

PERSONAL EMERGENCY PREPAREDNESS



FLOODS

....are you ready?



TABLE OF CONTENTS

Introduction.....Page 3

Know the Risks.....Page 4

Advisories & Warnings

- Alberta Environment.....Page 5
- Alberta Emergency Alert.....Page 6

Make a Plan.....Page 7

72 Hour Preparedness.....Pages 8 - 9

Steps to Protect Your Family & Property.....Pages 10 - 12

- Before an Event
- During a High Streamflow Advisory / Flood Watch
- During a Flood Warning
- During a Flood
- During an Evacuation

Reception Centers.....Page 13

After a Flood.....Page 14

Resource Listing.....Page 15



INTRODUCTION

The MD of Foothills Emergency Management Agency has always strived to work with our partners, regionally and provincially, to ensure that our municipality is well-prepared to respond to emergencies or disasters that may occur in our region. Our dedicated emergency management team has the knowledge, experience and skills to respond to and manage both small and large scale events.

Located virtually on the doorstep to the Rocky Mountains, the MD of Foothills remains one of the most beautiful places in Canada. Along with such raw beauty, however, comes inherent risk. The rivers, streams and creeks that find their headwaters in these mountains can be very volatile and sometimes unpredictable. This was never so evident as on June 20, 2013 when the Highwood, Sheep and Bow Rivers; Pekisko, Tongue, Three Point, Little Bow, Priddis, Fish and other creeks spilled their banks, creating one of Canada's worst natural disasters on record.

In response to these devastating events, the MD of Foothills has been hard at work to repair the damage and to mitigate, as much as possible, future flood risks throughout our municipality. There have been many lessons learned while responding to this catastrophic natural event and in the weeks and months that have passed. As the municipality continues to recover and plan for the future, it is important for our residents to do the same. There are a number of important steps you can take to help ensure the safety of your family and your property. This document was created in an effort to help answer some of your questions and, most importantly, to provide you information on what you can do to protect yourself against future flood events.

ACKNOWLEDGEMENTS / SOURCES:

Government of Alberta (Alberta Environment, Alberta Emergency Management Agency, Alberta Health Services), Government of Canada (Public Safety Canada), Canadian Red Cross.



KNOW THE RISKS...

There are three causes of flooding in Alberta:

Snowmelt for plains and mountains:

- ❖ Snow on the plains usually melts and runs off during the March to April period. Excessive, rapid melting may flood smaller streams and rivers having their headwaters in the plains areas. Mountain snowmelt usually occurs during the May to July period. While mountain snowmelt may result in localized flooding, snowmelt by itself is generally not sufficient to cause flooding in major mountain-fed streams unless accompanied by rainfall.

Rainfall:

- ❖ Rainfall affects big and small watercourses in Alberta. Flooding along major mountain-fed rivers is caused by heavy rainfall or heavy rainfall during mountain snowmelt.

Ice Jams:

- ❖ Ice jams can occur anytime during the winter, although freeze-up or break-up are the most usual times. They can be initiated when the ice cover breaks up into floes and moves downstream. A jam occurs when the ice floes accumulate at a location and partially or completely block the channel. The ice blockage restricts the flow in the river, causing water levels to increase. In some cases the water levels can increase enough to cause flooding along the jam. Ice jams tend to form repeatedly at certain locations.
- ❖ Flooding in the MD of Foothills is an event that most commonly occurs in spring and early summer; however, be aware that flooding can occur at any time of the year.
- ❖ Some flood events can be predicted in a manner that provides the municipality and residents some time to make preparations and/or take precautions, including sandbagging and evacuating the area.
- ❖ Other flood events, such as a flash flood, can occur with very little time to prepare or to implement an emergency response.
- ❖ There are steps that you can take to mitigate the effects of future flooding on your family, businesses and property.



