

# Flood & Natural Hazard Reduction

## Public Information Bulletin #46

Fall 2016



*This Bulletin is being sent to you because your property has been determined to be in the floodplain.*

**T**here may be a drought today, but who knows about tomorrow? ***Be ready for anything!*** Everyone in Burlington should already be prepared for disaster because of living in the floodplain. That includes earthquakes that could result in flooding in the event of a problem at one of the upriver dams. Keep that Emergency Kit updated and have your family plan organized at all times! A small Emergency Kit is easily added to your vehicle as well. When disaster strikes, cell phone and land lines will be jammed and everyone will be on their own for a period of time.

Fortunately for Burlington, the long range plan for flood hazard mitigation is under construction by Dike District #12. The Skagit River General Investigation study has ended without final recommendations or results after many years. The work on the levee from Gardner Road past Skagit River Park will be completed in the near future and that levee segment will be able to handle a significant flood event.

The next key piece of the Burlington Levee Improvement Project is to complete the Skagit County Shoreline permit process to be able to proceed with the improvements from Gardner Road to Lafayette Road.

### FLOOD SAFETY & DISASTER PREPAREDNESS

Every home needs to be prepared and STAY PREPARED! Review your Flood procedure at home with your household and take the time to put your Emergency Preparedness Kit together, or check your flashlight batteries in your existing kit. Remember, a supply of drinking water, emergency food and first aid kit are the bare minimums, along with flashlights. In addition to the basic three day supply of food and water, consider having supplies for sheltering for up to two weeks. Keep a small "grab and go" kit for your place of work with food, water, first aid supplies. For the emergency kit in the car, add flares, jumper cables and seasonal supplies.

There is an excellent FEMA publication entitled "Are You Ready? An In-depth Guide to Citizen Preparedness". This publication offers disaster information for natural hazards, technological hazards and terrorism. It will guide you for preparation in advance and recovery from a disaster. If you want to order a free copy for your home, call 1-800-480-2520. On the internet, <https://www.fema.gov/media-library/assets/documents/7877> is the website link. A copy is available in the Burlington Public Library. THIS COVERS THE BASIC DISASTER SUPPLIES KIT IN DETAIL.

***Earthquakes are an example of a disaster that cannot be predicted and that is not seasonal. Be prepared at all times!***

## FLOOD WARNING SYSTEM

Each and every citizen has a role to play in the event of a flood. BE PREPARED!!! The Burlington Flood Emergency Team prepares and coordinates activities needed to be ready for any flood event with the involvement of all the responsible agencies.

The procedure for warning the public is coordinated through the Skagit County Department of Emergency Management. The Emergency Alert System is activated when necessary and includes the following local radio stations:

**KBRC - 1430 AM ■ KWLE - 1340 AM ■ KAPS - 660 AM**

One of the most used information sources in this area is <https://www.facebook.com/SkagitBreaking>. If evacuation is necessary, there will also be door-to-door notification and loudspeakers broadcasting from public safety vehicles in the neighborhood. Flaggers and/or portable signs directing traffic will be stationed at key intersections along the Evacuation Route.

Today, there are several neighborhoods in the Neighbor-to-Neighbor notification plan for very early warning. Contact your neighbors to ask if they want to be part of taking responsibility for each other, through a simple Telephone Tree, and call the Planning Department to get on the list. Now is the perfect time to identify your block captains and work together to BE PREPARED.

**Now is the time to sign up for automatic notification of Local Emergency Alerts** for your cell phones and those of friends and relatives! Only land lines are automatically dialed. You can sign up online at <https://www.alertsense.com/>. This is an important service for anybody who no longer has a landline phone.

## SUBSTANTIAL IMPROVEMENT/ DAMAGE REQUIREMENTS

The National Flood Insurance Program requires that if the cost of reconstruction, rehabilitation, addition, or other improvements to a building equals or exceeds 50% of the building's market value, then the building must meet the construction requirements for a new building. Substantially damaged buildings must also be brought up to the same standard. The major issue is elevating the structure one foot above the 100 year flood elevation, along with all mechanical equipment, ductwork and electrical equipment, and installing properly located and sized vents. However, if you are located in the Gages Slough Special Flood Risk Zone, "breakaway walls" are required below the 100 year flood elevation, and they must be designed by a licensed structural engineer.

## MAP DETERMINATION and LIBRARY INFORMATION

A map determination is figuring out where the 100 year flood elevation is located relative to the first occupied floor of a home or business. This information is used to prepare an Elevation Certificate. The citywide system of elevation benchmarks being updated in 2015, to ensure the most accurate data. An average of an additional \$200 in savings is possible on a flood insurance policy if there is an elevation certificate. This is in addition to the automatic 25% rate reduction available in Burlington as a result of community participation in the federal Community Rating System program. If you are concerned about the accuracy of the information from a lender or a flood insurance provider, please contact the city for help.

