



Peacocke Community Resilience Plan Household Booklet

Helping you understand and prepare
for natural hazards and climate
change risks in your community



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Introduction

This booklet has been designed to help Peacocke residents understand the risks to the community – natural, man-made and climate change – and how they can prepare for these risks, and what to do if a hazard event occurs.

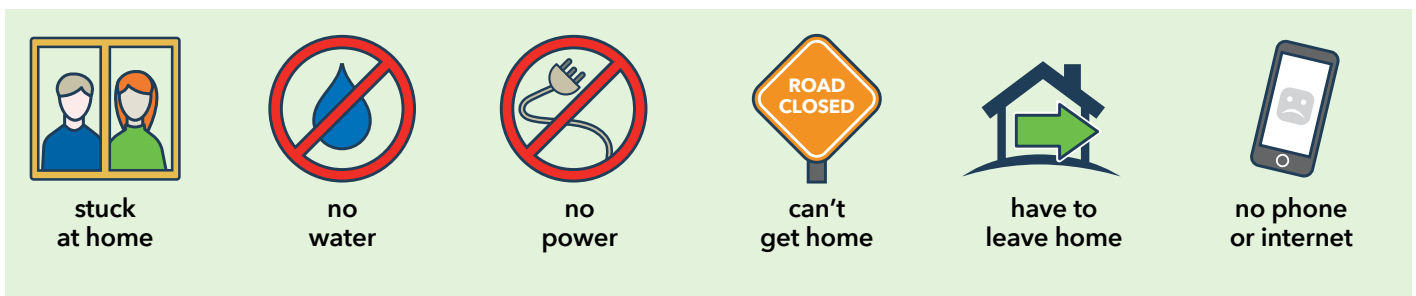
Peacocke is registered for a Green Star Communities rating through the New Zealand Green Building Council. This means the development is being assessed across a range of criteria around the quality of its sustainability features and as a healthy place to live.

Hamilton's natural and man-made hazards

Like the rest of New Zealand, Hamilton has its fair share of hazards to contend with. Here in Kirikiriroa, we can expect to be impacted by earthquakes, floods, severe storms and even ashfall from distant volcanoes. Some of these natural hazards, including floods and severe storms, are exacerbated by climate change. Natural hazards aren't our only risk. Like any large city, we are at risk of terror attacks, major hazard incidents and lifeline disruptions.

Hazard impacts

The impacts from hazards are what really cause issues. You might even experience some of these even if the hazard hasn't impacted you directly. Check out some of the impacts you might encounter below. Knowing what to expect allows you to prepare better.



How are we responding to these risks?

Hamilton City Council has a Civil Defence Emergency Management (CDEM) programme that works to get the city ready for an emergency and responds when one happens. Council staff are trained to respond to an emergency in our state-of-the-art Emergency Operations Centre.

Other areas of the council work to minimise and mitigate our risk where possible. For example, our flood team works to understand and mitigate flood risks while our building control team is actively working to minimise the risks from earthquake prone buildings throughout the city.

We also work to educate and inspire change in the general public to understand potential impacts and actions they can take to keep themselves safe. For information on how to get ready for an emergency, check out **getready.govt.nz**

What is climate change?

Our climate is a result of patterns in temperature, rain, wind, and sunshine. A stable climate is critical to the health and wellbeing of people and the planet.

As we use fossil fuels like oil, coal and gas in our day-to-day activities (such as for transport, power, etc.), the carbon dioxide and other greenhouse gas emissions that are released act as a blanket that traps heat in our atmosphere. This heat disrupts our climate, causing climate change.

We are already experiencing the effects of climate change, such as more extreme heat and rainfall, flooding, and drought. These weather events have widespread impacts on our lives and can also lead to injury and even death. The impacts of climate change, such as changes in the foods we can grow due to disrupted weather conditions, or deterioration of natural spaces that we care about like the Waikato River, also impact our wellbeing.

We have an opportunity to reduce the impacts of climate change by changing the way we live, work, and play so we don't rely on fossil fuels. We also need to prepare our communities and environment for the impacts we have already locked in.