ADVISORIES, WATCHES & WARNINGS ISSUED BY ALBERTA ENVIRONMENT

Alberta Environment provides up-to-date information on forecasts and any advisories in place across the Province of Alberta. The following chart details the meanings of these advisories, watches and warnings that are issued by the Flow Forecasting Team, and are ranked from lowest to highest in terms of risk to life and severity of property damage:

SPRING RUNOFF ADVISORY	Means that stream levels are rising or expected to rise due to snowmelt and no major flooding is expected. Minor flooding in low-lying areas is possible. Anyone situated close to the streams affected (Property owners and the general public) is advised to be cautious of rising levels.
HIGH STREAMFLOW ADVISORY	Means that stream levels are rising or expected to rise rapidly and no major flooding is expected. Minor flooding in low-lying areas is possible. Anyone situated close to the streams affected (campers, fishermen, boaters & the general public) is advised to be cautious of the rising water levels.
FLOOD WATCH	Means that the stream levels are rising and will approach or may exceed bankfull. Flooding of areas adjacent to these streams may occur. Anyone situated close to these streams is advised to take appropriate precautionary measures.
FLOOD WARNING	Means that rising river levels will result in flooding of areas adjacent to the streams affected. Anyone situated close to the river should take appropriate measures to avoid flood damage.

The most current advisories, watches and warnings providing critical information on spring runoff or high streamflow advisories, flood watches and warnings can be found on the Alberta Environment website at:

<http://environment.alberta.ca/forecasting/advisories>



ALBERTA EMERGENCY ALERT

Alberta Emergency Management Agency (AEMA) leads the coordination, collaboration and cooperation of government agencies, industry, municipalities and first responders involved in the prevention, preparedness and response to disasters and emergencies. One of the many services provided by AEMA, is the Alberta Emergency Alert System.



Alberta Emergency Alert is designed to provide critical, life-saving information to Albertans when emergencies or disasters occur. When an alert comes through your radio, television, phone or internet, take immediate action. If an emergency develops, you should follow the safety instructions provided by an alert to protect yourself and your family.

- ❖ The MD of Foothills has been actively involved with Alberta Emergency Alert for many years, and has several authorized users on staff.
- ❖ Alberta Emergency Alert was activated by MD emergency management staff on several occasions during the 2013 flood event.
- ❖ Alberta Emergency Alerts are broadcast over television and radio stations throughout Alberta. Local radio stations broadcasting alerts include:
 - **The Eagle 100.9 FM**
 - **Sun Country 99.7 FM**
 - **AM 1140**
- ❖ Alberta Emergency Alerts can also be received directly by phones, tablets and computers via Twitter, Facebook or RSS.
- ❖ Please visit the Alberta Emergency Alert webpage for further information and details on how to receive direct alerts at:

http://www.aema.alberta.ca/ea_index.cfm

Please monitor television, radio, internet and social media sites during an emergency for important information and alerts.....

MAKE A PLAN

If you live in an area prone to flooding, planning and preparation **before** a flood event occurs is critical. A **Family Emergency Plan** will help you and your family know what to do in case of an emergency.

Here are a few tips to guide you through the process of creating your plan:

- ❖ Discuss the potential for flooding at your place of residence and what each family member should do at home, school or work if an emergency occurs.
- ❖ Know the warning system(s) your municipality uses.
- ❖ Post emergency telephone numbers by each phone in your home. Ensure all cell phones have all contact information / numbers necessary programmed into them.
- ❖ Ensure that local extended family members that you are responsible for (ie: grandparents, parents etc) are included in your plan.
- ❖ Store important documents (ie: birth certificates, passports, wills, financial documents, insurance policies etc) in water proof containers.
- ❖ Choose a relative or friend who lives outside your municipality, as a check-in contact for everyone to call.
- ❖ Plan how your family will stay in contact if separated during a disaster or emergency. Pick two meeting places – one location a safe distance from your home and the second location should be at a location other than your home community / area, in case of a large scale evacuation.
- ❖ Make arrangements for family pet(s) when writing your plan.
- ❖ Show your family members how to shut off water, gas and electricity at the main switches.
- ❖ Learn local evacuation routes should you have to leave your residence.
- ❖ Write down and exercise your plan annually.

