



PreparedBC

Flood Preparedness Guide





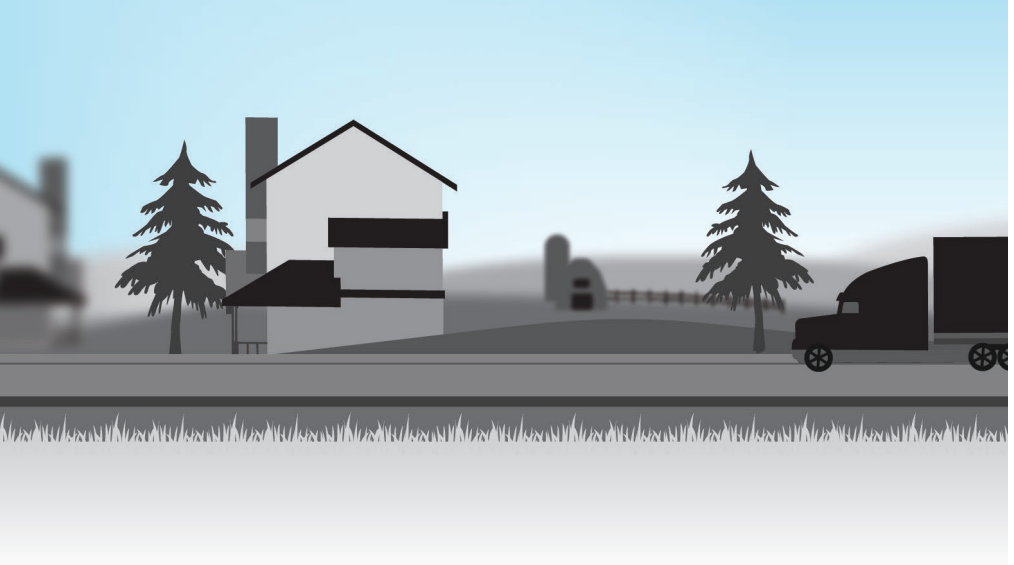
Floods in BC

Floods are common in BC and can happen at any time of year. The most severe floods usually occur in spring and early summer due to heavy rain and melting snow. They can also be caused by storm surges, ice jams or damage to structures like dikes or dams.

In some areas of BC, climate change and related extreme weather events have increased the flood risk. Rising temperatures, changing freeze-thaw cycles and rising sea levels can all contribute to flooding.

Floods can damage buildings, cause power outages, disrupt transportation and create landslides. Fast-moving flood waters can also be a hazard for people.

If you live somewhere that could experience a flood, this guide is a must-read! It will help you prepare and know what to do if a flood occurs.



Before a Flood

HAVE A PLAN

Having an emergency plan is one of the best steps you can take to prepare for a flood. It can be as easy as starting a conversation at home.

The following section will walk you through topics to consider as part of your basic emergency plan. As you discuss them, use the spaces provided to write notes.

TIP: You can also find and download our fill-in-the-blanks emergency plan at: preparedbc.ca/emergencyplan

My Emergency Meeting Place
10 min away



CHOOSE EMERGENCY MEETING PLACES

During an emergency, such as a flood, it's important to gather with the people you live with to make sure everyone is safe. You might not be together when disaster strikes.

You can make it easier to find each other by choosing emergency meeting places ahead of time. Pick one spot close to your home, such as a nearby hill or a neighbour's house. Then pick an alternate spot away from your immediate neighbourhood, such as a library or community building.



Our meeting place close to home is:



Our meeting place away from home is:

KNOW HOW YOU WILL COMMUNICATE

It's a good idea to save or write down a list of people you can call for help during an emergency.

Ideally, at least one contact should live far enough away that they won't be affected by the same emergencies. It's also helpful to have at least one contact who lives in your community.

Name	Phone & Email
.....	
.....	
.....	
.....	

Follow these guidelines for staying connected:



Keep your phone fully charged. Conserve battery life by dimming your screen and avoiding power-hungry apps and video.



Consider a virtual meeting place. Create a closed Facebook group for everyone in your home to check in during an emergency.

