

FLOOD WARNING INFORMATION

for Major Rivers in King County

2010-2011



SEE INSIDE FOR INFORMATION ABOUT:

- FLOOD PREPAREDNESS
- EMERGENCY OPERATIONS
- POST-FLOOD RECOVERY

VISIT OUR WEB SITE FOR MORE INFORMATION:

- Real-Time River Gage Readings
- Flood Watches, Warnings and Statements
- Flood Hazard Maps
- King County Flood Alerts
- Howard Hanson Dam Status

www.kingcounty.gov/flood



King County

Department of
Natural Resources and Parks

GENERAL INFORMATION

HOW CAN THE KING COUNTY FLOOD WARNING PROGRAM HELP YOU?

The King County Flood Warning Program warns residents and agencies of impending floodwaters on major rivers so they can take action and prepare themselves before serious flooding occurs. Once a flood warning is issued by the National Weather Service, or a flood alert by King County, residents should prepare for flooding. Becoming familiar with the relationship between upstream gage readings and local flood characteristics can help you prepare your individual emergency plan.

INCREASED RISK OF FLOODING IN THE GREEN RIVER VALLEY

There is a higher risk of flooding in the Green River Valley now due to damages to the Howard Hanson Dam sustained in the January 2009 flood event. Residents, businesses and farms in areas below the Howard Hanson Dam (see map) – such as Auburn, Kent, Renton, Tukwila and South Seattle – should prepare now for a higher risk of flooding. For more information on the dam and repair status, visit: www.nws.usace.army.mil.

WHAT INFORMATION IS AVAILABLE FROM THE FLOOD WARNING CENTER?

King County issues flood alerts based on a four-phase warning system, issued independently for each river. The thresholds for each phase are based on river gages that measure the flood flow and stage (flood depth) of the major rivers in various locations. During a flood, King County works closely with other agencies to obtain up-to-date information about major flood problems, road closures, the latest river gage readings, flood predictions, evacuations and other emergency services. Personnel at the Center are available to answer questions and help interpret gage readings during a flood event. The number is 206-296-4535 or 800-768-7932.

SANDBAG DISTRIBUTION INFORMATION

Sandbags can be an effective flood fighting tool. Properly filled and placed, sandbags can act as a barrier to divert moving water and prevent or reduce flood water. During a flood event, the Flood Warning Center will provide information about locations where free, limited emergency sandbag supplies will be available to the public in the Snoqualmie, Green, Cedar and White river valleys. Sandbags and supplies can also be purchased through private vendors year-round. (Check the Internet or your local phone directory for hardware stores and sandbag suppliers.) After a flood, property owners are responsible for removing sandbag installations in compliance with their local jurisdiction's regulations.

FLOOD PATROLS

During flood events, King County patrol staff inspect riverbanks and flood protection facilities such as levees for potentially dangerous conditions. Patrol staff wearing reflective clothing and traveling in King County labeled vehicles may need to enter private property to assess flood related conditions. When the patrol staff identifies dangerous flood conditions, an emergency plan is enacted to protect citizens and property. For example, if a levee is observed to be failing an evacuation may be initiated to protect public safety, or emergency construction may be authorized to prevent damages.

BUILDING AND DEVELOPMENT IN FLOODPLAINS

Certain activities in the floodplain require a permit, including grading, excavation and fill, construction of a new building, or repair, construction, or improvements to an existing building. Repairs or improvements to an existing structure that exceed 50 percent of its value are required to be flood protected to regulatory standards. Contact the King County Department of Development and Environmental Services (DDES) for more information on permits required to build in flood hazard areas. For general information from DDES call 206-296-6600 or visit their Web site at www.kingcounty.gov/ddes. Brochures on sensitive areas and floodplains are available by calling DDES or on the Web at www.kingcounty.gov/property/permits/publications/bulletins.aspx.

WHAT ARE THE ENVIRONMENTAL BENEFITS OF FLOODPLAINS?

Floodplains can act as recharge areas for groundwater and reduce the frequency, severity and duration of surface water flows. They also provide habitat for diverse species of plants and animals, some of which cannot live anywhere else. They are particularly important as breeding and feeding areas.

WHEN DOES FLOODING TYPICALLY HAPPEN IN KING COUNTY?

Floods most commonly occur from November through February during periods of heavy rainfall and rapid snowmelt. Historically, King County rivers have flooded in every month of the year. River flooding has led to 11 presidentially declared disasters in King County since 1990.

