

CITY OF SURREY

# Fraser River Flood Preparation



RESIDENTIAL & BUSINESS

# Important Flood Warning

**FLOODING DUE TO SEASONAL SNOWMELT, ALSO KNOWN AS FRESHET, CAN OCCUR EACH SPRING ALONG THE FRASER RIVER.**

**LEARN HOW TO MINIMIZE FLOOD DAMAGE TO YOUR PROPERTY AND PROTECT YOURSELF.**

**THE CITY OF SURREY IS MONITORING THE POTENTIAL FLOOD RISK CLOSELY**

Dear Resident or Business Owner,

Flood warnings have been forecasted for the Fraser Valley area due to record snow packs along the tributary regions to the Fraser River. The current snow pack has been measured at a higher level than the annual average, and depending on the melt pattern, this may result in various degrees of flooding. The Ministry of Environment is able to measure the snow pack and compare it to previous flooding events, but exact forecasting of a flood is not possible at this time.

The immediate areas of concern in Surrey have been outlined on the map in this guide. If you live or operate a business within the affected area, please read the following information package carefully.

This brochure outlines the City's Four (4) Fraser River Flooding Preparedness Phases. At the time this package was mailed to you, the City has activated Phase 1.

**For the most up-to-date information on the Fraser River Flood Risks, visit our website at [surrey.ca/floodalerts](http://surrey.ca/floodalerts)**

**PLEASE READ THROUGH EACH PHASE THOROUGHLY SO YOU KNOW WHAT TO EXPECT AND HOW TO PREPARE.**

**IT'S IMPORTANT THAT YOU EDUCATE YOURSELF ON THE NECESSARY ACTIONS THAT MUST BE TAKEN, BASED ON THE SEVERITY OF THIS POTENTIAL FLOOD.**

# Fraser River Flood Preparedness Phases

<b>FRASER RIVER FLOOD RISK</b>			
<b>LOW</b>	<b>MODERATE</b>	<b>HIGH</b>	<b>EXTREME</b>
PHASE 1	PHASE 2	PHASE 3	PHASE 4
<b>GET INFORMED</b>	<b>PREPARE FOR IMMINENT FLOODING</b>	<b>PREPARE TO EVACUATE</b>	<b>EVACUATE</b>
<b>6.0 M AND RISING</b>	<b>6.5 M AND RISING</b>	<b>7.0 M AND RISING</b>	<b>7.5 M AND RISING</b>

Phases are triggered by change in water levels based on the Mission Gauge located 50 kilometres upstream of Surrey.

**FRASER RIVER FLOOD RISK** **LOW**

## PHASE 1 Get Informed

We will keep you informed and updated of all flood precaution warnings as they occur. The most up-to-date instructions will be provided to you via:

The Flood Information Hotline 604-591-4534

City's website [surrey.ca/floodalerts](http://surrey.ca/floodalerts)

Surrey's social media channels



TheCityofSurrey



@cityofsurrey

**IT IS IMPORTANT THAT YOU FAMILIARIZE YOURSELF WITH ALL PHASES OF THE FRASER RIVER FLOOD RISK TO ENSURE YOU ARE PREPARED IF SEVERE FLOODING OCCURS.**

## PHASE 2 – Prepare for Imminent Flooding Risk

Preparation for potential flooding is important to ensure the safety of your family and employees. Depending on the severity of this potential flood, following the instructions in this guide can help reduce the impact on your home, personal belongings, and business. In extreme flood events, it can even save your life.

**IF YOU PLAN TO MAKE A VOLUNTARY EARLY EVACUATION AT THIS TIME, IT IS IMPORTANT THAT YOU SELF-REGISTER WITH THE EVACUEE REGISTRATION AND ASSISTANCE (ERA) TOOL AT [ESS.GOV.BC.CA](http://ESS.GOV.BC.CA)**

### General Planning

**CREATE** an emergency plan and share it with your family and employees so everyone is informed on the necessary actions that should be taken, based on the severity of flooding.