TIP: Details like contact info and meeting places can change over time. Make sure you review and update your emergency plan at least once every year.

KNOW WHERE TO FIND INFORMATION

For reliable information during an emergency, always start with local sources. This could be your band office, municipality, regional district or local authority. Know in advance how they'll share vital information, whether it's through their website, social media, phone or local radio.



Websites

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Social Media

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Phone Numbers

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Radio Stations

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EmergencyInfoBC

TIP: Depending on the emergency, you can also check provincial channels for information. EmergencyInfoBC shares information about large emergencies that may require support from the provincial government:



[EmergencyInfoBC.ca](https://www.emergencyinfobc.ca)



[@EmergencyInfoBC](https://twitter.com/EmergencyInfoBC)

RESEARCH INSURANCE COVERAGE

Check with your insurance representative to determine if sewer backup and/or residential flood insurance is available for your property. You can also contact the Insurance Bureau of Canada at 1-844-227-5422 for information regarding home insurance. Add your insurance information to your emergency plan to ensure it's handy when you need it.

MAKE GRAB-AND-GO BAGS

If flood waters get too close to your home, it may become unsafe to stay and you'll need to leave quickly. This is easier to do if you take time to build grab-and-go bags in advance. Fill backpacks or carrying bags with the supplies everyone in your household will need while away from home.

Everyone's needs will be different, but our checklist on the next page is a good place to start.

TIP: For some, it's easier to gather these items over time, instead of all at once. Get more ideas on building grab-and-go bags at preparedbc.ca/grab-and-go



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Basic Survival

- Bottled water
- Ready-to-eat food, like granola bars

Warmth & Safety

- Emergency blanket
- Seasonal clothing
- Flashlight
(battery-powered or hand-crank)
- Whistle

Health & Sanitation

- First aid kit
 - Toothpaste, toothbrush and other toiletries
-

If applicable:

- Spare glasses/contact lenses
- Personal medication

Communication

- Phone charger
- Battery bank
- Handheld radio
(battery-powered or hand-crank)
- Extra batteries

Peace of Mind

- Pen and notepad
- Cash in small bills
- Copy of vital documents such as insurance papers
- Copy of your emergency plan

TIP: Food, water, batteries and other items in your grab-and-go bag can expire over time. Check and replace the contents at least every 6 months.

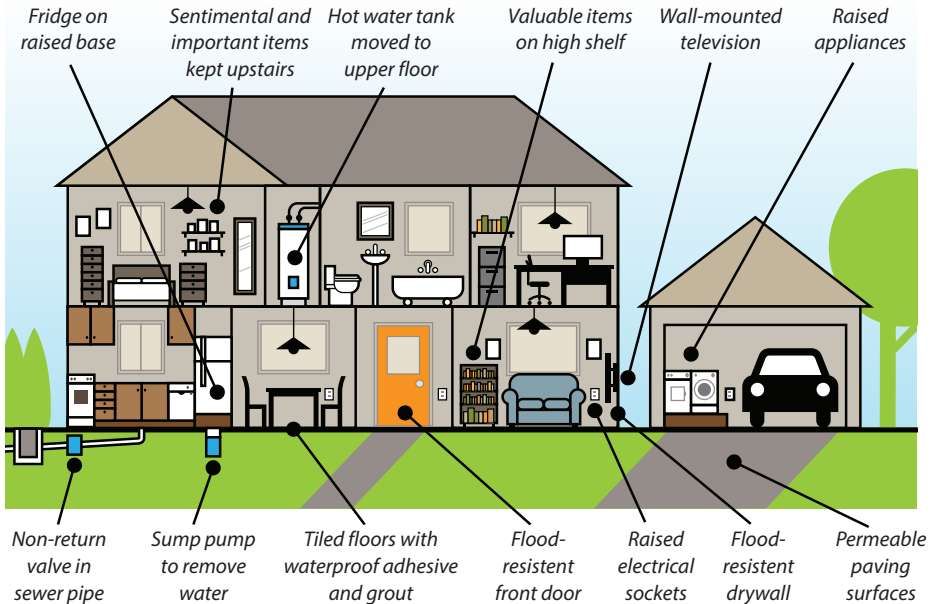
An easy way to remember is to refresh your supplies when the clocks spring forward and fall back!

