

CITY OF CHEHALIS FLOODPLAIN MANAGEMENT

You are receiving this letter because you live or have rental property within a floodplain. Please review the following information and contact the Chehalis Community Development Dept. for information regarding your specific property.

The City is working on ways to improve and increase its circulation of and accessibility to information that pertains to the floodplain, in an effort to better educate and assist its citizens about developing and living in the floodplain. Please take the time to read the information below, and if you have further questions, or would like additional information, a variety of contact information has been supplied at the end of this document.

Overview

The City of Chehalis contains several large rivers and smaller tributaries, or streams, which are susceptible to annual flooding events that pose threats to life and safety and cause significant property damage. Large rivers include the Chehalis and Newaukum, while streams include Berwick, Coal, Dillenbaugh, and Salzer Creeks. The City of Chehalis has close to 1,700 acres of floodplain and about 573 individual parcels that are partially or entirely located within the floodplain (60% (341 parcels) are developed, and 40% (232 parcels) are vacant).

Recent Flooding Events

While some sort of seasonal flood-related damage occurs nearly every year, the flooding and associated flood event of January 2009 represents the most recent significant flooding. The flood event was caused by an extended period of heavy snow and below-freezing temperatures followed by excessive rain and above normal temperatures.

The January 2009 flood event caused considerable damage in Chehalis. A twenty-mile stretch of Interstate 5 in Washington was closed between exits 68 and 88, which runs through Lewis County. The interstate was closed for two days. The economic cost of the Interstate 5 closure to the state was roughly \$4 million a day. Approximately sixty structures within the city were inundated.

Although the January 2009 flood event represents the most recent flooding, records dating back to the late 1920's indicate that the Chehalis River has caused significant flooding to the City at least thirteen times, while flooding from the Newaukum River has dramatically affected the City at least ten times.

Causes of Flooding in Chehalis

Flooding occurs when climate (or weather patterns), geology, and hydrology combine to create conditions where river and stream waters flow outside of their usual course and "overspill" beyond their banks. In the City of Chehalis, the combination of these factors, including ongoing development, create seasonal flooding conditions.

Flooding is most common from October through April, when storms from the Pacific Ocean, bring intense rainfall to the area. The City of Chehalis receives approximately 40 inches of rain on average each year. Larger floods result from heavy rains that continue over the course of several days, augmented by snowmelt at a time when the soil is near saturation from previous rains. Frozen topsoil also contributes to the frequency of floods. Snowmelt from the Willipa Hills and Cascade Mountain Range may contribute to, but is not considered a significant source of flooding on the Chehalis and Newaukum Rivers.

Riverine and urban are the two types of flooding that primarily affect Chehalis. Riverine flooding is the overbank flooding of rivers and streams, the natural processes of which add sediment and nutrients to fertile floodplain areas. Urban flooding results from the conversion of land from fields or woodlands to parking lots and roads, through which the land loses its ability to absorb rainfall.

Commercial and residential development within the City continues to potentially displace natural areas that have historically functioned as flood storage, but the city has addressed this potential displacement by requiring development to be consistent with the City of Chehalis and Washington State storm water & floodplain management requirements. The city has adopted the FEMA Flood Insurance Study (revised 2006), and associated requirements, so the would-be increase in flood levels caused by the development are within the Federal Insurance Administration and Washington State requirements (no increase in the water-surface elevation of the 100-year flood more than one foot at any point).

Flood Insurance

The City of Chehalis participates in the National Flood Insurance Program (NFIP) that makes available federally backed flood insurance for all structures, whether or not they are located within the floodplain. More than 25 percent of NFIP

claims are filed by properties located outside the 100-year floodplain, also known as the Special Flood Hazard Area (SFHA). Following the purchase of flood insurance, NFIP imposes a 30-day waiting period, so residents should purchase insurance before the onset of the rainy season to ensure coverage during the flooding season.

Membership within NFIP — and the availability to Chehalis residents of flood insurance — requires the City to manage its floodplain in ways that meet or exceed standards set by FEMA. The residents of Chehalis receive a 20% flood insurance premium discount due to the manner in which the city manages floodplains. The NFIP insures building with two types of coverage: structural and contents. Structural coverage includes walls, floors, insulation, furnace and other items permanently attached to the structure. Contents coverage may be purchased separately to cover the contents of an insurable building. Flood insurance also pays a portion of the costs of actions taken to prevent flood damage.