For help with your plan, refer to Government of Canada's Your Emergency Preparedness Guide.

**REVIEW** the precautions listed under Phase 3. Make sure you understand what steps need to be taken, should the City ask that you prepare to evacuate.

**MAKE** arrangements to stay with friends or family away from the affected areas in the chance of evacuation and consider alternative living arrangements for pets.

The Emergency Support Services (ESS) Reception Centre can also provide accommodation during evacuation, in the event of a severe flood.

**PREPARE** an emergency survival kit that is easy to carry and waterproof. It should include:

- ▶ Food and water
- ▶ Necessary medication
- ▶ Medical first aid supplies
- ▶ Battery-powered radio and spare batteries
- ▶ Cell phone charger
- ▶ Identification for each member of your household
- ▶ Any important personal and family documents
- ▶ Flashlight with spare batteries
- ▶ Warm clothing, including waterproof outer garments and footwear
- ▶ Blankets
- ▶ Infant care items
- ▶ Personal toiletries

**TALK** to your neighbours and help each other out before, during and after a flood.

### Sandbagging

- ▶ If constructing a sandbag dike, build it on high ground close to your home or building
- ▶ This ensures fewer sandbags will be needed and the dike will be less exposed to nearby streams
- ▶ Dig a trench one bag in depth and two bags wide as a foundation for the dike structure
- ▶ To be effective, a dike must be three times as wide at its base as it is high

## INFORMATION FOR BUSINESSES

Follow these suggested actions to ensure minimum disruption to your business in the event of flooding:

### EMERGENCY PLAN

Create an emergency plan including a communications plan for employees. Keep up-to-date contact information for all employees.

### UTILITIES (ELECTRICITY, WATER, GAS)

When you are advised of immediate danger of flooding, shut off all power, water and gas services to your business. Relocate equipment and appliances to higher levels. For equipment that is too large to be relocated, remove motors, fans and controls and store at higher levels.

### HAZARDOUS MATERIALS

Materials like paints, solvents, oils, pesticides or any other environmentally-damaging chemicals should be moved to floors above ground level or removed from the site. Fill and anchor large fuel and water tanks and plug their vents. Propane bottles float, regardless of the amount of volume. They should be chained or secured on site, or removed from the site.

### RECORDS & ELECTRONIC DATA

Remove any records, files and computer equipment from basement areas and ground floors. Move them to higher levels or to another location unlikely to be impacted by flood waters. This may be a good time to back up your data to secure storage.

### INVENTORY AND ITEMS IN LONG-TERM STORAGE

These items should be relocated to higher levels or removed from your facility. If any items are stored outside the building they should be moved indoors. If any of these items will not be damaged by water, they should be tied down or moved inside.

### SHOP FLOORS AND WORK AREAS

These areas should be clean of debris, oils, etc. Secure tanks from floating.

### LOGISTICS

Make arrangements to defer or redirect shipments. Secure or relocate valuables. Move vehicles to high ground.



# PHASE 3 – Prepare to Evacuate

## LISTEN FOR INSTRUCTIONS

**Have your emergency survival kit ready** When instructed, follow the precautions below for your safety and to help minimize the damage to your personal property or business.

### ELECTRICAL SERVICE

- ▶ Shut off all power to premises
- ▶ Do not attempt to turn off power if the room is already flooded
- ▶ If the main switch is in an area that is already wet, stand on a dry board and use a dry stick to turn switch off

### ELECTRICAL APPLIANCES

- ▶ Disconnect all electrical appliances, and if possible, move them to a higher level
- ▶ Thermally insulated appliances such as freezers, refrigerators and ranges should be given priority
- ▶ Any appliances that cannot be moved should have motors, pumps, fans, etc. removed to higher levels

### GAS OR OIL FURNACES AND APPLIANCES

- ▶ Oil or water tanks will float if not full. Fill if possible, and then plug vent holes. If you are unable to fill, weigh down with sandbags or wedge against a solid object

