



City of Orting

104 Bridge St S.

Orting, WA. 98360-0489

Orting's Flood Information Center



Flood Preparedness, Facts on why to be ready

The City of Orting 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. In addition, you are encouraged to visit Orting Flood Information Center at www.cityoforting.org or by accessing the QR Code above with your cell-phone camera.

Overview

The City of Orting features two large rivers and smaller tributaries, or streams that are susceptible to annual flooding events that pose threats to life and safety and may cause significant property damage. Large rivers include the Puyallup and Carbon Rivers, streams include Horse Haven Creek and Voight's Creek. Snow melt from the Cascade Mountain range contributes substantially to flooding, and ongoing development within the County continues to displace natural areas that have historically functioned as flood storage.

Recent Flooding Events

While some sort of seasonal flood-related damage occurs nearly every year, the flooding and associated events of February 1996, November 2006 and Jan 2009 represent the most recent significant flooding. In 1996, 2006, 2008 and Jan 2009 prolonged precipitation accompanied by an early snowmelt, caused by a warm-weather trend known as a "Pineapple Express," caused many rivers and creeks throughout the Puyallup/Carbon River watersheds to rise to 100-year flood levels, causing flooding in both rural and urban areas. Damage to Pierce County businesses, residences and infrastructure was estimated to be roughly 200,000 dollars. Claims filed under the Federal Emergency Management Agency (FEMA)'s National Flood Insurance Program (NFIP) from Pierce County residences and businesses accounted for almost one third of the entire claims throughout the state in 1996.

Causes of Flooding in Pierce County

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 Pierce County, the combination of these factors, augmented by ongoing development, create chronic seasonal flooding conditions. Pierce County spans a wide range of climatic and geologic regions that results in considerable variation in precipitation, the primary factor of which is elevation. Mt. Rainier's snowmelt provides a continuous water source throughout the year, and can contribute significantly to the development of flooding.

Flooding is most common from October through April, when storms from the Pacific Ocean, 60 miles away, bring intense rainfall to the area. Pierce County 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.

Riverine flooding and urban flooding are the two types of flooding that primarily affect Pierce County. 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.

Flood Insurance

The City of Orting 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). Homeowner policies do not cover floods. 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 County residents of flood insurance — requires the County to manage its floodplain in ways that meet or exceed standards set by FEMA. 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 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 all lending institutions 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 SFHAs 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 cross County 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 County regulates the floodplain in order to protect property and lives, while affording County 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. **All three surface water management agencies that serve the urban areas of the County have adopted and enforce regulations that prohibit the dumping of material into any natural or manmade component of the drainage system. Additionally, the County as a whole has adopted and enforces regulations that prohibit the illegal dumping of material, including material dumped into ditches, streams or other drainageways.** Please report any observations of the dumping of debris or other objects into streams, drainageways, or rivers to the City of Orting Code Enforcement Department at (360) 893-9018.

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 Orting Building Department at (360) 893-9007. Please report any observations of the clearing of vegetation or trees on stream banks to the City of Orting Code Enforcement Department at (360) 893-9018.

Obtain a floodplain development permit and / or building permit, if required: To minimize damage to structures during flood events, the City of Orting 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 County defines a Substantial Improvement as any reconstruction, rehabilitation, or addition to an existing structure, the cost of which exceeds 50 percent of the structure's 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 staffs are available to undertake site visits, if requested, to review flood, drainage and sewer issues. Contact the City of Orting Building Department at (360) 893-9007 or Public Works at (360) 893-9039 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 City of Orting environment. Understanding and protecting the natural functions of the floodplain does help to reduce flood damage and protects resources. When flooding spreads out across the floodplain, its energy is dissipated, which results in lower flood flows downstream, reduced erosion of the streambank 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 streambank 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 Orting Building Department at (360) 893-9007 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 County's Department of Emergency Management at (253) 798-7470, or visit their Web site at: pccemermgmt@co.pierce.wa.us. In case of an emergency, call 911.**

County Floodplain Information Services: The City of Orting 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 Orting Building Department at (360) 893-9007.

Flood Warning System: The City of Orting will warn its residents, in several ways, of an impending flood. Road signs will be posted on SR 162 and information will be posted on our website at www.cityoforting.org and City of Orting Facebook page. When necessary, door to door notifications, in conjunction with the fire department staff, will be conducted as well as use of the reverse 911 service.

Flood Safety Tips

The County's Emergency Management Department has flood warning information available that can be accessed by calling them at (253) 798-4274, or through their Web site at: www.piercecountywa.org. The Web site includes information about sandbag locations and ways to contact and listen to the National Weather Service and the Seattle Weather Service. It also has an informational brochure that explains how people can prepare for an emergency. Additionally, the County Roads Department has a hotline that features road conditions, road closures and road hazards. Call (253) 798-7250.

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 Puget Sound Energy 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.

Important Contact Information

- 1) Pierce County Internet Home Page: <http://www.piercecountywa.org>
- 2) Pierce County Internet Floodplain Information: <http://www.piercecountywa.org/flood>
- 3) Federal Emergency Management Agency (FEMA)
Phone: (425) 487-4600
Web: <http://www.fema.gov/nfip/>
- 4) Pierce County Land-Use and Environmental Planning Division
Phone: (253) 798-7425
- 5) City of Orting Code Enforcement
Phone: (360) 893-9018
Web: <http://www.cityoforting.org>
- 6) Pierce County Department of Emergency Management
Phone: (253) 798-6595
Emergency: 911
Web: <http://www.pierccountywa.org/dem>
- 7) City of Orting Library System (Houses floodplain publications and additional floodplain information)
Phone: (253) 798-2661
- 8) Washington Department of Fish and Wildlife (WDFW)
Phone: (360) 902-2200
Web: wdfw.wa.gov/home.htm
- 9) National Marine Fisheries Service (NMFS)
Phone: (206) 526-6150
Web: <http://www.nmfs.noaa.gov/> (and) <http://www.nwr.noaa.gov/>
- 10) U.S. Army Corps of Engineers
Phone: (206)764-3750
Web: <https://www.nwp.usace.army.mil/home.asp>