

## CITIZEN FLOOD INFORMATION

### WHY AM I RECEIVING THIS?

Providing this information to you allows you to make smart decisions regarding your particular flood risk. It also allows any flood insurance policy holder within the City of Cedar Rapids to possibly obtain significant premium discounts.

### FLOOD HAZARD AREAS

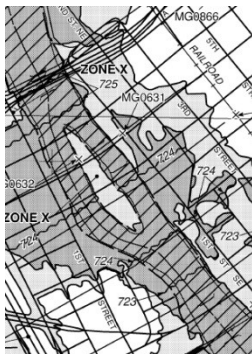
Cedar Rapids has numerous creeks which flow into the main Cedar River, which in turn runs right through the heart of the city. A significant area of downtown is within the “1% chance” floodplain.

Flash-flooding is the typical type of flooding found on The Vinton Ditch, Dry Creek and Indian Creek. During a normal flood event, just a few inches of rain in a short period of time can cause street and basement flooding in low lying areas.

**Floods are the #1 natural disaster in the United States.**

Flooding on Prairie Creek and the Cedar River is normally a much slower event, as rainwater makes its way down these channels from the north and west.

Various floods on each of these water bodies have affected Cedar Rapids in recent memory. In June 2008, floodwaters from the Cedar River reached 8-10' high on some homes and businesses and caused millions of dollars worth of damage. This flood was at least 11' higher than any previous floods



experienced here before. The top flood levels on record are as follows:

- (1) 31.12 ft on June 13, 2008
- (2) 21.95 ft on September 27, 2016
- (3) 20.00 ft on June 1, 1851 and March 18, 1929
- (4) 19.66 ft on March 31, 1961
- (5) 19.27 ft on April 4, 1993

The normal river level is between 3' and 10'. The “1% chance” flood is approximately equivalent to 22.5 ft flood stage, and the “0.2% chance” flood is approximately at 26.5 ft flood stage. More historical data regarding river heights can be obtained from the National Weather Service Website ([water.weather.gov/ahps](http://water.weather.gov/ahps))

Information on whether your property is in the “1% chance” floodplain can be obtained by talking with our Development Services staff at 319-286-5780. Maps and other flood-related information are available on the City's website or by visiting the Development Services Department in person. Official “Elevation Certificates” are also available for new development dating from 1982 to present.

### FLOOD SAFETY

The following common sense guidelines can help you to avoid the dangers of flooding:

- Do not drive through a flooded area. More people drown in cars than anywhere else during a flood. Do not drive around barriers.
- Do not walk through flowing water. Currents can be deceptive. Six inches of water can knock you off your feet and hide hazardous obstacles.
- Stay away from power lines and electrical wires. If your house is soon to be flooded, turn off the power at the service box. Electrical current can travel through water. Electrocution is the 2<sup>nd</sup> leading cause of death during floods.
- Be alert to gas leaks. Turn off the gas to your house before it floods. If you smell gas, report it to the gas company. Do not use candles, lanterns or

**A car can easily be carried away by just two feet of water.**

open flames if you smell gas or are unsure if your gas has been shut off.

- Keep children away from the flood waters, ditches, culverts and storm drains. Flood waters can carry hazardous items that have dislodged themselves. Culverts may suck smaller people into them, rendering them helpless.
- Clean everything that has been wet. Flood water may be contaminated with sewage and other chemicals which pose severe health threats.
- Look out for animals. Small animals that have been flooded out of their home may seek shelter in yours.
- Do not use gas engines, such as generators, or charcoal fires indoors during power outages. Carbon monoxide exhaust can pose serious health hazards.

### PROPERTY PROTECTION MEASURES

If your property is susceptible to flooding, there are many flood damage reduction measures you can employ:

- Watertight seals can be applied to brick and block walls to protect against low-level flooding.
- A sanitary sewer backwater prevention valve.
- Utilities such as heating and air conditioning systems, water heaters and other major appliances can be elevated to higher floors in the structure or on raised platforms.
- Temporary measures such as moving furniture and other valuables to higher floors or sandbagging exterior openings will also help.
- Elevating or relocating the entire structure may also be a feasible option.

The City's “Flood Response Manual” is designed to keep critical roads, buildings and services protected. It is not intended to protect every home or business in town that may be flooded.

### FLOODPLAIN PERMIT REQUIREMENTS

All development within the “1% chance” floodplain (not only the construction of buildings, but filling, excavation, etc.) is required to obtain a Floodplain Development Permit.

