

# **FLOODING**

## **L'ÎLE-BIZARD–SAINTE-GENEVIÈVE**



### **PREVENTION FROM A FLOOD CRISIS**

## **CITIZEN'S GUIDE**

 /inondationsibsg

## A word from the Mayor



Dear citizens,

The 2017 spring floods have impacted our community. Despite all the difficulties, the citizens affected or not, with the help of the authorities, showed a lot of solidarity. As a result of these events, I made the decision to form a post-mortem committee to learn from this crisis. Given the changes affecting our planet, we have decided to put forward prevention measures for the future.

This guide, which you will read, is the result of research, expert consultations, meetings with committee members, citizens and the management of our borough. Our main objective was to find the best ways to equip our citizens to cope with a possible flood. To that end, we hope that this document will guide your actions in the event of another crisis.

I take this opportunity to thank the members of the post-mortem committee and the borough management for their excellent work.

In closing, I remind you that it is your responsibility to ensure the protection of your property. The borough and its authorities will be there to support you, as always.

Together, let's get ready!

A handwritten signature in blue ink, reading "N. Marinacci".

Normand Marinacci, LL.L.  
Borough mayor  
L'Île-Bizard – Sainte-Geneviève  
March 2018

## The 2017 spring flood

The spring floods of 2017 have affected hundreds of homes, caused water and sewer backups and mobilized a hundred borough employees along with more than 200 volunteers. Dozens of residences have been evacuated and millions of dollars have been invested because of the constant increase in the water level. We have prepared for your benefit the following document to help protect your home and family from future floods. Please note that this guide is for your information only, you must adapt it to your situation.

<b>WHY?</b>	Swelling of rivers, weather conditions (heavy rains, rapid snowmelt).
<b>WHEN?</b>	Usually between the beginning of April and the end of May.
<b>WHAT TO VERIFY?</b>	<p>Bathymetric rules installed in certain flood areas of the borough.</p> <p>A hydrometric sensor operated by Hydro-Meteo allows you to follow the evolution of the water levels at the following address: <a href="#">Lac des Deux Montagnes - MSP</a></p>
<b>WHAT TO KNOW?</b>	<p>Lac des Deux-Montagnes</p> <ul style="list-style-type: none"><li>• The minor flood threshold is 23.3 m</li><li>• The 2-year flood rating is 23.41 m</li><li>• The 20-year rating is 24.19 m</li><li>• The 100-year rating is 24,52 m</li></ul>
<b>WHERE GETTING INFORMED?</b>	<p>The page Facebook/<a href="#">inondationsibsg</a>, <a href="#">facebook/MTLibsg</a>, <a href="#">facebook.com/mairemarinacci</a>. There you will find continuous information. The borough website : <a href="http://www.ville.montreal.qc.ca/ibsg">www.ville.montreal.qc.ca/ibsg</a> or by email : <a href="mailto:arribsg@ville.montreal.qc.ca">arribsg@ville.montreal.qc.ca</a></p>

## BEFORE THE FLOOD

As of March each year, the borough conducts the verification of its resources and manpower in order to be ready to face a flood. Bathymetric rules will be installed at certain critical points of the main affected areas so that citizens can visually follow the variation of water levels. As a citizen, the borough reminds you that **individual responsibility is the key to a true success**.

Here are some actions you can take to be ready.

Whether it's a flood, a fire or another disaster, it's important to **make an inventory of your belongings**. You can make a list, take pictures or even a video. Such an inventory could greatly facilitate your task in the event of a claim to be made to your insurer or any other government agency.

## EMERGENCY KIT

Each residence should be equipped with an emergency kit that allows residents to provide for their needs without going out for at least 72 hours.