Since July 1, 1997, all NFIP policies include Increased Cost of Compliance (ICC) coverage that assists with bringing structures into compliance with current building standards, such as elevating structures 1 foot or more above the height of the 100-year flood. **The limit of this coverage is \$30,000.**

Federal financial assistance requires the purchase of flood insurance for buildings located within the SFHA — a requirement that affects nearly all mortgages financed through commercial lending institutions. This mandatory requirement stipulates that structural coverage be purchased equal to the amount of the loan, or other financial assistance, or for the maximum amount available, which is currently \$250,000 for a single family residence. While the mandatory flood insurance purchase requirement has been in effect for many years, not all lending institutions required flood insurance in the past. Today, however, most institutions are now requiring the flood insurance purchase, and some are reviewing all mortgage loans to determine whether flood insurance is required and should have been required in the past. Upon refinancing a loan, nearly every lending institution will enforce the flood insurance requirement. It is the lender's responsibility to check the Flood Insurance Rate Map (FIRM) to determine whether a structure is within the SFHA.

The mandatory flood insurance purchase requirement does not apply to loans or financial assistance for items that are not eligible for flood insurance coverage, such as vehicles, business expenses, landscaping and vacant lots. The requirement also does not apply to loans for structures not located in a SFHA, even though a portion of the lot may be within a SFHA. Persons located within SFHA who received disaster assistance after Sept. 23, 1994 for flood losses to real or personal property must purchase and maintain flood insurance coverage, otherwise future disaster assistance will be denied.

Floodplain Understanding and Regulation

Maintaining the flow capacity in streams that go across City properties requires cooperation and assistance to prevent flooding and bank erosion. Following are some suggestions and information for understanding the ways that floodplains function and how the City regulates the floodplain in order to protect property and lives, while affording Chehalis citizens the ability to obtain floodplain insurance.

- **Do not dump or throw anything into ditches or streams:** A plugged channel cannot carry water, and when it rains, the excess water must go somewhere. Trash and vegetation dumped into a stream degrades water quality of both the stream itself and its receiving waters, and every piece of trash contributes to flooding. **The City has adopted and enforces regulations that prohibit the dumping of material into any natural or manmade component of the drainage system. Additionally, the City has adopted and enforces regulations that prohibit the illegal dumping of material, including material dumped into ditches, streams or other drainage-ways.** Please report any observations of the dumping of debris or other objects into streams, drainage-ways, or rivers to the City of Chehalis Code Enforcement Officer at (360) 748-8605.
- **Remove debris, trash, loose branches and vegetation:** Keep banks clear of brush and debris to help maintain an unobstructed flow of water in stream channels. Do not, however, remove vegetation that is actively growing on a stream bank. Streamside vegetation is tightly regulated by local, state and federal regulations. Before undertaking any removal of streamside vegetation, contact the City of Chehalis Community Development Department at (360) 345-2229. Please report any observations of the clearing of vegetation or trees on stream banks to the City of Chehalis Public Works Department at (360) 748-0238.
- **Obtain a floodplain development permit and / or building permit, if required:** To minimize damage to structures during flood events, the City requires all new construction in the floodplain to be anchored against movement by floodwaters, resistant to flood forces, constructed with flood-resistant materials and flood-proofed or elevated so that the first floor of living space, as well as all mechanical and services, is at least 1 foot above the elevation of the 100-year flood. These standards apply to new structures and to substantial improvements of existing structures. The City defines a Substantial Improvement as any reconstruction, rehabilitation, or addition to an existing structure, the cost of which exceeds 50 percent of the structure appraised or market value (whichever the builder chooses to use). Additionally, most other types of development within the floodplain also require a floodplain development permit, such as grading, cut and fill, installation of riprap and other bank stabilization techniques. City staff is available to undertake site visits, if requested, to review flood, drainage and sewer issues. Contact the City of Chehalis Community

Development Department at (360) 345-2229 for further information and prior to undertaking any activity within the floodplain.

- **Recognize the natural and beneficial functions of floodplains to help reduce flooding:** Floodplains are a natural component of the Chehalis environment. Understanding and protecting the natural functions of floodplains helps reduce flood damage and protect resources. When flooding spreads out across the floodplain, its energy is dissipated, which results in lower flood flows downstream, reduced erosion of the stream bank and channel, deposition of sediments higher in the watershed and improved groundwater recharge. Floodplains are scenic, valued wildlife habitat, and suitable for farming. Poorly planned development in floodplains can lead to stream bank erosion, loss of valuable property, increased risk of flooding to downstream properties and degradation of water quality.
- **Reduce risk of damage to homes:** Practical and cost-effective methods for reducing or eliminating the risk of flooding are available to property owners whose homes have experienced damage from flooding in the past, or may experience damage in the future. Such techniques include elevation of the home, relocating the home to higher ground, constructing floodwalls or berms, flood-proofing and protecting utilities. For further information, contact the City of Chehalis Community Development Department at (360) 345-2229 and the Federal Emergency Management Agency, Region X at (425) 487-4600. **During times of flooding, homes that have not been retrofitted can be protected during emergencies by the installation of sandbags. For further information about sandbags and the locations of sites where sandbags are available during flooding, contact the City of Chehalis Public Works Department at (360) 748-0238. In case of an emergency, call 911.**
- **Chehalis Floodplain Information Services:** The City can determine the relationship of a particular property to the floodplain, including: 1) whether the property is located within the Special Flood Hazard Area; 2) Flood Insurance Rate Map (FIRM) Zone for property; 3) Base Flood Elevation for property, if available; and 4) whether the property is located within the Floodway. Contact the City of Chehalis Community Development Department at (360) 345-2229 for further information.

