



## FLOOD & NATURAL HAZARD REDUCTION PUBLIC INFORMATION BULLETIN #39

Spring 2012



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

Everyone in Burlington should already be prepared for disaster because of living in the floodplain, and that includes earthquakes that could result in flooding in the event of a problem at one of the upriver dams. There is no doubt that everyone needs to keep that Emergency Kit updated and have your family plan organized at all times! Plans are in the works to greatly expand emergency notices in cooperation with the 911 center.

Dike District #12 has a systematic plan for enlarging the levees so that they will first qualify for credit to help keep flood insurance rates lower, and eventually, they will provide 100-year flood protection under federal standards. The final project design will add height to the improved levees as needed.

FEMA is changing the way they set the base flood elevations, with the goal of giving some credit for existing levees. There is no schedule at this time for final decisions on the methodology, or any map changes. The project is being closely monitored because of the fact that Burlington has so many flood insurance policies and great care has been taken to make sure that every structure is elevated and complies with the best practices. The related question of how much water gets to Burlington in a flood event is now on track to be determined by a panel of experts.

### 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 was designated as Special Flood Risk in the mid-1980's as part of a negotiating process over the uniquely complex Skagit River delta area when the Flood Insurance Rate Maps were finalized. The status of Gages Slough will be revisited when new base flood elevation maps are finalized by the Federal Emergency Management Agency.

The goal for Burlington is to get credit for the levees when the 100-year flood elevations are established on the Flood Insurance Rate Maps. This is only possible if the levees are certified as having 100-year flood protection and the work is accredited by FEMA. The process will take quite a few more years to complete, and in the meanwhile, efforts to get FEMA to use the most accurate data in setting new base flood elevations are underway. It is a very difficult challenge because of the federal regulatory framework.

Levee enlargement work started in 1990 and earthwork is still underway. Dike District #12 is focused on completing the levee work at the upstream end by Lafayette Road, then completing the work from the Gardner Road Boat Launch Ramp to the Railroad Bridge. This will give the best flood protection in the shortest timeline.

## 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” available. 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, <http://www.fema.gov/areyouready/> 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!***

## 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.

## Natural & Beneficial Functions of Floodplains

Filling property to increase elevation in the floodplain is allowed today, but the long term goal is to minimize fill to protect fish and wildlife habitat. Burlington supports habitat improvements in the floodplain, and the Gages Slough restoration projects are a major effort in the city. Storm water quality monitoring in Burlington clearly shows that better water quality treatment systems are needed and this is a major focus of the surface water utility. The use of natural rain gardens is one of the ideas included in the low impact development approach that is being promoted as a way to get storm water runoff back into the ground, and to clean up water quality.

The Gages Slough habitat management plan has identified locations for restoration and water quality improvement projects. There are three complete restoration sites today, and about 15 more in need of work! The community is working towards the goal of clean water entering the Skagit River as the top priority, along with improving public access to habitat areas. The most exciting project is the plan to build a nonmotorized trail along Gages Slough that extends under I-5 at Cascade Mall. This will combine water quality treatment with public access.

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 will help raise funds for farmland preservation in exchange for increased residential density in mixed use business and commercial areas of the city.

Key elements 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, and creating new public access opportunities to improve everyone's quality of life.

## 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**

If evacuation is necessary, there will also be door-to-door notification and loudspeakers broadcasting from public safety vehicles in the neighborhood. Flaggers will be stationed at key intersections along the Evacuation Route to direct traffic.

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. The City is working with the 911 center on the latest ways to contact everyone in the event of an emergency, so stay tuned!

## Flood Insurance

Any property owner in the City of Burlington is eligible to obtain Flood Hazard Insurance, since the city participates in the National Flood Insurance Program. Purchasing or refinancing a home will trigger a requirement for flood insurance by the lender. Coverage in the event of flooding is not included in typical homeowner's insurance policies. Flood insurance is available through your own agency or broker and includes flooding from ponding/drainage problems, snowmelt flooding, runoff on hillsides, or any flooding involving surface water. Contents of the building are a separate addition to the policy. There is limited coverage available for flood-related erosion and mudslide. Replacement cost coverage is available for principal residences. *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 located at or above the 100 year flood elevation. You will have to retain the services of a Licensed Engineer to complete the paperwork, unless an Elevation Certificate is on file already with the Building Department, so please check here first.

**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 and copies are available at the Permit Center. 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.**

## 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 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.

## Map Determination & Library Information

A map determination is figuring out where the 100 year flood elevation is located relative to the first occupied floor of your home or business. This information is used to prepare an Elevation Certificate. A citywide system of elevation benchmarks is maintained in the Building Department. An average of an additional \$200 in savings is possible on your flood insurance policy if you have an elevation certificate, in addition to the 25% rate reduction available in Burlington as a result of community participation in the federal Community Rating System program. There are issues with lenders and flood insurance providers, and if you feel that you are not getting good information, please contact the city and we will try to 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 755-9717 to get on the mailing list! Take the time to participate because your ideas will be taken seriously and you will have a say in the future of your community.

## 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.

**DO NOT DRIVE THROUGH  
FLOODED AREAS.**

## Drainage System Maintenance

This is the ninth year of 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 two wetland restoration projects that are beginning to mature. 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.

The drainage maintenance and inspection program is part of flood hazard mitigation. Every year, all detention ponds, pipes, catch basins and other drainage control structures are inspected and corrections required as needed to ensure that the capacity of the ponds is maintained and that the ability of the system to clean the storm water is retained, in addition to inspection and maintenance of the city street system. The public drainage system, including culverts, pipes and ditches is well maintained. Gages Slough is maintained at each street intersection and culvert location. 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. You may report illegal dumping (this includes yard waste) in the Slough, by calling the Planning Department at 755-9717, or in writing.

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