PROTECT YOUR HOME & PROPERTY

There are simple steps you can take in and around your home and property to help prevent flood damage.

Here are steps everyone should take:

- Store valuables and important items or documents in water-tight containers or in higher places, like on a tall shelf or upper floor.
- Clean your gutters regularly.
- Keep nearby storm drains clear of debris.
- In the winter, clear snow at least 3-5 feet away from your home's foundation.



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If you can, also consider these home improvement projects:

- Raise large appliances, furnaces, hot water heaters, and electrical panels onto wood or cement blocks above the potential water level. (If an item can't be raised, consider anchoring it and protecting it with a floodwall or shield.)
- Anchor any oil tanks or fuel supplies to the floor.
- Install backflow valves on basement floor drains, washing machine drains, toilets and sink drains.
- Install a sump pump.
- Install tiled floors with waterproof adhesive and grout.
- Install flood-resistant exterior doors.
- Raise electrical sockets on the ground floor of your home.
- Install flood-resistant drywall.
- Apply weather protection sealant around basement windows and the base of ground-level doors.
- Install permeable paving surfaces for sidewalks and driveways.
- Make sure your gutter downspouts extend at least 2 metres from your basement wall. Water should drain away from your property and neighbouring properties.
- Install permanent safeguards, such as self-closing flood barriers, designed to keep water out of your home for as long as possible.
- Enhance your landscaping so water drains away from your foundation.



During a Flood

IF FLOODING IS IMMINENT

The most important thing you can do is heed all evacuation alerts and orders and follow all instructions from your band office, municipality, regional district or local authority. Trust in your preparedness work and your emergency plan.

If flooding is imminent but you have not yet been instructed to evacuate, follow these tips:

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- Monitor local radio stations, television news and social media for the latest information from your local authorities on sandbagging stations, possible evacuation procedures and routes.
- If a flood warning is in effect (**see page 14**), shut off electricity to areas that are at risk of flooding and move small appliances, electronics and smaller furniture to upper floors or areas not likely to be affected.

FLOOD ADVISORIES AND WARNINGS

The River Forecast Centre issues advisories and warnings about current or expected flood risks. There are three stages of notification:

- 1 High Streamflow Advisory**

River levels are rising or expected to rise rapidly, but no major flooding is expected. Minor flooding in low-lying areas is possible.
- 2 Flood Watch**

River levels are rising and will approach or may exceed the river bank. Flooding of areas adjacent to affected rivers may occur.
- 3 Flood Warning**

River levels have exceeded the river bank or will exceed the river bank imminently, and flooding of areas adjacent to affected rivers will result.

These advisories and warnings can be found on the River Forecast Centre website: bcrfc.env.gov.bc.ca/warnings/index.htm

TIP: You can also follow @EmergencyInfoBC on Twitter to get notifications for Flood Watches and Flood Warnings.



EmergencyInfoBC



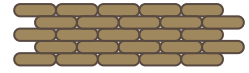
@EmergencyInfoBC

BUILDING A SANDBAG DIKE

You can prevent or reduce flood damage to your home by building a sandbag dike. It takes two people about one hour to fill and place 100 sandbags, giving you a 1-x-20-foot wall. Contact your local government for information on obtaining sandbags.

BAGS REQUIRED PER 100 LINEAR FEET OF DIKE

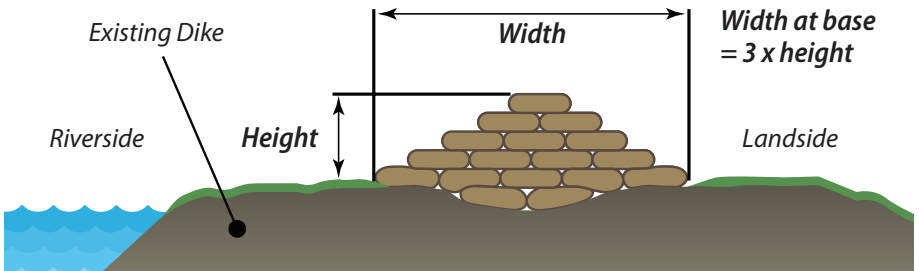
Height above dike	Bags required
1/3 metre	600
2/3 metre	2,000
1 metre	3,400