### PLUMBING FIXTURES AND WATER SUPPLIES

- ▶ Turn off water supply
- ▶ Plug all basement sewage connections, e.g. toilet, sinks, showers, etc. with a plug or other device. The plug should be held in place with a weight or wood brace to the joist above

### OTHER PRECAUTIONS

- ▶ Pesticides, weed killers, fertilizers and other articles that may cause pollution should be moved to higher levels
- ▶ To relieve overloading the sewer system, disconnect any downspouts draining to them
- ▶ Move or remove all furniture and valuable items that could be damaged by flooding or that may float and cause damage



# PHASE 4 – Evacuate

## LISTEN FOR INSTRUCTIONS

Self-register with the Evacuee Registration and Assistance (ERA) Tool at [ess.gov.bc.ca](http://ess.gov.bc.ca).

### Leave the area immediately when you are instructed to do so

Vacate your home or business when you are advised to do so by emergency personnel. Ignoring such a warning could jeopardize the safety of your family, your employees, yourself and emergency response teams.

### Don't try to be a hero

Leave when you are asked to leave. Our emergency response teams are equipped and trained to deal with a flood situation. Thank you for your full cooperation in ensuring a smooth, safe evacuation and an expedient recovery.

### Remember to:

TAKE YOUR EMERGENCY SURVIVAL KIT

LOCK YOUR HOME

TAKE EXTRA CARE WHEN DRIVING

- ▶ Avoid driving through flood waters. If your car stalls in a flooded area, abandon it. Look for information signs and emergency personnel.

SELF-REGISTER WITH THE EVACUEE REGISTRATION AND ASSISTANCE (ERA) TOOL AT [ESS.GOV.BC.CA](http://ESS.GOV.BC.CA)

- ▶ So that you can be contacted and reunited with your family and loved ones as well as receive Emergency Support Services including accommodation assignment.



# Emergency Support Services

The role of the Emergency Support Services team, in partnership with the Canadian Red Cross, is to ensure that evacuated residents have the support they require until they are able to make a safe return to their homes.

## ▶ IN PHASE 1

The Emergency Support Services team will assist in the preparation of communications to ensure that the affected residents and businesses are prepared for potential flooding or evacuation

## ▶ IN PHASE 2

Individuals and families may choose to make an early evacuation. It is essential that they register with the ESS team through the ERA tool at [ess.gov.bc.ca](http://ess.gov.bc.ca) to provide emergency contact information.

## ▶ IN PHASE 3

In the case of evacuation, an ESS reception centre may be established in the North Surrey area. Evacuees who have not already self-registered, or are unable to do so, should go directly to the ESS Reception Centre. Registering allows ESS responders to assign accommodation and provide referrals for other necessary services.

## ▶ PHASE 4

The ESS Reception Centre will be kept open until evacuees have secured accommodation, and then will be scaled down for the duration of the flood

Information for safe return to homes and businesses will be posted on [surrey.ca/floodalerts](http://surrey.ca/floodalerts)

ESS is available to evacuees for up to 72 hours following a disaster. The Canadian Red Cross may assist individuals and families in the recovery stage through their disaster relief program.

# Returning After a Flood

## LISTEN FOR INSTRUCTIONS

Once the flood waters have receded, the City will assess the safety of the area and inspect the water supply to ensure it is safe for use. The City will also ensure that adequate toilet facilities are available before it advises that it is safe to return.

Information for safe return to homes and businesses will be posted on [surrey.ca/floodalerts](http://surrey.ca/floodalerts)

## Preparing for Clean Up

Before moving back in, it is important to restore your home or business to good order as soon as possible to protect your health and prevent further damage to the building and contents.

Clean-up could be a tedious and dangerous task. Floodwater can pick up sewage and chemicals from roads and factories. Be careful walking around. Floors may be covered with mud and debris, including nails and broken glass. Small animals may have been forced to leave their homes and take up residence in your building. Be cautious when picking up or turning over items.