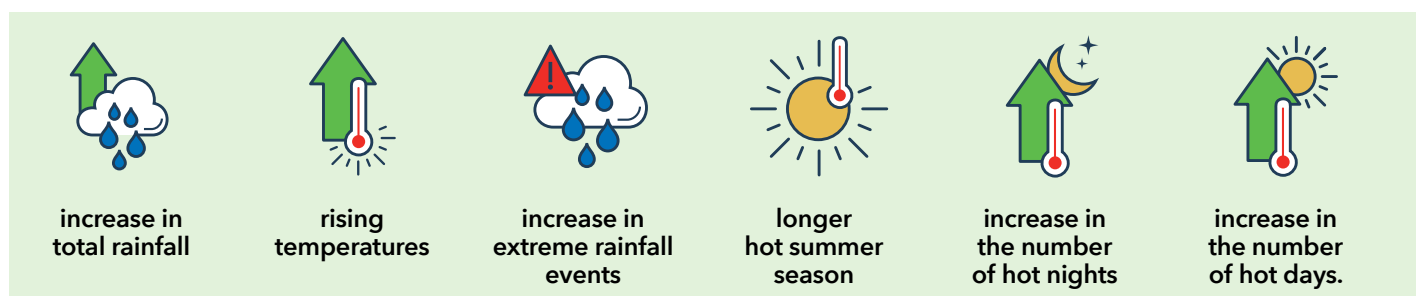
How is Council responding to climate change?

Hamilton City Council has a strategy for responding to climate change – Our Climate Future: Te Pae Tawhiti o Kirikiriroa. It outlines the priorities for our response and guides the way we consider climate change in all we do. The strategy sets targets to reduce city-wide emissions by a minimum of 30% by 2030 and 82% by 2050, as well as ambitious targets for Council's own emissions. A key part of the strategy is also making sure that we build our community and city resilience to deal with the impacts of climate change.

You can find more about Council's response to climate change and read the strategy on our website, hamilton.govt.nz/climatechange

Climate change impacts in Hamilton

The climate in our city is already changing, including longer summers, warmer temperatures, extreme rainfall, and drought. Climate modelling shows that for Hamilton Kirikiriroa, over the next few decades we'll experience:



The above impacts apply to all areas of Hamilton, but Council is also conducting risk assessments to understand the risks climate change brings to different areas of the city. This will help our community to be better prepared for the climate change impacts we are anticipating.

What does this mean for Peacocke?

In 2022, Council completed a climate change risk assessment for Peacocke (as part of the Green Star accreditation process). The key risks that were identified are:

- Extreme heat and flooding could negatively impact green spaces and biodiversity
- Increased daily temperatures could lead to urban heat island effects
- Extreme rainfall and flooding could damage and/or lead to closures in the transport network.
- Potential need to evacuate due to flooding or other hazards.

As with the rest of Hamilton, New Zealand, and global projections in general, the climate risks for Peacocke are predicted to increase out 2050 and 2100 if action is not taken to reduce emissions as soon as possible.

'Urban heat island effect' refers to the experience of warmer temperatures in an urban area, compared to more rural places. This is because the urban area has roads, pavements, buildings, and other infrastructure that absorbs and re-emits heat more than the natural landscape does.

This section contains general advice – for the most up to date information, you should always check the Civil Defence website civildefence.govt.nz.

How to prepare and respond

This section outlines how you can prepare for climate change impacts, and what to do during and after extreme weather events.

Before an emergency

It's important to think about what to do in an emergency before it happens. You should:

- Talk about the possible impacts of an emergency with your household, workplace and marae (see the impact section towards the beginning of the booklet).
- Consider what supplies you will need to get you through at least three days and where possible, purchase what is missing
- Form connections with local community groups who might be able to assist with something that's missing
- Get to know your neighbours – they can offer support and you can offer support too
- Make a plan – see the Civil Defence website for templates
- Stay informed.

Remember, you will need to think about getting your house, work, school and/or marae ready – an emergency could happen when you are at any of these locations.