For further information about creating a Family Emergency Plan, please visit the Alberta Emergency Management Agency's website at:

http://www.aema.alberta.ca/personal_emergency_preparedness.cfm



72 HOUR PREPAREDNESS

Is your family prepared to survive without outside assistance? If an emergency happens, it may take emergency workers some time to reach you. Emergency services will first attend to those in need of lifesaving assistance. If you and your family are not injured or in life-threatening danger, you will need to be prepared to get by without things like power or water.....for at least 72 hours. All families should have two emergency kits: a ready to STAY kit and a ready to GO kit:

READY TO STAY KIT:

A ready to stay kit should include items that you will need that will help keep you safe at home for a few days. You can keep these items in a plastic tub or in a designated cabinet in your home. You will likely have some of these items on hand, like food, water and flashlights....but would you be able to find these items in the dark?

Basic emergency kit:

- ✓ Water – minimum 2 litres drinking water per person/ day. Include some small bottles that can easily be taken with you in case of evacuation.
- ✓ Food that won't spoil (canned food, energy bars, dried foods). Replace food and water annually in your kit.
- ✓ Manual can opener
- ✓ Crank or battery-powered flashlight and radio (and extra batteries)
- ✓ First aid kit
- ✓ Extra keys to your car and house
- ✓ Some cash and change for payphones
- ✓ Copy of your Family Emergency Plan and contact information
- ✓ Items such as: prescription medication, infant formula, equipment for persons with disabilities / special needs, etc.)

Recommended additional items:

- ✓ 2 additional litres of water per person/day for cooking and cleaning
- ✓ Candles, matches or lighter (place candles in sturdy containers and don't burn unattended)
- ✓ Change of clothing / footwear for each family member
- ✓ Sleeping bag / warm blanket for each family member
- ✓ Toiletries, hand sanitizer
- ✓ Utensils, garbage bags, toilet paper
- ✓ Chlorine bleach or water purifying tablets
- ✓ Basic tools (hammer, pliers, wrench, screwdriver, etc)
- ✓ Small fuel operated stove and fuel (follow mfr's directions / store properly)
- ✓ A whistle (if you need to attract attention)



72 HOUR PREPAREDNESS

READY TO GO KIT:

Keep your ready to go kit in a backpack, duffle bag or a suitcase, in an easily accessible place in your home, such as your front hall closet. Make sure the kit is easy to carry and that everyone in your household knows where it is. Take it with you in the event you have to evacuate your home.

Recommended items:

- ✓ 2 litres of water for each person
- ✓ Food that you don't have to refrigerate and a manual can opener
- ✓ Plastic or paper plates, cups and utensils
- ✓ Crank or battery-powered flashlight and radio (and extra batteries)
- ✓ Change of clothes for each person
- ✓ Copy of your Family Emergency Plan and contact information
- ✓ Pet food and supplies for at least 3 days
- ✓ Small first aid kit
- ✓ Personal identification
- ✓ Personal hygiene items (soap, hand sanitizer, toothpaste, toothbrush, etc.)
- ✓ Store medications you usually take near your ready to go kit
- ✓ Cash in smaller denominations and change for payphones

You can make your own 72 Hour Kits, or you can also purchase pre-packaged kits from the Canadian Red Cross (www.redcross.ca); St. John Ambulance and Salvation Army kits can be purchased at (www.sja.ca) or they may also be purchased at various retailers across Canada.

Visit www.getprepared.ca or call 1-800-0-Canada (1-800-622-6232) for a listing of retailers by province and territory.



STEPS TO PROTECT YOUR FAMILY & PROPERTY

Before an Event:

- ❖ Review your insurance policy – overland flooding is not covered by standard homeowner’s insurance policies.
- ❖ Create a detailed inventory of your property and keep it in a safe place. Photo and video recordings are an easy way to document your belongings – always enable the date and time function on cameras.
- ❖ Install backflow valves in sump pumps, floor, sink, toilet and washing machine drains in your basement to help prevent sewer backups.
- ❖ Fill in any settlement next to your house and make sure the ground slopes away from your house on all sides.
- ❖ Redirect storm water away from your house using downspout extensions. Do not drain water directly onto your neighbour’s property.
- ❖ Know where to obtain sandbags, plywood, plastic sheeting and lumber.
- ❖ Important documents should be stored in watertight containers that can be quickly moved or taken with you during an emergency.