Every flood-contaminated room, including floors will have to be thoroughly cleaned, disinfected and surface-dried. All contaminated dishes and utensils must be thoroughly washed and disinfected. Any food, medicine, cosmetics, and toiletries exposed to flood waters must be disposed of.

For clean up measures, visit Government of Canada website [getprepared.gc.ca](http://getprepared.gc.ca). Select 'Hazards and Emergencies' and 'After an Emergency'.



## DO NOT RE-ENTER YOUR BUILDING IF THERE ARE ANY SIGNS OF STRUCTURAL DAMAGE

### Important Safety Measures

#### ELECTRICITY

Exercise caution when re-entering your home or business. Avoid electrical shock by wearing rubber boots in an area flooded with more than 5 cm (2 inches) of standing water. Do not use flooded appliances, electrical outlets, switch boxes or fuse-breaker panels until they have been checked by BC Hydro.

Keep extension cords out of the water. If the power is on in the flooded area, shut it off immediately at the breaker box. If conditions are wet around the breaker box, stand on a dry board and use a dry stick to turn off the switch. Consult with BC Hydro if you require assistance.

Do not use matches, cigarette lighters or any other source of open flame(s) since gas may be trapped inside. Instead, use a flashlight to light your way. Leave the power off until an electrician has inspected your system for safety.

#### HEATING SYSTEMS

Whether you use a wood, gas or electrical heating system, ensure that you have it thoroughly inspected by a qualified technician before using it again. If they have been soaked, replace the furnace blower motor, switches and controls. Flooded forced-air heating ducts and return-duct pans should be either cleaned or replaced. Replace filters and insulation inside furnaces, water heaters, refrigerators, and freezers if they have been wet.

Do not heat your home or business to more than 4 degrees Celsius (about 40 degrees Fahrenheit) until all water is removed. If you use gasoline, kerosene or propane-powered pumps or heaters, buy and install a carbon monoxide sensor. Combustion devices can produce large amounts of lethal carbon monoxide when out of tune or improperly ventilated.