The 'Get Ready' website will help your planning – see getready.govt.nz.
This website is operated by the National Emergency Management Agency who lead the response and recovery for national emergencies.

You can use the checklist and plan at the back of the booklet to help you prepare – tear this out and keep it somewhere safe.

During an emergency

If an emergency occurs in Hamilton, Council's specially trained team of staff coordinate local response activities from our Emergency Operations Centre.

If an emergency occurs over an area wider than Hamilton, Waikato Regional Council will coordinate regional response activities while Hamilton City Council delivers support locally. Hamilton City Council is part of the Waikato Civil Defence Emergency Management Group, which oversees emergency management services in the region.

For more information on the Waikato Civil Defence Emergency Management Group, visit **waikatoregioncdemg.govt.nz**.

In an emergency, it is important to keep informed. A helpful list of radio stations, websites, social media pages, and phone numbers can be at the front of this booklet.

If emergency shelters are activated, their locations will be advertised at the time. They are usually in public places with large capacity, such as stadiums or other community buildings. For the Peacocke area, this could include:

- Glenview Library
- Glenview Community Centre
- Hillcrest Library

Remember, if you need emergency assistance, phone 111.

A grab bag contains emergency supplies and essential items that you can carry with you and is ready for you to take when you must leave in a hurry. If you can, ensure that everyone has easy access to a grab bag at work, at home, and in your vehicle.

See the Civil Defence website **civildefence.govt.nz** and resources on page 11, for information on what to include in your emergency supplies.

Weather emergencies and natural hazards

We've identified the most likely weather emergencies and natural hazards in Hamilton that may cause big problems. We rank these based on how often they might occur and how easy it will be for us to manage them when they do happen. We expect climate change to negatively impact many of these hazards, making them either more severe or occur more frequently. Below we go into detail about some of these hazards and what to do to prepare for them.

Extreme winds, cyclones and tornadoes

MetService issues severe weather watches and warnings for strong winds that meet certain criteria. The warnings and watches are posted on their website, [metservice.com](https://www.metservice.com).

Severe storms and winds are common in Hamilton and we expect that due to climate change, there will be an increase in the severity and frequency of these events. During cyclone season, we expect to be impacted by at least one large storm per year that will cause issues. We can expect similar problems during winter storms that produce lots of wind. High winds often result in trees damaging lifelines such as power, roading and water.

Hamilton can also experience tornadoes. These are not very common but they can and have occurred, causing significant damage and risk to life.

Follow the advice at the back of this booklet and [getready.co.nz](https://www.getready.co.nz) to prepare your family and property for the possibilities of extreme winds, cyclones, and/or tornadoes.

During a severe storm, it is important to:

- Stay inside. Don't walk around outside. Don't drive unless absolutely necessary.
- Close exterior and interior doors and windows. Pull curtains and blinds over windows. This could prevent injury from flying glass if the window breaks.
- Stay informed during an emergency. Listen to the radio or follow your Civil Defence Emergency Management Group online. Follow the instructions of civil defence and emergency services.
- Avoid bathtubs, water taps, and sinks. Metal pipes and plumbing can conduct electricity if struck by lightning. Use your water from your emergency supplies.
- Unplug small appliances that may be affected by electrical power surges. If you lose power, unplug major appliances. This will reduce the power surge and possible damage when power is restored.

Heavy rainfall

Heavy rainfall starts to cause issues when it overwhelms our infrastructure. It is common in the middle and upper North Island areas, including Hamilton Kirikiriroa. We expect that the frequency and severity of heavy rainfall will increase due to climate change. Heavy rainfall can lead to flooding, slips and erosion, which risks human life, buildings, and infrastructure damage. In Peacocke, the gullies may be impacted.

There are many things you can do to prepare yourself and your property for these weather events. This includes:

- Keeping an eye on weather forecasts – particularly for weather watches and warnings
- Bringing outside items indoors, and securing loose items (like trampolines) where possible
- Removing debris like branches and firewood from around the property
- Closing windows and doors, and staying sheltered inside if it's safe to do so
- Regularly cleaning gutters and drains around your property to prevent blockages
- Removing anything valuable touching the ground floor (in case of flooding)
- Bringing pets inside

During a storm, it's best to stay inside and do not drive unless absolutely necessary.