IMPORTANT EMERGENCY CONTACTS

BEFORE A FLOOD

- Disaster supply kits (American Red Cross)..... 206-323-2345
- National Flood Insurance Program (FEMA)..... 888-379-9531
- King County Flood Warning Information..... 206-296-8200 or
800-945-9263
- King County Flood Alerts..... 206-263-3400 or
www.kingcounty.gov/flood
- How to Prepare for a Flood..... *www.kingcounty.gov/floodplans*

DURING A FLOOD

Life-threatening emergencies 911

Flood Warning Information Line

including gage readings and emergency sandbag

distribution information 206-296-8200 or 800-945-9263

King County Flood Warning Center ... 206-296-4535 or 800-768-7932

On the Web at: *www.kingcounty.gov/flood*

Road conditions 206-296-8100

Urban drainage emergencies 206-296-1900

after hours 206-296-8100

Emergency Shelter Information

Office of Emergency Management 206-296-3830

AFTER A FLOOD

Septic tank and well problems

Public Health - Seattle & King County 206-296-4932

Permits for work along a river or stream

King County grading and shoreline permits 206-296-6600

(Permits from other agencies may also be required.)

King County Housing Repair (loans and grants) 206-263-9095

KING COUNTY FLOOD ALERTS

As rivers rise, or are expected to rise, above flood phase thresholds, the Flood Warning Center will send you an automated flood alert by phone, text message or e-mail. Sign up to be notified based on the river and flood phase you select.

Go to www.kingcounty.gov/flood or call **206-263-3400**.

BEFORE A FLOOD

1. Know if you are in a flood prone area.
 - View and print custom online maps using King County data including parcels, floodway and floodplain boundaries with iMAP at www.kingcounty.gov/iMAP. (High speed Internet connection required.)
 - Find out the flood risk of your property. Go to www.floodsmart.gov.
2. Buy flood insurance. The standard homeowners insurance policy will not cover a loss caused by flooding. There is a mandatory 30-day waiting period on all new National Flood Insurance Program flood insurance policies. (See card.)
3. Each year, update flood procedures for your family, farm or business:
 - Have an emergency plan and learn several safe routes from your home or business to high ground.
 - Establish meeting places and phone numbers in case family members are separated by rising flood waters.
 - Assemble the following emergency kit supplies: a battery or crank-operated radio and extra batteries; first aid kit/supplies; any prescription medicines; copies of important documents in a plastic bag (driver's license, insurance information, family bank and other contact information); flashlight with extra batteries; a whistle; a three day supply of non-perishable food and water; warm clothing, sturdy shoes/boots, and blankets; personal hygiene and sanitation supplies; and comfort items for children (blanket, books, games, toys).
4. Talk to neighbors and share information on preparedness and previous experiences. Find out if any of your neighbors need special assistance.
5. Minimize flood damage:
 - Store valuables at higher elevations (second story, if possible).
 - Store household chemicals above flood levels.
 - Ensure that underground storage tanks are fully sealed and secure.
 - Buy sand and sandbags ahead of time. Learn how to use sandbags from the U.S. Army Corps of Engineers. Go to www.nww.usace.army.mil/html/offices/op/em/HowToBag.htm.
 - Have check valves installed in building sewer traps to prevent flood waters from backing up in sewer drains.
 - Move vehicles and equipment to higher ground.
 - Keep street drains, storm grates and flap gates free of leaves and other debris. Call 206-296-8100 if you need assistance or to report illegal dumping into a drainage system facility.

DURING A FLOOD

1. Monitor your local radio or television station for emergency updates.
2. If you are caught in a home or building by rapidly rising waters, call 911 for help. Then move to a higher floor or to the roof. Take warm, weatherproof clothing, a flashlight, a cellular phone and a portable radio.
3. Do not walk or wade in flooded areas.
4. Be prepared to evacuate. If advised to evacuate, do so immediately.
If you evacuate by car:
 - Do not drive where water is over the road or past barricaded road signs.
 - If your car stalls in a flooded area, abandon it as soon as possible and walk to safety in the direction you came from.
 - Follow recommended evacuation routes, as shortcuts may be blocked.
5. Find out where emergency sandbag supplies can be obtained locally to use in protecting your home or business. Call the Flood Warning Information Line at 206-296-8200 or 800-945-9263.
6. When flooding is imminent, but only if time permits:
 - Close the 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.
7. 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