During a High Streamflow Advisory / Flood Watch:

- ❖ If you have time, remove as many household items as you can from basements, never store items such as family photos in basements. Move things upstairs.
- ❖ Determine evacuation route(s), in case flooding requires you to leave your residence.
- ❖ Ensure you have a full tank of fuel in your vehicle
- ❖ Watch for warning signs: increases in height and/or intensity of water flows, mudslides, debris in creeks / rivers, colour changes in water.
- ❖ Stay away from river banks / streams – they may be unstable, keep children well away
- ❖ Check on elderly / other family members who may require additional assistance if evacuation necessary and make plans to assist.
- ❖ Make arrangements for your pet(s), should you have to evacuate.



STEPS TO PROTECT YOUR FAMILY & PROPERTY

During a Flood Warning: (if you have time)

- ❖ Plastic sheeting, plywood & sandbags can be used to protect your home.
- ❖ Turn off utilities at main switches or valves and unplug electrical items ONLY IF FLOODING HAS NOT YET BEGUN AND THE AREA AROUND A FUSE BOX IS COMPLETELY DRY. HAVE A FLASHLIGHT WITH YOU.
- ❖ Plug all basement sewer drains and toilet connections with a stopper, secured with a wood brace or weight such as a sandbag.
- ❖ Bring outdoor furniture inside.
- ❖ Prepare to evacuate:
 - Get your Ready to Go kit and prepare to load it into your vehicle.
 - Prepare a list of family members' prescribed medications and prescribed dosage. Include name and phone numbers of doctors. For those who rely on medical devices such as a pacemaker, list the style, serial number and other pertinent information. Carry it with you at all times.
 - Collect all vital family records and other irreplaceable items in one central location where they can easily be transported if you must leave the area quickly. Keep them in a waterproof container.
 - Listen to the radio and check internet / social media for flood advisories and warnings and follow instructions of your local government.
 - Know how to operate the manual override of your garage door.

STEPS TO PROTECT YOUR FAMILY & PROPERTY

During a Flood:

- ❖ Listen to radio, television, internet and social media sites for updated alerts and information.
- ❖ Stay out of flooded areas until municipal authorities give permission to return. Traditional media (radio, television), social media(Facebook/ Twitter) and the MD's website will be sources of this information.
- ❖ Avoid standing water. It may be electrically charged from ground or downed power lines.
- ❖ Do not attempt to drive over a flooded road. Floodwaters can conceal debris or areas where the road has eroded.
- ❖ Barricades are placed on roads for your protection. If you encounter a barricade, find an alternate route.
- ❖ Avoid walking through moving water. Less than 15 cm (6 inches) of moving water can make you fall.
- ❖ Do not try to attempt search and rescue operations on your own. Call 9-1-1 for assistance.

During an Evacuation Order:

- ❖ Always follow the instructions issued by your municipal officials and/ or first responders.
- ❖ Evacuation orders may occur with door to door notifications, or via traditional media (radio, television), social media (twitter, facebook) or via early warning systems in place in your region.
- ❖ Do not stay behind. You put yourself, your family and first responders at risk by doing so.
- ❖ Remember your neighbours, particularly if they are elderly or infirm. They may need additional help or assistance from emergency services.
- ❖ Do not return to your home or business while an evacuation order is in effect.

RECEPTION CENTERS

During a flood event, when evacuations are required, the MD of Foothills Emergency Management Agency will establish Reception Centers to receive and care for evacuees. These are temporary facilities that can be established in schools, community halls, arenas or private facilities. The site(s) chosen will depend on the number of people evacuated, the location(s) of flooded areas and the resources available at that time.