## Assemble one!

Checklist for a Basic Emergency Kit:

- ☐ Water — two liters of water per person per day (including small bottles)
- ☐ Non-perishable foods such as canned food, energy bars and dehydrated foods (replace water and food each year)
- ☐ Manual can opener
- ☐ Hand-crank or battery-powered flashlight (and spare batteries)
- ☐ Hand crank or battery operated radio (and spare batteries)
- ☐ First aid kit
- ☐ Extra keys for the car and the house
- ☐ Cash, traveler's checks
- ☐ Important family documents, such as your identity documents, insurance documents and bank statements
- ☐ Emergency Plan Guide - keep a copy in your kit, along with important contact information (<https://www.preparez-vous.gc.ca/>)
- ☐ Candles, matches or lighter
- ☐ Replacement clothing and shoes for all family members
- ☐ Sleeping bag or blanket for all family
- ☐ Toiletries and personal hygiene articles
- ☐ Hand sanitizer, toilet paper and garbage bags
- ☐ Prepaid phone card, mobile phone charger
- ☐ Food and pet supplies
- ☐ Infant formula, food and baby supplies
- ☐ Activities for children, such as books, puzzles or toys
- ☐ Prescriptions, medical equipment
- ☐ Utensils, plates and cups
- ☐ Bleach or tablets for water purification
- ☐ Basic tools (hammer, pliers, wrench, screwdriver, work gloves, pocket knife)
- ☐ Small stove with fuel and fuel
- ☐ Whistle (to attract attention)
- ☐ Electrical adhesive tape

## EMERGENCY TRAY

During a flood, it is important to be ready. To do this, there are several things to buy. Here is a list of items that we advise you to have on hand before reaching the level of a minor flood (to adapt according to your needs) :

- ☐ 1 pump 2''
- ☐ some pipes / hoses
- ☐ Pumps (one pump per window rim if applicable)
- ☐ 5 extensions wire
- ☐ 1 box of garbage bags
- ☐ 1 box of Ziploc
- ☐ 2 flashlight with batteries
- ☐ Generator (always place the generator outside the house)
- ☐ Drill
- ☐ 4 round containers (chlorine container type) to put in each window rim.
- ☐ 1 plastic trash bin
- ☐ 1 round shovel
- ☐ 20 moving boxes and duct tape
- ☐ 20 bricks (to elevate your furniture)
- ☐ Treated plywood (for each window)
- ☐ Treated plywood for the basement access if applicable
- ☐ A few pieces of wood 2" X 4"
- ☐ Cans of gasoline
- ☐ Full propane tank
- ☐ Portable radio with batteries

## **DURING THE FLOOD**

### **EMERGENCY RESPONSE**

Concretely for the citizens, the beginning of the emergency measures begins with the distribution of sandbags (for those who do not have any) and polythene by the borough, the installation of balloons in the storm sewers and municipal pumps.

Then, a volunteer leader will be assigned to different sectors following the triggering of the emergency measures. In coordination with the borough, this person will ensure the efficient and priority distribution of sandbags, the identification of the needs of citizens, the management of the distribution of resources and the deployment of volunteers among citizens.

In addition to 311, two emergency hotlines (514-620-6035 or 514-620-3098) will be put in place to ensure more effective communication for citizens. These numbers will be published by the previously mentioned channels.

## EMERGENCY PLAN IN 3 STEPS

We propose a plan of emergency in three detailed stages as well as the actions to do for each one of them.

### PLAN A

Protect your house.

PREPARATION	ACTIONS
<ul style="list-style-type: none"><li><input type="checkbox"/> Order sandbags</li><li><input type="checkbox"/> Get the emergency tray</li><li><input type="checkbox"/> Prepare the emergency bag</li><li><input type="checkbox"/> Gather important documents</li><li><input type="checkbox"/> Block the sewer pipes, the toilet, the shower and the sink or close the water</li><li><input type="checkbox"/> Empty the basement</li><li><input type="checkbox"/> Mount the basement furniture on bricks and put balloons in the water outlet</li><li><input type="checkbox"/> Bring furniture and boxes on the upper floors</li><li><input type="checkbox"/> Remove all harmful products and cleaners</li><li><input type="checkbox"/> Disassemble the furnace</li><li><input type="checkbox"/> Disassemble the water purifier</li><li><input type="checkbox"/> Refill the gas cans</li><li><input type="checkbox"/> Prepare plan B</li></ul>	<ul style="list-style-type: none"><li><input type="checkbox"/> Pick up furniture, toys, accessories in the yard</li><li><input type="checkbox"/> Install the sandbag dike</li><li><input type="checkbox"/> Remove the fence panels to build an effective dike</li><li><input type="checkbox"/> Dig holes in the copings and install the pumps</li><li><input type="checkbox"/> Put silicone and wooden planks around the windows</li><li><input type="checkbox"/> Waterproof the doors and windows of the basement</li><li><input type="checkbox"/> Put sandbags around the windows (dike)</li><li><input type="checkbox"/> Put a balloon in the water outlet</li><li><input type="checkbox"/> Secure all property or objects on your property that can be moved or swept away by the flood (trash, recycling bin, firewood, ...)</li></ul>



## **PLAN B**

Install the required pump (s) to prevent water from accumulating in your basement or even reaching your ground floor.