Plan of bottom layer



Method of lapping bags



- Locate the sandbag dike on high ground as close as possible to your home.
- Dig a bonding trench, one sack deep by two sacks wide.
- Alternate the direction of sacks (e.g. bottom layer length-wise with dike, next layer crosswise).
- Sacks should be approximately half-filled with clay, silt or sand.
- Tying or sewing of sacks is not necessary.
- Lap unfilled portion under next sack.
- Press firmly in place.



KNOW YOUR EVACUATION STAGES

Be prepared. Understand the evacuation stages used in BC, and what to do for each. This will help you respond quickly and confidently.

Evacuation Alert:

Be ready to leave on short notice.

Evacuation Order:

You are at risk. Leave IMMEDIATELY.

Evacuation Rescind:

All is now safe and you can return home.

Evacuation Alert

This means be ready to leave on short notice. If you're under alert, take the following steps:

- Gather your grab-and-go-bags, emergency plan, copies of important documents and cherished mementos. Have them at the front door or already packed in your vehicle.
- Make sure vehicles are parked away from streams and waterways.
- Remove toxic substances such as pesticides and insecticides from the flood area to prevent pollution.
- Do NOT attempt to shut off electricity if any water is present.
- Use sandbags to block floor drains and toilets to prevent sewage back-up.



TIP: Always keep your vehicle's gas tank half full in case you need to evacuate on short notice.

Evacuation Order

This means you are at risk and must leave IMMEDIATELY. Follow all directions from officials and evacuate using the route(s) they've identified. Heed the following advice as you evacuate:

- Do not attempt to cross rivers or flowing streams.
- Do not drive or walk across flooded roads – 15 centimetres of rushing water can knock an adult off their feet; 30 centimetres of water can sweep away a vehicle.
- If your car begins to flood, abandon it quickly and head to higher ground.

An Emergency Support Services (ESS) reception centre may be opened for evacuated residents who are without access to other supports, such as insurance coverage or friends and family who can help. Services may include: food, lodging, clothing, emotional support, information about the crisis and family reunification.

Evacuation Rescind

Once officials determine the situation is safe, the evacuation order will be rescinded and you can return home. Continue to stay tuned for other possible evacuation alerts or orders.



COPING WITH FLOOD STRESS

Alerts, evacuations, loss and worry – floods can affect us all. If you are feeling stressed or anxious, here are some things you can do to help you cope.

Take care: Stress takes a toll on your physical and mental health. Eating well, exercising and getting enough sleep lowers stress and helps us cope.

Reach out: Talking helps, whether it's with family, friends, a doctor or counsellor. Crisis lines are available to listen and help at any time. You can contact:

- BC Mental Health Support Line, available 24 hours a day at 310-6789 (no area code).
- KUU-US Indigenous Crisis Line at 1-800-588-8717.

Help others: Take care of the vulnerable. Assisting others can help you regain a sense of purpose and community as you confront the challenges together.