Flood Safety Tips

The Lewis County Emergency Management Department has flood warning information available that can be accessed by calling the Lewis County Emergency Management Office at (360) 740-1151, or through their Web site at Web: <http://lewiscountywa.gov/em>

The City web site includes information about sandbag locations and ways to contact and listen to the National Weather Service. It also has an informational brochure that explains how people can prepare for an emergency. Additionally, for information regarding road closures and road hazards call (360) 650-3262.

Following is a list of important considerations that should be followed during times of flooding:

- **Prepare an evacuation plan:** Before the floodwaters hit, develop an evacuation plan among all members of a household that includes a meeting place outside of the house, as well as an escape route out of the floodplain and away from floodwaters.
- **Do not walk through flowing water:** Drowning is the number one cause of flood deaths, mostly during flash floods. Currents can be deceptive; six inches of moving water can knock you off your feet. If you walk in standing water, use a pole or stick to ensure that the ground is still there.
- **Do not drive through a flooded area:** More people drown in their cars than anywhere else. Don't drive around road barriers; the road or bridge may be washed out.
- **Stay away from power lines and electrical wires:** The number two flood killer, after drowning, is electrocution. Electrical current can travel through water. Report downed power lines to the Lewis County Public Utility District or the County Emergency Management Office.
- **Shut off gas and electricity and move valuable contents upstairs:** Be prepared in advance with a detailed checklist because warning of an impending flood may provide little time for preparation prior to evacuation.
- **Look out for animals, especially snakes:** Small animals that have been flooded out of their homes may seek shelter in yours. Use a pole or stick to poke and turn things over and scare away small animals.
- **Look before you step:** After a flood, the ground and floors are covered with debris including broken bottles and nails. Floors and stairs that have been covered with mud can be very slippery.
- **Be alert for gas leaks:** Use a flashlight to inspect for damage. Don't smoke or use candles, lanterns or open flames unless you know that the gas has been turned off and the area has been ventilated. It is highly recommended you do not use candles, open flames, etc. until you have contacted the gas company.

Important Contact Information

- **City of Chehalis Internet Home Page:** <http://www.cityofchehalis.com>
- **City of Chehalis Internet Floodplain and Elevation Certificate Information link:** <http://www.cityofchehalis.com>

- **Federal Emergency Management Agency (FEMA)**
Phone: (425) 487-4600
Web: www.fema.gov
- **City of Chehalis Community Development Department**
(Floodplain publications and other floodplain information available)
1321 S Market Blvd
Chehalis, WA 98532
Phone: (360) 345-2229
E-Mail: comdev@ci.chehalis.wa.us
- **City of Chehalis Code Enforcement**
Phone: (360) 748-8605
- **Lewis County Department of Emergency Management**
Phone: (360) 740-1151
Emergency: 911
Web: <http://lewiscountywa.gov/em>
- **Lewis County Public Utility District (PUD)**
Phone: (360) 748-9261
Emergency: 911
- **Washington State Department of Natural Resources (DNR)**
Pacific Cascade Region
PO Box 280 / 601 Bond Rd
Castle Rock, WA 98611-0280
Phone: (360) 274-4196
Web: <http://www.dnr.wa.gov>
- **Washington State Department of Fish and Wildlife (WDFW)**
Southwest Washington Region 5 Office
2108 Grand Boulevard
Vancouver, WA 98661
Phone: (360) 696-6211
Web: <http://wdfw.wa.gov/reg/region5.htm>
- **National Marine Fisheries Service (NMFS)**
Northwest Region
Phone: (206) 526-6150
Web: <http://www.nmfs.noaa.gov/> (and) <http://www.nwr.noaa.gov/>
- **U.S. Army Corps of Engineers**
Seattle District
PO Box 3755
Seattle, WA 98124-3755
Phone: (206) 764-3742
Web: <http://www.nws.usace.army.mil/>
- **River Data: Real-Time**
United States Geological Survey
USGS Washington Water Science Center
Web: <http://wa.water.usgs.gov/data/realtime/htmls/>