PREPARATION	ACTIONS
<ul style="list-style-type: none"><li><input type="checkbox"/> Raise the generator on pallets in front of the window <u>outside</u></li><li><input type="checkbox"/> Install the pump (s) and hoses</li><li><input type="checkbox"/> Prepare the suitcases of each family member with ALL the clothes and bring them to a safe place</li></ul>	<ul style="list-style-type: none"><li><input type="checkbox"/> Put a wooden board on the patio door and protect the windows</li><li><input type="checkbox"/> Put plastic and sandbags in front of the front door</li><li><input type="checkbox"/> Lock the shed</li><li><input type="checkbox"/> Put a balloon in the water outlet</li></ul>

## **PLAN C**

Secure and evacuate the house.

PREPARATION	ACTIONS
<input type="checkbox"/> Turn off electricity and gas. <input type="checkbox"/> Close all windows.	<input type="checkbox"/> Take the emergency bag.* <input type="checkbox"/> Lock all the windows and doors.

\* The emergency bag could contain the following items in a ziploc bag :

- ☐ Cell phone and charger
- ☐ Car keys
- ☐ Wallet
- ☐ Medication
- ☐ Hand cream
- ☐ ALL invoices (gaz, pumps, pipes purchased...)
- ☐ Insurance contract
- ☐ Letter of refusal or acceptance of insurance coverage
- ☐ Proof of residence of each person (bulletin for children, driving license for adults, passports ...)
- ☐ Tax accounts
- ☐ Detailed list of losses and property damages
- ☐ List of important telephone numbers
- ☐ Clothing and personal effects for a few days

Inform the borough of your departure (fill out the form), Hydro-Québec for electricity, heating (gas, oil), your insurance and all other suppliers.

## AFTER THE FLOOD

When the water is gone, there are several things to consider before returning to your home or even protecting your uninhabitable home..

Before re-entering your home, make sure that :

- you have the authorization of Hydro-Québec, Gaz Métropolitain and the other authorities;
- your structure is safe;
- the water is drinkable before consumption;
- your sewer system and bathrooms are functional;
- you take the necessary measures if you have a septic tank or artesian well;
- you wear appropriate shoes (rain boots or construction boots);
- you correctly follow the recommendations of your heating company;

Quickly :

- Take pictures and / or videos of the damage
- Remove all materials that have been in contact with contaminated water
- Check for mold, fungi
- Disinfect each part that has been in contact with the water
- Install dehumidifiers
- Discard food if your appliances have been shut down or if it has come into contact with water
- Secure your outdoor terrain (fill holes, remove waste ...)
- Have the water analyzed if you have an artesian well

## USEFUL TELEPHONE NUMBERS

L'Île-Bizard-Ste-Geneviève borough :

311, 514-620-6035, 514-620-3098

Hydro-Québec : 1-800-790-2424

Gaz Métropolitain : 1-800-361-8003

## IMPORTANT LINKS

Brochure « What to do in an emergency situation? »

↳ <http://www.urgencequebec.gouv.qc.ca/En/situation-urgence/Pages/Inondation.aspx>

Brochure «What should be done after heavy rains and floods? »

↳ <https://www.getprepared.gc.ca/cnt/hzd/flds-ftr-en.aspx>



## Changes to residences following the 2017 flood

Here are some examples of changes residents made to their homes following the floods.

- Purchase of a generator
- Added a 30 AMP plug to the ground floor
- Elevation of electrical installations in the basement
- Added electrical panel for pumps
- Adding a submersible pump tank (pit) or enlarging it
- Purchase of additional pumps
- Portable dykes
- Purchase of plywood and silicone
- Repairing cracks in the foundation
- Purchase of polythene rolls
- Added a "gate valve" or double-flap on the sewer in the house
- Study of the possibility of raising ground with plant barriers





# Maps of water plan around our borough

Map of watersheds to Montreal (Source: Hydro-Québec) and geographical map of Lac des Deux Montagnes (Source: City of Montreal)