Disaster Social Services workers play a very important role during an evacuation by:

- ❖ Helping people to meet their basic needs
- ❖ Reuniting families who have become separated
- ❖ Providing accurate and timely information about the emergency
- ❖ Helping people re-establish themselves once they can return home

Reception Centers provide the following services:

- ❖ Registration and inquiry information
- ❖ Temporary lodging / accommodations for evacuees
- ❖ Emergency clothing
- ❖ Meals
- ❖ Personal services
- ❖ Volunteer coordination

If you are evacuated, it is very important that you register yourself and your family members at a designated reception center. Listen to local radio, television or monitor social media sites for updates as to the location(s) of reception centers in your area.



AFTER A FLOOD

Once the danger of a flood has passed, the Emergency Management Agency will make notifications through traditional media (radio, television), social media (Twitter, Facebook) and at Reception Centers where evacuees are located, that it is now safe to return to an affected area. Please follow the directions given by emergency officials to ensure a safe return to your home.

The following are some tips on what to do when you return home and how to clean up and restore your property. More specific and detailed information about safely cleaning flood affected property can be obtained by contacting your local health unit.

- ❖ Use a camera or video camera to record all flood damage. Inform your insurance agent or broker as soon as possible regarding any loss or damage.

Returning Home:

- ❖ Exercise extreme caution when returning to your home or business.
- ❖ Do not attempt to live in the house until you have taken the following precautions:
 - Have the electrical system checked by an electrician
 - Have natural gas / propane appliances checked by a qualified technician
 - Ensure the water supply is safe for drinking
 - Ensure your sanitation facilities are working
 - All flood-contaminated rooms have been cleaned and disinfected
- ❖ Make sure the building is safe to enter. Check for foundation damage, make sure all porch roofs and overhangs have their supports intact. If you see or suspect damage, call a building inspector.
- ❖ If you see downed powerlines or smell gas, leave the area immediately and contact 9-1-1
- ❖ Do not enter basements or other areas with floodwater still standing as it may contain hidden hazards and/or be electrically charged
- ❖ If your basement was flooded, do not switch on the electricity until the system has been checked by a qualified electrician

For detailed information on flood preparation and the remediation of your home, property, wells, cisterns, dugouts and dams, please go to the following website and open the “Get Ready for Flooding” link

http://www.aema.alberta.ca/personal_emergency_preparedness.cfm



RESOURCE LISTINGS

Government of Canada

- ❖ Environment Canada
 - http://www.weather.gc.ca/Canada_e.html
- ❖ Public Health Agency of Canada (Centre for Emergency Preparedness & Response)
 - <http://www.phac-aspc.gc.ca/cepr-cmiu/index-eng.php>

Public Safety Canada

- ❖ www.getprepared.ca

Canadian Red Cross

- ❖ www.redcross.ca

Government of Alberta

- ❖ Alberta Emergency Management Agency
 - <http://www.aema.alberta.ca/>
 - AEMA Response Readiness Center – 1-866-618-2362 (AEMA)
- ❖ Alberta Emergency Alert
 - <http://www.emergencyalert.alberta.ca>
- ❖ Alberta Environment
 - <http://environment.alberta.ca/> (Main Webpage)
 - <http://environment.alberta.ca/01655.html> (Flood Hazard Mapping)
- ❖ Alberta Health Services
 - <http://www.albertahealthservices.ca/8644.asp>
 - Health Link – 1-866-408-5465 (LINK)
- ❖ Alberta Municipal Affairs
 - <http://www.municipalaffairs.alberta.ca>
- ❖ Alberta Transportation
 - <http://www.transportation.alberta.ca>

Municipal District of Foothills #31

- ❖ Municipal Office - 309 Macleod Trail, Box 5605, High River, AB T1V 1M7
 - 403-652-2341
 - <http://www.mdfoothills.com>
- ❖ Public Works After Hours Emergencies
 - 1-888-808-3722
- ❖ Emergency Coordination Center
 - ONLY ACTIVE DURING AN EMERGENCY THAT REQUIRES OPENING OF THE ECC
 - 403-603-3557