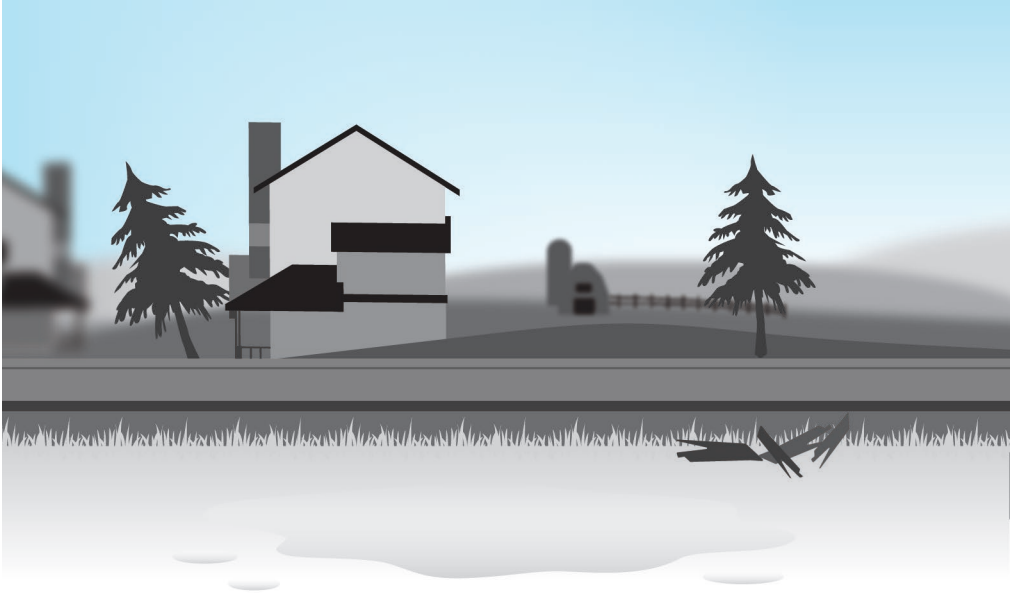
After a Flood

RETURNING HOME

Returning home after widespread flooding can be overwhelming. Use extreme caution and take it one step at a time.

Talk to your neighbours. We're all in this together and reaching out to people in your community, as well as accepting aide, can be both comforting and helpful.

Consider creating a cleanup and recovery plan. Just like having an emergency plan, it will help you organize what needs to be done to return your home to normal.



Tips for returning home:

- Do not return home until authorities say it is safe and they have cleared your home of structural, electrical or other hazards.
- Stay out of any buildings if floodwaters remain around or in the building.
- Do not enter a building if you see buckled walls or floors.
- Ensure your electricity has been turned off. Do NOT attempt to turn the power back on in your home until the wiring has been inspected by a professional.
- If water needs to be drained, do so slowly addressing about 1/3 of the water per day. This ensures the structure of your home won't buckle.
- Do not heat your home above the temperature outside until all water has been removed.

MANAGING MOULD AND HEALTH RISKS

Cleaning up after a flood can pose health risks. You may see or smell mould on clothing, drywall, furniture, cardboard boxes or books, but it may also be hidden under or behind items like carpet, cushions or walls.

Mould grows in wet and damp conditions. It's less likely to grow if your home and furnishings are dry within 48 hours after a flood. This will help prevent mould, which can continue to damage your home long after.

Pregnant women, children, the elderly, pets and those with asthma, allergies or other health problems should not be in or near the area where the mould is being cleaned up.

Identify all mouldy items. Place and seal items in a plastic bag and dispose it. It's important to wash your hands thoroughly after mould cleanup, as well as change your clothes.

If you rent your home, speak to your landlord about any moisture or mould problems. It may be the responsibility of the owner or landlord to address the problem. If you own a condo unit or workspace, be sure to consult with the Condominium Board before taking any action.

Consider seeking professional assistance to identify the right corrective actions to be taken inside your home.

TIP: Before you start your cleanup activities, call your insurance representative or company. Most insurers have a 24-hour claims service. See **page 25** for more info.

HOW TO CLEAN YOUR HOME

Before you begin cleaning up, be sure to open all interior and exterior doors and windows, allowing air to flow freely through the space. Do not use fans if mould is present, as this can spread the mould to new areas.

Scrub all washable surfaces with a household bleach solution or unscented soap solution. These areas include window sills, concrete surfaces, hard surfaces and tiles. Dry the surfaces quickly.

Essential list of items for cleaning mould:

- Bucket
- Stiff bristle brush
- Cleaning clothes
- Goggles
- N-95 respirators, or ones that provide more protection (check packaging for “N-95”) available at hardware stores. Be sure to read the directions for proper use.
- Protective rubber gloves
- Waterproof rubber boots
- Dish detergent
- Household bleach

Cleaning solutions:

- A bleach solution is made up of 1-part bleach to 10-parts clean water.
- You can make a baking soda solution by adding a ¼ tablespoon of baking soda to a spray bottle of warm water.
- A soap solution can be made by combining unscented detergent and warm water.