Heavy rainfall and storms can impact lifeline utilities, for example by causing power cuts or damaging water supplies. It's important to have an emergency plan and supplies for if you are stuck at home without these utilities. Visit **getready.govt.nz** to get prepared.

MetService issues severe weather watches and warnings for heavy rain, strong winds and thunderstorms (plus heavy snow fall) that meet certain criteria. The warnings and watches are posted on their website, [metservice.com](https://www.metservice.com).

Flooding

Flooding is when water covers land that is usually dry. Floods are normally caused by heavy and/or prolonged rainfall, and we expect that the frequency and severity of floods experienced in Hamilton Kirikiriroa will increase due to climate change.

For Peacocke, there is a risk of surface flooding which may cut off roadways, lifeline utilities, etc. In the worst-case scenario, it could lead to evacuation. This risk has been considered and mitigations have been designed in from the start of Peacocke.

Flooding and flash floods can happen quickly. When flooding is possible, you need to be prepared to evacuate, so keep your grab bag near. If you see rising water, don't wait for official warnings; put safety first and act quickly.

Follow the check list at the end of this booklet and **getready.co.nz** to prepare your family and property for the possibilities of flooding. Council's Floodviewer is also a handy tool that shows flood modelling in different areas of the city, and whether properties are affected by flooding in a 100-year flood. This can help you to understand the flood risk to your property and modify your property to reduce risk if needed.

You can find out more and view the tool at **hamilton.govt.nz/flood-mapping**.

It's important to stay out of any flood waters – never try to walk, swim, or drive through. If you do come into contact with flood water, make sure you wash your hands, clothes, and property if needed. Contaminated flood water can make you sick.

After a flood, you should only return home (or to any other location that's been damaged) once Civil Defence and emergency services have said it's safe to do so. You must always follow their advice to ensure that you do not impact any ongoing emergency operations.

Some other things to consider are:

- If your property has been damaged, contact your insurance company as soon as possible. If you rent, make sure to contact your landlord too.
- Take photos of damage to help with insurance claims.
- Dispose of any food and water that has come into contact with flood water.
- Do not drink tap water until you have received confirmation that it is not contaminated and follow the advice of local authorities on how to treat water (if necessary). Instead, you should use the emergency drinking water supply that you have stored.
- Clean and dry your property, but make sure you're protected while doing so – for example by wearing a mask, gloves, protective clothing and appropriate footwear.
- Dispose of anything that was contaminated with flood water and cannot be cleaned.

For more information on how to prepare for a flood, what to do during a flood, and what to do after, visit getready.govt.nz/floods.

Drought

A drought is defined by many different factors, but generally refers to a rainfall deficit that restricts or prevents human activity such as farming or power generation¹. Drought can reduce the amount of water in rivers, streams, and lakes. Due to climate change, we expect that the frequency and severity of droughts in the summer months will increase in Hamilton Kirikiriroa.

As Hamilton's drinking water comes from the Waikato River, a major drought may limit our drinking water supplies. It's important to keep up to date with Water Alert Levels which are put in place during high demand periods. These are put in place to make sure there is enough water for everyone to use.

Visit **smartwater.org.nz** to find out about the alert levels and some water saving tips, such as:

- Having shorter showers
- Filling the kettle with only the water you need
- Only running your washing machine when it's full
- Choosing drought resistant plants that can tolerate dry conditions and do not need a lot of water

The National Institute of Water and Atmospheric Research (NIWA), provides the New Zealand Drought Monitor - a system for keeping track of drought conditions across Aotearoa New Zealand. Find out more at niwa.co.nz.

As before, residents are encouraged to store enough water for themselves and those in their household as back up supplies in case of drought.

