed for drinking water. And they provide habitat for plants and animals which creates a healthier environment.



Here are three ways to protect the floodplain you live in.

- 1. Build right from the start.** Development is regulated to protect floodplains and their functions. Building, construction repairs or improvements, grading, excavation and fill all require permitting. Repairs or improvements to an existing structure that exceed 50 percent of its value are required to be flood protected and meet regulatory standards. Before you start a project on your property, or to report illegal development, contact the Department of Permitting and Environmental Review at 206-296-6600 or visit www.kingcounty.gov/permits.
- 2. Report illegal dumping.** From chemicals to garbage to household appliances and furniture, illegal dumping pollutes our environment and can also block floodways. To report illegal dumping contact the Illegal Dumping Hotline at 206-296-SITE (7483); toll free at 1-866-431-7483; or go to www.kingcounty.gov/dumping.
- 3. Don't drip and drive.** Oil and other vehicle fluids from cars are toxic and can harm wildlife and habitat. Vehicles drip an estimated 7 million quarts of motor oil into the Puget Sound watershed each year. When it rains, stormwater runoff carries these pollutants to rivers, streams, lakes and Puget Sound. To diagnose your leak, get tips and referrals go to www.fixcarleaks.org.

BEFORE, DURING AND AFTER A FLOOD

Get details at www.kingcounty.gov/floodservices

Before a flood

- Know your hazard. If you were mailed this newsletter, your home or property is in a floodplain. To look up if your property is in a floodplain, go to:
 - www.kingcounty.gov/iMAP or call 206-477-4732
 - www.floodsmart.gov or call 1-888-379-9531
- Buy flood insurance. Standard homeowner insurance does not cover loss caused by flooding and there is a mandatory 30-day waiting period on new policies.
- Protect yourself and your family:
 - Update emergency plans for your family, farm or business.
 - Know several routes from your home or business to high ground.
 - Pick a meeting place in case family members are separated.
 - Pick an out-of-state friend or relative to call with info if local lines are busy.
 - Assemble an emergency kit (see inside for checklist).
 - Talk to neighbors about flood preparedness, previous experiences and any special needs you or they may have for assistance.
- Protect your property from flood hazards:
 - Figure out how and when you can move vehicles, equipment, livestock or pets to higher ground.
 - Store valuables and household chemicals above flood levels.
 - Seal and secure underground storage tanks.
 - Get sand and sandbags ahead of time and learn how to use them effectively.
 - Install check valves in building sewer traps to prevent flood waters from backing up in sewer drains.
 - Keep street drains, storm grates and flap gates free of leaves and debris

During a flood

- Do not walk, wade or drive through flooded areas. Turn around. Don't drown.
- If your vehicle stalls in a flooded area, abandon it as soon as possible and walk back the way you came to safety.
- Monitor local news outlets for emergency updates.
- Be prepared for an evacuation notice from authorities. If advised to evacuate, do so immediately. Follow recommended evacuation routes, as shortcuts may be blocked.
- If you are unable to safely leave your home or a building due to rapidly rising waters, call 911 for help. Then move to a higher floor or to the roof. Take warm, weatherproof clothing, a flashlight, a mobile phone and a portable radio.
- When flooding is imminent, but only if time permits:
 - Close your main gas valve.
 - Turn off all utilities in your building at the main power switch. Do not touch any electrical equipment unless it is in a dry area or you are standing on a piece of dry wood while wearing rubber-soled shoes and rubber gloves.
 - Record flood statistics such as time, gage reading, and local flood elevations for future use in understanding flooding in your neighborhood. Include specific observations at your home or business.

After a flood

- Before re-entering your home, be cautious of potential structural damage, potential gas leaks, electrical shorts and live wires.
- Have a professional check your heating system electrical panel, outlets and appliances for safety before using. Call the gas company to have the gas turned back on.
- Find out the procedures for safe clean-up of household items, food, water supply and property.
- Document your losses. Photograph damages and record repair costs. Contact your insurance agent for flood loss claims.
- Mark the highest point where water was in your home or damaged structure.
- Pump out flooded basements gradually (about one-third of the water per day) to avoid structural damage.
- Remove and dispose of sandbags properly.
- Check your local news outlets for updates on disaster assistance and registration procedures.



King County Flood App for mobile devices

Get real-time flooding info on your mobile device for the Skykomish, Snoqualmie, Tolt, Raging, Cedar, Green and White rivers, and Issaquah Creek. This free app shows current river flows, flood stage data and forecasts, plus real-time flood phases. Graphs make it easy to see several days of river data and forecasts.



How to fill sandbags

According to the National Flood Insurance Program, one inch of flooding in a 1,000 square foot home can cause approximately \$10,600 worth of damage. Protect your property by using sandbags to create a flood barrier and divert water. Sandbag materials can be purchased from hardware stores and sandbag suppliers in advance. During a flood event, call the King County Flood Warning Center to find out where free emergency sandbag supplies are available. For sandbag instructions and locations go to www.kingcounty.gov/floodservices.