Winter flooding in western Washington is a fact of life. Like many communities, we in Whatcom County reduce the dangers and disruptions of major floods through education, aggressive flood plain management, flooding preparedness, advanced flood warnings, coordinated response, and post-flood repair of our dikes and levees. Our residents also benefit from our National Flood Insurance Program (NFIP) which provides affordable insurance to property owners in exchange for locally-adopted floodplain regulations, construction standards, and best management practices. These commitments reduce your flood insurance premiums by 20% and ensure that our citizens are financially secure when the floods come.

Whatcom County Public Works administers these programs on your behalf. Our ability to safely respond to floods is a partnership between your local government and you – please do your part. Be aware. Be prepared.

Jon Hutchings, Director
Whatcom County Public Works

Flooding Hazards in Whatcom County

Whatcom County floods occur between the months of November and February. The Nooksack River and its tributaries impact the largest area of the county, including the overflow corridor between Everson and Sumas. The Sumas River, Samish River, numerous alluvial fan areas, lakes, and coastal areas of Whatcom County are also susceptible to flooding. Significant floods occurred in 1935, 1945, 1951, 1955, 1975, 1989, 1990, 1995, and 2009, and more major floods are likely in the future.

Natural & Beneficial Functions of our Floodplain

The floodplain – the low land adjacent to a river or stream that is susceptible to flooding – is essentially nature’s “safety valve” for managing floods. One of its crucial functions is to store and slow down excess water. When a river has access to its floodplain, floodwaters from rain or snowmelt spread over a wider area, reducing and slowing the amount of water heading downstream. When the size of a floodplain is reduced by dikes or altered by impervious surfaces like pavement, the speed, depth, and peak flows of floodwaters increase and may cause greater damage to both natural and manmade resources.

Floodplains are shaped by a river’s movement. In the Nooksack basin, the floodplain contains old river channels and side channels that are critical for fish and wildlife, particularly for local salmon runs that use them for spawning and rearing. Old river channels provide storage for floodwaters and sediment, and help to dissipate the force and energy, of floodwaters. Fresh sediments deposited by floodwaters on floodplains help to enrich soils, making for fertile agricultural areas.

Flood Warning System

Whatcom County and the National Weather Service work together before and during a potential flood event to try to warn county residents of imminent flooding. If warranted, the Emergency Alert System (EAS) may be activated. The following local stations broadcast emergency information:

- KGMI – AM 790
- KISM – FM 92.9
- KPUG – AM 1170

Flood information is also aired on NOAA Weather Radio at 162.425 MHz (Puget Sound), 162.525 MHz (Blaine) and Weather Radio Canada 162.55 MHz.

The Whatcom County Sheriff’s Office Division of Emergency Management records important information on an Incident Hotline during floods and other emergencies. You can reach the hotline at (360) 738-4551. To request sandbags during a flood, please call (360) 778-6400.

If an evacuation is advised, you will be notified either by telephone, the Emergency Alert System, door-to-door visits, or public address systems. During times of heavy rain, listen closely to one of the radio stations listed above, or call the hotline.

If you have internet access, visit these sites for flood information:

- Weather warnings: www.wr.h.noaa.gov/sew
- River forecast: www.nwrfc.noaa.gov
- River levels: wa.water.usgs.gov/data/realtime/adr/interactive/index2.html

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Before A Flood

Protecting Your Property
Before flood season starts in earnest, take steps to limit your losses.
- Buy flood insurance.
- Elevate your house above the 100-year flood elevation.
- Floodproof structures - either make them watertight or able to withstand flooding with little or no damage.
- Construct barriers or berms between the river and your home.
- Prepare in advance to use sandbags, plywood and plastic during a flood.

Flood Insurance
You don’t need to live in a floodplain to purchase flood insurance. In fact, because Whatcom County participates in the National Flood Insurance Program (NFIP), any property owner is eligible for flood insurance. About 50% of all flood damages nationwide occur outside of the mapped 100-year floodplain area. Note that flood damage is not covered under standard homeowner’s insurance policies, and lenders require flood insurance for most floodplain home loans.

There is a 30-day waiting period, so contact an insurance agent about getting flood insurance now.

For more information about NFIP visit www.fema.gov/business/nfip, or call 1-877-FEMA-MAP (1-877-336-2627).

Floodplain Development Permits
Before you build, remodel, repair, fill or re-grade your property, you should check with the county or city government in which you live as to what permits and conditions will be required. It is always wise to check into requirements before you commit to any plans, construction, or materials.