Droughts can also increase the risk of fire. Fires threaten the health and wellbeing of our communities, environment, and biodiversity. At all times, but particularly in drought conditions, residents can help to prevent fires by carefully disposing of cigarette butts, matches, and other flammable objects such as aerosol cans.

If you do see a fire, call 111.

¹ NIWA Taihoro Nukurangi, <https://niwa.co.nz/natural-hazards/hazards/droughts>

Heatwaves

Climate change means that the frequency and severity of heatwaves is likely to increase.

A heatwave generally refers to an extended period of increase temperatures in a region, and there are some warning signs to look out for. The warning signs of a heat wave include:

- Temperatures that exceed the average for that region and time of year
- Increased night-time temperatures
- High levels of humidity
- Extended periods of hot/humid weather

Extreme heat and heatwaves have negative impacts on health and wellbeing. Anyone can be impacted by a heatwave, but the very young and elderly generations are most at risk, as are people with pre-existing medical conditions. It is important to check on those around you and be aware for signs of heatstroke such as high temperature, hot and flushed skin, headaches, nausea and vomiting, and/or feeling faint.

The biggest risk during a heatwave is dehydration, so residents are encouraged to store enough water for themselves and those in their household. As well as staying hydrated during a heatwave, residents can:

- Close curtains and blinds to keep the heat out
- Stay inside during the hotter hours of the day if possible
- Wear breathable fabrics
- Apply cold, damp cloths to the forehead

If you need to go outdoors, make sure to wear sunscreen, a hat, and practice sun smart behaviours. More information can be found at **[sunsmart.org.nz](https://www.sunsmart.org.nz)**.

You can prepare your property in advance of a heatwave, for example by investing in heat-blocking curtains, air conditioning, and fans, and by planting drought-resistance plants that will grow to provide shading.

Earthquake

With an earthquake risk from both local and distant faults, Hamiltonians need to be prepared for a big shake. Earthquakes can severely damage essential services such as drinking water, power and wastewater networks and might not be back online for weeks or months. Be prepared to survive without assistance for at least three days, if not more.

**Remember, if you feel the earth start to shake, make you sure you Drop, Cover and Hold.
Your biggest risk is from falling objects.**

Ashfall from volcanic activity

While there are no active or dormant volcanoes in Hamilton, distant volcanoes can still cause big disruptions for our city. Ashfall from the Taupo Volcanic Zone and Mount Taranaki can and have caused issues for Hamilton in the past. Ashfall can significantly impact engines so power, wastewater and fresh water plants may have to shut down to avoid long term damage. Roads may become impassable from a slippery ash coating. Ash can also have significant health risks, especially within the respiratory system.

Make sure to prepare your family by having food and water stocks as well as breathing masks, googles and protective clothing.

Further information

For more technical information and plans, visit:

- **hamilton.govt.nz/CivilDefence** for *An overview of natural hazards for the Hamilton City Council - Technical Report.*
- **waikatoregioncdemg.govt.nz** for the *Waikato Region Emergency Management Group - Group Plan 2018-2023*

MAKE A PLAN



GET READY
.govt.nz

MY HOUSEHOLD PLAN

Your household members details

Name:

Telephone Number:

Name:

Telephone Number:

Name:

Telephone Number:

IF WE CAN'T GET HOME

Our meeting place: Where will we meet if we can't get home (local and out of town)?

Add an address and instructions:

Who will pick up the kids? If you are not able to pick the kids up, who will?

Name:

Telephone Number:

Name:

Telephone Number:

IF WE CAN'T GET HOLD OF EACH OTHER

We will leave a message with: Who will we check in with (someone out of town in case local phone lines are down)?

Name:

Telephone Number:

Name:

Telephone Number:

Where to get updates: How will we find the latest news/alerts (which radio stations, websites, social media pages)?

Radio station/websites/social media:

WHO MIGHT NEED OUR HELP? Think about friends and neighbours who may need our help or who can help us

Name:

Telephone Number:

Name:

Telephone Number:

WHO WILL WE NEED TO CONTACT? (ALWAYS DIAL 111 IN AN EMERGENCY)

Think about council emergency hotline, medical centre/doctor, landlord, insurance company, power company, day care/school, work, family members

Emergency Services

111

Name:

Telephone Number:

IF WE ARE STUCK AT HOME

Do we have emergency supplies? Food and drink for three days or more (for everyone including babies and pets)? Torches and radio with batteries?