1. Before re-entering your home, be cautious of potential structural damage, potential gas leaks, electrical shorts and live wires.
2. 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.
3. Follow procedures for safe clean-up of household items, food, water supply and property. Contact Public Health - Seattle & King County at 206-296-4600 or www.kingcounty.gov/healthservices/health/preparedness.aspx.
4. Document your losses. Photograph damages and record repair costs. Contact your insurance agent for flood loss claims.
5. Pump out flooded basements gradually (about one-third of the water per day) to avoid structural damage.
6. Remove and empty sandbags. Do not dump sand into the river or on its banks. Store it for future use.
7. Financial assistance is only available following a federal disaster declaration. Listen to the radio or television for updates on disaster assistance and registration procedures.

Emergency Information Wallet Card

Tear out and use!



EMERGENCY FLOOD INFORMATION

King County Flood Warning Center

206-296-4535 or 800-768-7932

Staffed 24 hours during a flood to answer questions and provide information.

King County Flood Warning Information Line

206-296-8200 or 800-945-9263

Flood phase information, river gage readings, and emergency sandbag distribution locations.

How to Prepare for a Flood

www.kingcounty.gov/floodplans

Metro Transit Disruptions

www.kingcounty.gov/metro

3 days, 3 Ways – Are you Ready?

www.3days3ways.org

Emergency preparedness tips and checklist.

National Flood Insurance Program

888-379-9531

www.floodsmart.gov

King County Road 24/7 Helpline

206-296-8100 or 1-800 KC Roads

www.kingcounty.gov/roadalert

American Red Cross serving King and Kitsap counties

206-323-2345 or 360-377-3761

www.seattlredcross.org

fold

KING COUNTY'S FOUR PHASE FLOOD WARNING SYSTEM

At Phase I, County personnel are put on alert. When a Phase II threshold is reached, the Flood Warning Center is opened. Staff at the Center are available to answer questions around the clock. When a Phase III threshold is reached, flood patrol teams are dispatched to monitor flood protection facilities (such as levees).

At Phase II-IV, notification is sent to first-reponse agencies and those who have signed up for King County Flood Alerts.

River	Phase II: Minor Flooding	Phase III: Moderate Flooding	Phase IV: Extreme Flooding
Snoqualmie River	Lowland flooding. Roads that may overtop include Neal Road, S.E. Reinig Road, West Snoqualmie River Road N.E. (Walker Road), Snoqualmie Meadowbrook Road, Mill Pond Road.	Flooding of varied depth occurs in the entire Snoqualmie Valley. Roads that may overtop include Fall City - Carnation Road, Tolt Hill Road, Novelty Flats Road.	Some residential areas may experience dangerous high velocities and flooding of homes. Roads that may overtop include Woodinville - Duvall Road, Carnation - Duvall Road, Moon Valley Road.
Tolt River	Sans Souci area homes may be inaccessible and experience high water depths and velocities. Tolt River Road and some driveways may overtop.	Increased water depth and velocity in Sans Souci and other areas.	Levees may overtop near Carnation. Channel changes may occur.
Cedar River	Jones Road near 156th S.E. may overtop.	Lower Dorre Don and Byres Road may overtop.	Some residential areas may experience dangerous high velocities, debris flows and home flooding. Portions of SR 169 may overtop and close.
Green River	Lowland flooding in valley upstream of Auburn.	Flooding of varied depths occurs in valley upstream of Auburn and lower Mill Creek basin. S.E. Green Valley Road and West Valley Road may overtop.	Conditions at the Howard Hanson Dam may cause flows on the Green to greatly exceed channel capacity. Critical flood control levees may overtop and may weaken from saturation. Sudden changes in flood conditions are possible, especially in levee-protected areas. These changes may include rapidly rising water, widespread inundation, road closures, and utility disruptions. Be alert for evacuation orders and prepare to respond quickly.
White River	Red Creek area residents may experience overtopped roads and high water. Overbank flooding in the City of Pacific may occur.	Red Creek area residents may experience dangerous high velocities, debris flows and residential flooding. Overbank flooding is likely to occur in the City of Pacific.	Floodwater is likely to overtop SR 410 upstream of Mud Mountain Dam near Greenwater. Overbank flooding is likely to occur in the City of Pacific and near the City of Auburn. Dangerous high velocities and debris flows may occur throughout the river system. Damages may occur at the fish hatchery.