Information on other flood improvements, such as elevating your building, filling the crawl space, or floodproofing the lower portion, is available from the City and in the Burlington Public Library. There is a flood reference area in the library and staff will assist in directing you to the information you need.

Every land use newsletter includes a flood and natural hazard mitigation topic. Call the Planning Department at (360) 755-9717 to get on the mailing list. Take the time to participate! Your ideas are taken seriously and you have a say in the future of your community!



## FLOOD INSURANCE

*Concerned about high Flood Insurance Rates?* You may qualify for a substantial reduction if you have an Elevation Certificate that shows your home or business is built in compliance with the flood code and the first floor is at or above the 100 year flood elevation. You will have to retain the services of a Licensed Surveyor to complete an Elevation Certificate, unless there is one filed with the Building Department, so please check here first.

The passage of the Biggert-Waters Act of 2012 and the Homeowners Flood Insurance Affordability Act of 2014 required many significant reforms to the NFIP that will help increase its financial soundness. Annual rate increases of 15% to 25% will depend on the construction date, occupancy and claim history of an insured structure. In addition to annual rate increases there is an annual \$25 surcharge on flood insurance policies for a single family structure, an individual condominium unit, or a contents only policy (renter's contents) that is the "primary residence" of the policyholder. A surcharge of \$250 is applied to a residential structure that is not the primary residence of the policyholder, non-residential structures and multi-family residential structures. Additional information on the legislative changes to the National Flood Insurance Program is available at <https://www.floodsmart.gov>.

A detached garage or storage building may qualify to be excluded from the mandatory flood insurance purchase requirement, but every property owner needs to discuss this with their lender or the federal regulator for their lender. If a detached garage or accessory building on the same lot has a separate flood insurance policy the \$250 annual surcharge will be applied. If you would like additional information for yourself or to share with the lender, the city has a variety of contact information available.

Since the City of Burlington participates in the National Flood Insurance Program flood insurance is available to any property owner inside the city's jurisdiction. Purchasing or refinancing a home may trigger a requirement for flood insurance by the lender in addition to homeowner's insurance. The Mandatory Purchase requirement applies to any structure that is located in a Special Flood Hazard Area (A or V zone) on the FEMA Flood Insurance Rate Map. Flood insurance is available through many local insurance agents or brokers and includes flooding, as defined in the NFIP policy, which includes overflow of inland or title waters, rapid accumulation or runoff of surface water from any source, and mudflow.

On the NFIP flood policy contents coverage must be purchased separately. Replacement Cost is available on a structure that is the principal residence of the named insured if underwriting guidelines are met. Other structures and contents are paid using Actual Cash Value. Please discuss NFIP coverage, limitations and exclusions with your insurance agent

**Lowering flood insurance premiums: Not only should the lowest floor be elevated but make sure that the floor of the crawlspace meets Technical Bulletin 11-01. Pick up a copy at the Permit Center OR by e-mail to [bpplanning@burlingtonwa.gov](mailto:bpplanning@burlingtonwa.gov). Flood insurance rates are higher for buildings with crawlspaces that are two feet or more below the lowest adjacent exterior grade. Also make sure that all mechanical equipment is elevated above the Base Flood Elevation (BFE). This includes ductwork, heat pumps, furnaces, and propane tanks or oil tanks. Make sure any garages that have the floor below BFE are also vented along with the crawlspace.**

## FLOODPLAIN DEVELOPMENT PERMIT REQUIREMENTS

Before you build, add fill, or make changes to your property and structures, be sure to contact the Planning and Building Departments to determine if any permits or approvals are necessary. The Federal Emergency Management Agency and the insurance industry make frequent changes in the interpretation of floodplain standards, and you need to be sure you are using the most current information for any construction project.

## NATURAL & BENEFICIAL FUNCTIONS OF FLOODPLAINS

Burlington supports habitat improvements in the floodplain, and Gages Slough restoration is a key component. The good news about the low water this year is that major cleanout of the culverts and drainage outfall areas is in process for the first time in several years.

Storm water quality monitoring in Burlington clearly shows that better water quality treatment systems are needed and this is a major focus of the drainage utility. The use of natural rain gardens to clean storm water and get it back in the ground works very well in the soils here, and the use of this low impact development (LID) approach is being used by new development and in the city street improvement projects. The code is being updated to make this a requirement unless it is not feasible in a specific case.

Filling property to increase elevation in the floodplain is monitored to protect fish and wildlife habitat and meet federal standards that limit the total amount across the city limits.

The Gages Slough habitat management plan is being updated to focus on increasing the size of the culverts at each crossing and to remove the built up sediment, to increase the carrying capacity of the Slough and improve water quality. Other projects include more connecting trails, places to relax, and completing and maintaining wetland buffer

restoration sites. The construction of a non-motorized trail along Gages Slough that extends under I-5 at Cascade Mall is completed, and additional connections are planned.