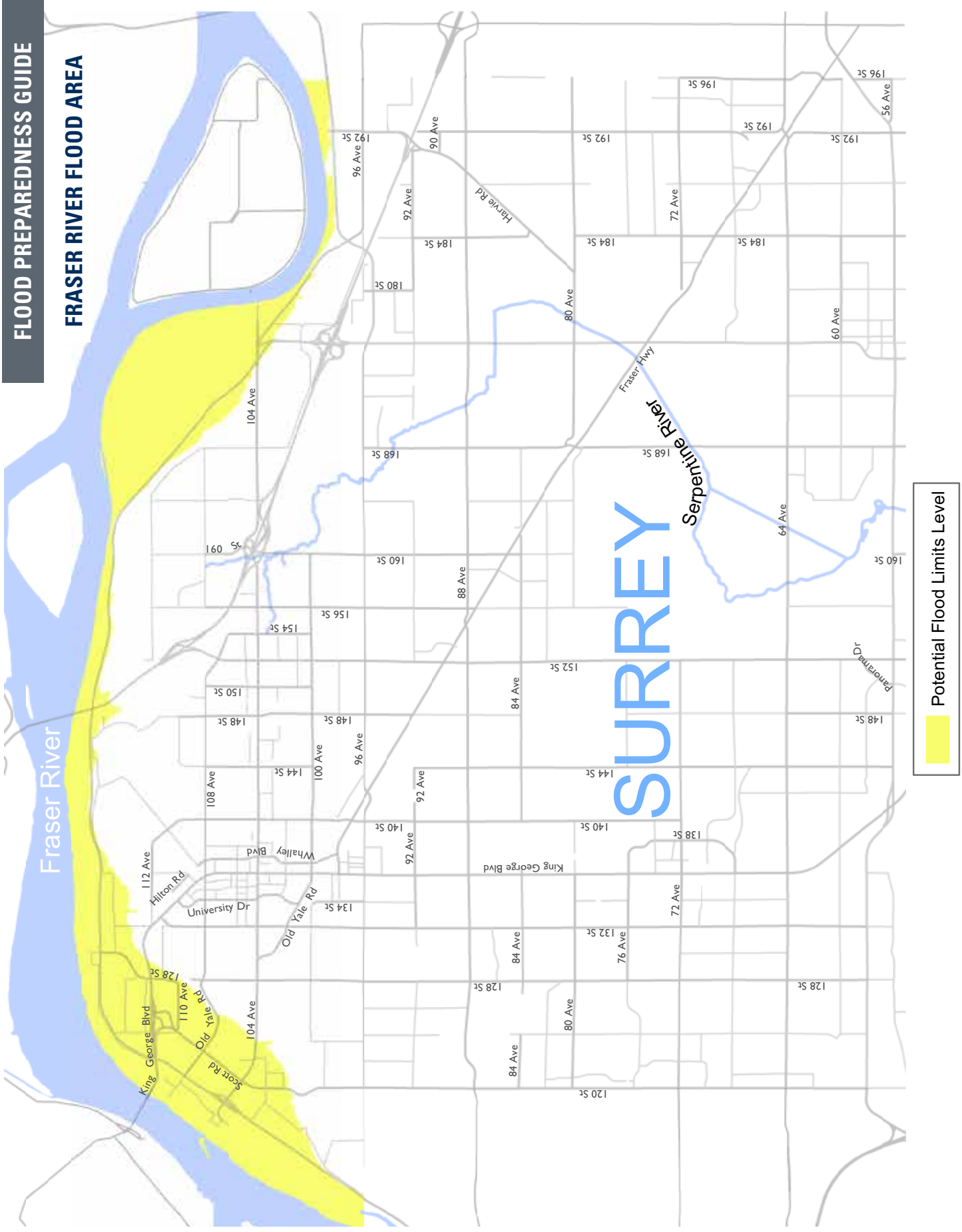


### Water Damage

Household items that have been flood-damaged will have to be bagged, tagged and discarded according to local regulations.

Remember to store all valuable papers that have been damaged in a freezer until they are needed. Record details of flood damage, by photograph or video if possible. Register the amount of damage to your home with your insurance agent.