**New land development can increase flood risk.**

Applications must be made prior to doing any work in a floodplain. Please contact the Development Services Department at 319-286-5780 to receive all the information you will need in order to properly develop in the floodplain. You may report any illegal development activities to the above number as well.

### **SUBSTANTIAL IMPROVEMENT/DAMAGE**

The National Flood Insurance Program (NFIP) requires that if the cost of improvements to a building or the cost to repair damages (from any cause) to a building exceeds 50% of the market value of the building (excluding land value), the entire building must be brought up to current floodplain management standards. Building improvement projects include exterior and interior remodeling, rehabilitation, additions and repair and reconstruction projects. The code provides more definition of what constitutes 50%, if the building has suffered damage more than once, or if numerous improvements are made over time. Please contact the Development Services Department at 319-286-5780 for further information.

### **FLOOD MAPS**

The City of Cedar Rapids is able to help you understand your flooding risk by locating your property relative to multiple floodplains on the official flood maps. Please contact the Development Services Department at 319-286-5780 or visit the City's website ([www.cedar-rapids.org](http://www.cedar-rapids.org)) for further information.

### **FLOOD INSURANCE**

If you do not have flood insurance, talk to your insurance agent. Most homeowner's insurance policies do not cover damage from floods. Flood insurance is only available to those participating communities in the National Flood Insurance Program (NFIP). The City of Cedar Rapids is part of the NFIP and thus, residents are able to obtain flood insurance through the program. Additionally, because

More than 20 percent of flood insurance claims come from people outside of mapped high-risk flood areas.

the City of Cedar Rapids participates in FEMA's Community Rating System (CRS) program, flood insurance premiums are discounted in many cases.

Be sure to check your policy to ensure you have adequate coverage. Flood insurance policies often cover the building structure, but not the contents. Contents coverage may also be obtained by asking. There is a 30-day waiting period before flood insurance coverage becomes effective. Plan ahead; do not wait until a flood is predicted before purchasing flood insurance.

If you are building inside the "1% chance" floodplain, the purchase of flood insurance is mandatory if using a federally regulated/insured bank for a loan.

Flooding can be somewhat unpredictable. It's worth noting that over 20% of flood insurance claims come from people outside the "1% chance" floodplain. The purchase of flood insurance should be considered wherever your property is located.

### **NATURAL & BENEFICIAL FUNCTIONS**

Floodplains play a valuable role in providing natural and beneficial functions to the area around, and including Cedar Rapids. Floodplains that are relatively undisturbed provide a wide range of benefits to both human and natural systems. These benefits provide aesthetic pleasure as well as function to provide active processes such as filtering nutrients. Parts of both the Cedar River and Prairie Creek floodplain are used as a means to filter farm chemical run-off so that these areas can maintain bio-diversity and ecosystem sustainability. Parts of the floodplain contain historic and archeological sites that provide opportunity for education and study. Natural floodplains enhance waterfowl, fish and other wildlife habitats and provide feeding/breeding grounds. And lastly, they provide natural erosion control and open space so further flooding damage does not occur where it shouldn't.

### **DRAINAGE SYSTEM MAINTENANCE**

As simple as it may sound, keeping smaller ditches and streams free of debris can dramatically improve

the run-off capacity of low-lying areas, as well as greatly reduce the risk of a blockage occurring that may significantly contribute to flooding. It is illegal to dump materials into a waterway and violators may be fined. If you see someone in the act of dumping or see debris in one of our watercourses, please contact our Building Services Department at 319-286-5836.

### **FLOOD WARNING SYSTEM**

Many times, flooding along the Cedar River within Cedar Rapids can be predicted days in advance, giving ample warning for preparation and evacuation. However, in the event of a flash flood due to a large rain event, you may be the first to notice the oncoming situation and have a short time to prepare. Notify the City's Police/Fire Department. The City's Emergency Alert System may be activated. Tune your radio to WMT – 600AM for local weather information. You will also see regular interruption on local radio and television stations advising you of the situation.

### **ADDITIONAL INFORMATION**

If you should require further information regarding flood-related issues in Cedar Rapids, here are some additional sources:

- [www.cedar-rapids.org](http://www.cedar-rapids.org)
- [water.weather.gov/ahps](http://water.weather.gov/ahps)
- [www.FEMA.gov/nfip](http://www.FEMA.gov/nfip)
- [www.floodsmart.gov](http://www.floodsmart.gov)
- Development Services (319-286-5780)
- Engineering (319-286-5802)
- Cedar Rapids Public Library

For specific advice on reducing the flood damage risk on your property, please contact us at 319 286 5802. We'll visit your property and provide technical assistance.