If your proposed repair or improvement is valued at 50% or greater of the value of the existing structure, then your improvement is “substantial” and will be considered new construction. To get the latest information or requirements for construction, substantial improvements, or filling and grading in the floodplain, please contact either the River and Flood Division at (360) 778-6230 or Planning and Development Services at (360) 778-5900.

Drainage System Maintenance
When flooding occurs, a common problem is improperly functioning drainage systems. It is important to inspect systems frequently for damage and remove debris that may clog or reduce drainage capacity before flood water arrives. A plugged channel cannot dissipate floodwaters.

Ask For Help
For more details or for help in selecting and planning property protection measures, call the River and Flood Division at (360) 778-6230 and make an appointment. County staff are also available to conduct site visits to discuss your flooding and drainage problems, sewer backflow devices (if applicable), and structure retrofitting options.

Where Will It Flood
The blue areas of the map show Whatcom County’s 100-year floodplain, the high-risk flood hazard areas in the county. These areas are lands in the floodplain that have a 1% or greater chance of flooding in any year. If your property is in the 100-year floodplain, it has about a 25% chance of being flooded over the term of a 30-year mortgage.

If you would like more information regarding historic flooding, flood insurance, or flood preparedness, including whether your property or one you may want to purchase is in a floodplain, please contact the River and Flood Division at (360) 778-6230, or visit the reference sections of the Bellingham and Whatcom County public libraries.
During A Flood

Flood Advisories

When there is a possibility of a flood, the National Weather Service issues flood advisories. The advisories may use these terms:

River Forecast Point: A river gauge site that represents a specific reach of the river and has a flood stage established by local emergency management officials and the National Weather Service.

Flood Stage: The water level height in feet at a river forecast point where flood waters begin to potentially damage buildings, roadways and bridges.

Flood Outlooks, Watches and Warnings: These are the three levels of flood awareness that provide communities lead time and raise awareness and preparedness before and during a flood.

- **Hydrologic (Flood Potential) Outlook**: The initial level, which raises awareness of and preparedness for a possible flood event in 2 or 3 days.
- **Flood Watch**: The next level of community flood awareness and preparedness, when conditions are becoming more likely for flooding in a day or so, but are not yet imminent or certain.
- **Flood Warning**: The highest flood level message, when flooding is imminent within 12 hours or is occurring. Since there are many variables in a flood forecast, they are issued with an accuracy of plus or minus one foot.

**Flood Safety**

Flooding can be extremely dangerous and unpredictable. Long periods of rain may cause slowly rising floodwaters over several hours or days, but a dam or levee failure could cause a rapid and dramatic rise in floodwaters.

To decrease the potential for injury due to flooding:

- **Know the flood warning procedures.**
- **Move to a safe area before access is cut off.**
- **Don’t drive where water is over the road; the road may be washed out.**
- **If your vehicle stalls in a flooded area, abandon it if it is safe to do so, and seek higher ground.**
- **If you are caught in the house by suddenly rising waters, move to the second floor and, if necessary, the roof.**
- **Keep children away from floodwaters, ditches, culverts and storm drains.**

After A Flood

**Food and Drinking Water Safety**

- Do not use food or water that has been exposed to floodwaters, it may be contaminated.
- Until the public water system or your private well has been declared safe, water for drinking and preparing food should be boiled vigorously for 10 minutes.

**Re-Entering Your Home**

- Return home only when local officials say it is safe to do so.
- Before entering, check for structural damage that could cause collapse. Turn off any outside gas lines at the meter, or tank, and let the house air for several minutes.
- Do not strike a match when entering your home. There may have been a gas leak.
- Be careful about turning the power on again. Watch for electrical shorts or live wires. Do not use water-damaged appliances.
- Document your flood losses and contact your insurance agent for flood loss claims.
- Dry your house slowly. Carpets and drywall may have to be removed. Remember, water can be trapped between walls and will not dry.
- If your home or business has suffered extensive structural damage, this may be the time to elevate or floodproof the structure.
- Contact the Whatcom County chapter of the American Red Cross for disaster assistance at (360) 733-3290. The Red Cross provides shelter, food, and health and mental health services to address basic human needs.

**If You Evacuate**

- Secure your home. Cut off all electrical circuits at the fuse panel or disconnect switches. If you can’t, turn off or disconnect all electrical appliances. Shut off the water and gas.
- Pack your disaster supplies kit, prescription drugs, eyeglasses, clothing, money, ID, child supplies and personal items.
- Don’t forget about your pets. Most shelters don’t allow any animals other than service dogs, so make arrangements before a flood for your household pets.

Debris from the November 1990 flood lies across Ferndale Road. Photo courtesy of The Bellingham Herald.