**FRASER RIVER FLOOD AREA**



# Important Contact Information

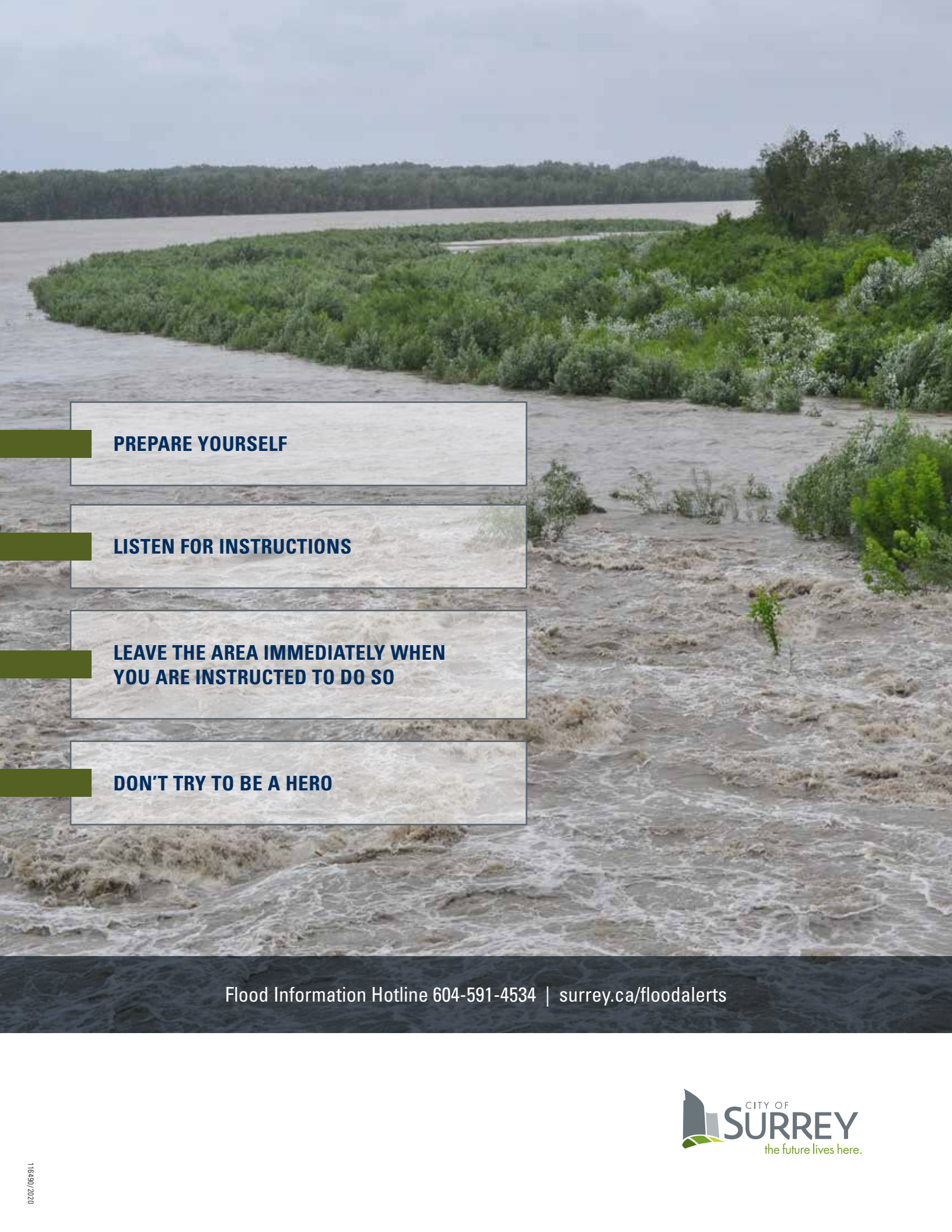
## Call 911 in an emergency for Police, Fire or Ambulance

Surrey Flood Information Hotline	604-591-4534
Surrey Emergency Program	604-543-6795
Provincial Emergency Program	1-800-663-3456
Surrey Fire Service (non-emergency)	604-543-6700
Emergency Support Services	604-501-5000
Surrey RCMP (non-emergency)	604-599-0502
BC Ambulance Service (non-emergency)	604-872-5151
City of Surrey Engineering	604-591-4340
Surrey Memorial Hospital	604-581-2211
Peace Arch Hospital	604-531-5512
South Fraser Public Health Unit	604-587-7610
Environment Canada (weather office)	1-800-668-6767
Red Cross	604-709-6600
Surrey Animal Resource Centre	604-574-6622
Surrey Food Bank	604-581-5443
FortisBC (emergency)	1-800-663-9911
(non-emergency)	604-576-7000
BC Hydro (power outages)	1-888-POWERON
(non-emergency)	604-224-9376
ICBC (dial-a-claim)	604-520-8222
School District 36	604-596-7733
Office of the Fire Commissioner	1-888-988-9488
Legal Aid – Legal Services Society	604-408-2172
Medical Services Plan of BC	604-683-7151
Victim Services (Surrey)	604-599-7600
BC Mental Health Society	604-524-7000
Poison Control	604-682-5050

Make sure you, your family and your business are ready for the first 72 hours after a major emergency happens.

[surrey.ca/floodalerts](https://surrey.ca/floodalerts)





**PREPARE YOURSELF**

**LISTEN FOR INSTRUCTIONS**

**LEAVE THE AREA IMMEDIATELY WHEN  
YOU ARE INSTRUCTED TO DO SO**

**DON'T TRY TO BE A HERO**

Flood Information Hotline 604-591-4534 | [surrey.ca/floodalerts](https://surrey.ca/floodalerts)