

Public Works Community Update on Stormwater Management



Hamilton
Public Works



Hamilton has installed traffic signs at various underpasses that flood and become impassable during heavy rains. For your safety, please obey these signs.

Health & Safety Tips

Flooding events present hazards requiring special precautions. Safety should be your primary concern.

Dealing with flooded areas outdoors

Entering an outdoor flooded area can be dangerous. Extra safety precautions should be taken and common sense used.

When flooding occurs in a park, don't enter the flooded area or allow children or pets to play in the water – the water may contain dangerous bacteria that can make them severely ill. Even after the water recedes, the area will be slippery. Electrocutation can be a danger if hydro wires are down.

Electrical Hazards

In any flooding situation, be aware of electrical hazards associated with submerged live wires, electrical appliances, and water-damaged appliances and devices. **IF UNCERTAIN, DO NOT PROCEED** until a qualified electrician has assessed the situation.

Do not enter a flooded basement or room unless the electricity has been shut off at the main box. Even after the water has receded there still may be a danger of electrical shock. If you must enter a flooded area to shut off the hydro, contact a licensed qualified electrician to ensure all safety precautions are followed.

Flood water can also damage electrical installations and appliances and create a potential safety hazard. For instance, if you plug in a wet appliance, it could burn out or cause a serious shock. All electrical installations and appliances should be inspected prior to turning the hydro back on.

Natural Gas

Flood water can damage electrical installations and appliances and create a potential safety hazard. If a natural gas odour is present:

- Don't touch any electrical fixtures, telephones or switches – any spark may ignite the gas line.
- Don't light matches or smoke cigarettes.
- Open all windows to ventilate the house.
- Leave the house immediately.
- Contact the gas company and the Fire Department from a safe place.

Contamination Hazards

During a flood and afterwards in the clean-up process you may be exposed to a range of contaminants in the water itself, the air, and within cleaning agents.

- Open windows to let fresh air in.
- If at all possible, contract a professional restoration company to provide initial clean-up.
- If you are involved in the clean-up, wear protective clothing such as overalls, gloves, protective eyeglasses, rubber boots, and a face mask.
- Dispose of any canned goods or other foods that may have come in contact with the flood water. If you are unsure, throw it out.
- If your freezer and refrigerator have lost power, beware of spoiled food. Again, if you are unsure, throw it out.

The following foods should be considered unsafe and thrown away if they may have come into contact with contaminated flood waters:

- Food products stored within paper, cloth or cardboard boxes/containers.
- Home canned foods.
- Flour, sugar and coffee in canisters or bags.
- Fresh meat, poultry and seafood.
- Any food in cellophane.
- Fresh fruits and vegetables that do not have a peel or shell that can be removed before eating.
- Bottled or canned juices, bottled water, condiments

(mustard, ketchup, mayonnaise), peanut butter and jellies.

- Commercially canned food without dents, leaks or bulges are considered safe if properly cleaned and sanitized (To sanitize: Remove the label, thoroughly wash the cans in warm soapy water and rinse with clean water, soak for 30 – 60 minutes in a solution of two spoonfuls of bleach in water, re-label cans with a permanent marker, making sure to include the expiration date).
- Beverage bottles with twist caps that were under the water should be thrown out.
- Previously opened bottles should be thrown out
- Dishes and eating and cooking utensils should be thoroughly cleaned with a water and chlorine bleach solution.
- Throw away any plastic utensils, paper and plastic plates, wooden bowls, chopping boards and kitchen tools or any other non-food items made from a porous material.
- Food preparation surfaces should be wiped down using hot unboiled tap water and soap. Use bleach and water to sanitize after cleaning.
- If any plates, glasses, pots or pans are badly chipped or damaged do not use.

Mould and Mildew

To avoid the health hazards of mildew and bacterial mould, water soaked walls and insulation should be removed, and the space and studs allowed to dry thoroughly. Walls constructed of gyproc, plaster or wood will dry out in time but insulation in these walls is no longer effective. As insulation becomes water soaked the weight causes it to settle and compact at the bottom, leaving a large portion of the wall no longer insulated.

Household Furnishings

Upholstered furniture, mattresses, carpets and rugs affected by sewage contaminated flood waters should be thrown away.

Clothing, bedding and other soft/fabric articles including children's toys should be laundered on a hot wash (60°C or the highest temperature indicated on manufacturer's instructions).

Hazardous Products

Containers that hold hazardous materials such as pesticides, fuel or gasoline may have spilled indoors and/or a spill, avoid skin contact with contaminated materials or contaminated water and keep the area well ventilated. Contact the fire department for help.

Structural Hazards

Flooding can severely undermine a building's structural integrity. Evacuate your building if you feel there is any chance of a collapse.

Appliances

(refrigerators, freezers, stoves and other appliances)

Any appliance that has been partially or wholly immersed in water will have wet insulation with no insulation value. It cannot be dried without removal. A qualified service technician should be contacted before the appliance is put into service.

Once the safety of the appliance has been verified, it should be cleaned in the following way:

- Ensure electrical power is turned off.
- Clean the unit thoroughly with a detergent solution, rinse with clean water, then wash with a solution containing one-half cup of Javex or similar product in nine litres (two gallons) of water.
- Allow to dry with door kept open. Note: Keep children away

Trees absorb water!

The urban forest can significantly reduce the potential of flooding by slowing the rate of rainfall reaching the ground (foliage interception) and by reducing the amount of surface run-off by increasing soil infiltration rates (root structure activity). Both of these phenomena serve to moderate the "spike" of run-off volumes during heavy storm events, which helps to avoid the "over capacity" situations for sewers and drains that result in flooding.

The City's Street Tree Planting Program provides tree plantings within the road allowances at no cost to residents. Requests for new plantings may be made through www.hamilton.ca or by calling 905-546-CITY (2489)



Hamilton

Contact Us!

City of Hamilton Customer Service – 905-546-CITY (2489)

City of Hamilton Public Health Services – 905-546-3570

www.hamilton.ca

Helpful Resources

The following Web sites are excellent reference resources to assist you in protecting your home from flooding damage:

Public Safety & Emergency Preparedness Canada

Preparing for an emergency:
www.psepc.gc.ca/prg/em/gds/floods-en.asp#cleanup

Preparing for floods:
http://www.getprepared.ca/risks/floods_e.asp

Prepare for storm surges:
http://www.getprepared.ca/risks/surges_e.asp

Natural Resources Canada

Natural Hazards and Emergency Response (Web site)

Flood hazards scoping study: identifying needs and defining research directions
http://nher.nrcan.gc.ca/k02_summary_e.php

Flooding in Canada - History
http://nher.nrcan.gc.ca/k02_supplement_e.php

Federal Emergency Management Agency (USA) - www.fema.gov/hazards/floods/

National Flood Insurance Program (USA) - www.floodsmart.gov

West Nile Virus

What you can do after a heavy rainfall to eliminate mosquito breeding sites:

The best way to keep mosquitoes away is to clean up areas where they like to breed. Take a look around your house or property and get rid of places that are mosquito-friendly that would make good breeding sites, particularly following a heavy rainfall.

Any type of standing water

- Clean up empty containers of standing water such as old tires, flower pots,

wheelbarrows, barrels or tin cans that are outdoors

- Drill holes in the bottoms of used containers so water can't collect
- Change water in bird baths every other day

Check eaves and drains

- Don't let brush pile up. Clear leaves and

twigs from eavestroughs, storm and roof gutters through the summer

- Make sure drainage ditches are not clogged
- Check flat roofs frequently for standing water