Mould cannot be properly cleaned from many porous materials. Instead, dispose of materials that cannot be dried within 48 hours.

What to discard:

- Remove and discard flooring that has been soaked by flood water.
- Remove all wet drywall, going at least 30 cm above the flood water level.
- Dispose of all wet items that do not dry quickly, including:
 - insulation and drywall
 - paper and cardboard products
 - carpets
 - pillows and cushions
 - particleboard furniture
 - furniture coverings
 - mattresses and box springs
 - perishable foods, foods or medicines packaged in cardboard or plastic
 - stuffed toys

NOTE: Mould that comes back after cleaning is usually an indication that the source of moisture has not been removed. If this happens, always seek professional assistance.

NOTE: Painting or caulking over mouldy surfaces like drywall does NOT kill mould and does not stop it from growing back. If the mould is underneath the paint, the drywall will need to be removed and replaced.

PSYCHOLOGICAL CARE

Fear and anxiety are natural reactions to stressful events and can stir up past traumas. To help yourself and your loved ones:

- Accept offers of help. Seek counselling or spiritual guidance.
- Focus on positive memories and the skills you've used to get through other hard times.
- Be aware of how children are reacting. Reassure them and encourage them to express themselves.
- Give yourself and your loved ones permission to grieve.
- Practice cultural or spiritual customs that bring you comfort.

With support, most people recover within a few weeks. However, some will need more time and help to heal. Watch for warning signs of extended anxiety and contact a medical professional or trusted community leader if they last more than two to four weeks:

- Trouble with eating and sleeping.
- Feeling depressed or hopeless; showing low energy or crying often.
- Being anxious and fearful.
- Trouble focusing on daily activities.
- Recurring thoughts or nightmares.

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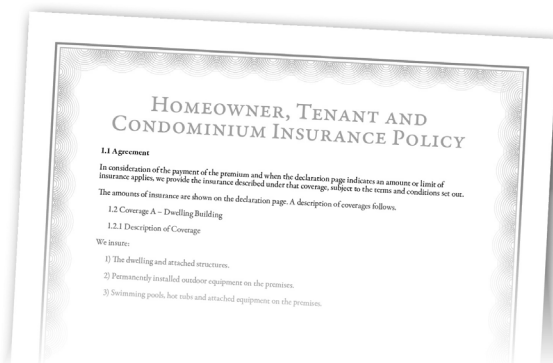
TIP: Don't be afraid to seek help after a traumatic event, such as a flood and related evacuation. BC's Mental Health Support Line is open 24 hours a day at 310-6789 (no area code). Counselling is also available through the First Nations Health Authority. Visit www.fnha.ca or call the KUU-US Indigenous Crisis Line at 1-800-588-8717.

CLAIMING INSURANCE

Before you start your cleanup activities, call your insurance representative or company. Most insurers have a 24-hour claims service. Be as detailed as possible when providing information.

List all damaged or destroyed items. If possible, assemble proofs of purchase, photos, receipts and warranties. Take photos of the damage. Keep all receipts related to clean up and living expenses if you've been displaced. Ask your insurance representative about what expenses you may be entitled to and for how long.

If you do not know the name of your insurer or your insurance representative, contact Insurance Bureau of Canada's Consumer Information Centre at 1-844-2ask-IBC.



ADDITIONAL RESOURCES

PreparedBC: www.PreparedBC.ca

EmergencyInfoBC: www.EmergencyInfoBC.ca

River Forecast Centre: bcrcfc.env.gov.bc.ca/warnings/index.htm

First Nations Health Authority: www.fnha.ca

First Nations' Emergency Services Society: www.fness.bc.ca

Government of Canada: www.canada.ca/Flood-Ready

Natural Resources Canada: www.nrcan.gc.ca/hazards/floods

FloodSmart Canada: floodsmartcanada.ca

Ready.gov: www.ready.gov/floods

DriveBC: www.DriveBC.ca

Canadian Mental Health Association, BC Division: cmha.bc.ca

HealthLinkBC: www.healthlinkbc.ca

BC Centre for Disease Control: www.bccdc.ca

Insurance Bureau of Canada: www.IBC.ca

Notes:



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