Protecting agricultural lands is part of protecting the Natural and Beneficial Functions of Floodplains. The city has implemented the Burlington Agricultural Heritage Credit program which is a density bonus credit option that helps raise funds for farmland preservation in a mapped area around the City, in exchange for increased residential density in higher density zoned areas of the city.

Key elements of the 2014 update of the Skagit County Natural Hazard Mitigation Plan include protecting existing urban areas and preserving farmland and open space, looking at a variety of measures through the delta area to the mouth of the Skagit River, carefully coordinating and managing the hydroelectric power dams in the river system during a flood event, permanently moving homes and development rights out of the floodway, improving the environment for wildlife, designing for wild fire protection, and creating new public access opportunities to improve everyone's quality of life.

## LOCAL FLOOD HAZARD AREAS

There are three flood zones in the City Limits of Burlington, the Floodway (river side of the levee), the 100 Year Flood Zone and the Special Flood Risk Zone. Most of Burlington is in the 100 Year Flood Zone.

The Special Flood Risk Zone includes all land within 300 feet of the landward toe of the levee. All structures must be designed so that floodwaters can pass underneath and there is no occupied space below one foot above the 100 year flood elevation, unless the site is within 100 feet of the levee where nothing can be built. All property in Gages Slough that is three feet or more below the 100 year flood elevation is also designated as Special Flood Risk.

### DRAINAGE SYSTEM MAINTENANCE

Water quality studies in Gages Slough and wetland restoration projects to improve water quality are a high priority. The commitment to long term maintenance, monitoring and habitat improvement is beginning to show, with the success of the first three wetland restoration projects. Clean water, efficient flow of water when needed, and a quality environment are the goals. Gages Slough and the Skagit River are important amenities for the community. Burlington is fortunate to have the Skagit Conservation District as a partner in Gages Slough water quality sampling. There is still a long way to go to deliver clean water to the River including enlarging culverts and removing polluted sediment.

The drainage maintenance and inspection program is part of flood hazard mitigation. Each year, every owner of a drainage system is mailed a Self-Inspection Checklist and asked to inspect and make corrections as needed to all detention ponds, pipes, catch basins and other drainage control structures, to ensure that the capacity of the ponds is maintained and that the ability of the system to clean the storm water is retained.

As the results come in, the city will do follow-up inspections, in addition to inspection and maintenance of the city street system. The public drainage system, including culverts, pipes, ditches and the Gages Slough corridor are in a formal maintenance program. A well maintained drainage system that functions in small storms will provide the best assistance possible in large storms and floods, by quickly and efficiently carrying the excess water out of town.

Thank you for respecting the signs that state **“No Dumping – thank you”** at public access points to Gages Slough! Each property owner along the Slough is responsible for cleaning up any litter or trash that is on their property. The problem of illegal dumping of yard waste in Gages Slough and the problem of trash dumped at points of public access to the River can only be solved if everyone helps out. It is illegal to dump or to fill along Gages Slough or the Skagit River. Please report illegal dumping (this includes yard waste) in the Slough. Call the Code Compliance Inspector at (360) 755-0077 or the Planning Department at (360) 755-9717.

### PROPERTY PROTECTION MEASURES

Let's get started on improving flood protection in your home! Staff is available to provide site specific flood and flood-related data, make site visits to review flood, drainage and sewer problems and to advise and assist on retrofitting techniques.

Stop by the Permit Center or give the Building Department a call at (360) 755-0077 and let the city provide you with technical assistance on improving flood protection in your home. A site visit will be scheduled at your convenience to put a checklist together for home flood protection improvements. Staff is also available from the Public Works Department if additional assistance is needed to assist with drainage and sewer problems.

If you want to do your own research, here are some of the recommended FEMA technical bulletins that you will find at the Burlington Public Library and the Building Department for your use:

- Homeowner's Guide to Retrofitting, FEMA-312
- Design Manual for Retrofitting Flood-prone Residential Structures, FEMA-114
- Protecting Building Utilities from Flood Damage, FEMA-348

Take a few minutes to look over the possible areas where you may need to floodproof important parts of your home. A good example is protecting utility systems. This is one of the easiest and least expensive retrofitting methods to accomplish. Whether it is elevating, relocating, or anchoring; items such as electrical panel boxes, furnaces, water heaters, washers/dryers and heating fuel tanks are typically very cost effective items to upgrade. There are also recommendations for drainage and crawl space improvements.

If you have a newer (post 1985) home, check to be sure these items have been taken care of when the home was constructed. Identify the potential for moving essential items and furniture to upper floors or the attic of your home. Materials like sandbags, plywood, plastic sheeting, and lumber handy for emergency waterproofing can already be on hand. This action will help minimize the amount of damage caused by floodwaters and requires minimal storage space.