First aid/medical supplies? They don't all need to be in one big box, but you may have to find them in the dark. Do we know how to turn off water, power and gas.

Make detailed notes on where these items are stored:

Details on how to turn the water and gas off:

IF WE HAVE NO POWER

How will we cook, stay warm, see at night? Do we have spare cash in case ATMs are not working? Do we have enough fuel in case petrol pumps are not working?

Make notes on what you and your family need to do:

IF WE HAVE NO WATER

Do we have enough drinking water (3 litres per person per day for 3 days or more), change every 12 months. What will we cook and clean with? What will we use for a toilet?

What will you do? How have you prepared?

IF WE HAVE TO LEAVE IN A HURRY

Do we have Getaway Kits* for everyone? At home, at work, in the car?

* A small bag with warm clothes, torch, radio, first aid kit, snack food and water, to get you to your safe place.

Detail where you have stored your getaway kits:



Prepare for an emergency

Check through the items below to help you prepare for any emergencies.

Create a household emergency plan

Visit **getready.govt.nz** - to develop plans for your household, work or marae.

Use the plan template in this booklet to make a start.

Prepare your emergency supplies

You probably have most of the things you need already. You don't have to have them all in one place, but you might have to find them in a hurry and/or in the dark.

You'll need:

- ☐ Water for three days or more, for drinking and basic hygiene
- ☐ Long-lasting food that doesn't need cooking, including baby formula and food for pets
- ☐ Gas barbeque to cook on and boil water
- ☐ Toilet paper and buckets for an emergency toilet
- ☐ Work gloves and a face or dust mask
- ☐ First aid kit and essential medicines
- ☐ Radio with spare batteries
- ☐ Torch and spare batteries or a self-charging torch
- ☐ Blankets or sleeping bags
- ☐ Emergency toilet - toilet paper and rubbish bags

Don't forget that you and your neighbours can help each other by sharing supplies too.

Prepare your grab bag

Have a grab bag for everyone in your family, including pets. These should include:

- ☐ Walking shoes, warm clothes, a raincoat and hat
- ☐ Water and snack food
- ☐ Hand sanitiser
- ☐ Portable phone charger
- ☐ Cash
- ☐ Copies of important documents
- ☐ Medications and first aid kits
- ☐ Torch, radio and batteries

For a full check list of supplies, visit **getready.govt.nz**.

Information sources

In an emergency, it is important to keep informed. Below is a list of information sources to check in with.

Radio stations

Radios are the most reliable communication method in an emergency. Tune in to the below stations to get updates during a response.

Station	Frequency
The Hits	98.6FM
The Breeze	99.4FM
More FM	92.2FM
RNZ	101.0FM
Newstalk ZB	97.0FM
Free FM	89.0FM
Radio Tainui	95.4FM

Hamilton City Council

Council will work with our Civil Defence team before and during an emergency and will share messages on our website, **hamilton.govt.nz**. Council is the best place to go for local information. You can also check **Hamilton City Council** on Facebook and **@hamilton_city_nz** on Instagram. Alerts will also be posted via the **Antenno app**.

To report damage such as fallen trees or blocked roads, call the Customer Service team on **07 838 6699**, or email **info@hcc.govt.nz**. You can also easily report any issues via the **Antenno app**.

National Emergency Management Agency - Civil Defence

Visit **civildefence.govt.nz**, **NZ Civil Defence** on Facebook, and **@NZcivildefence** on Twitter.

Waikato Region Emergency Management - Civil Defence Group

Visit **waikatoregioncdemg.govt.nz**, **Waikato Civil Defence** on Facebook, and **@CivilDefenceWKT** on Twitter. Waikato Civil Defence can also send out

Power

Check with your power retailer for outages or to report a power outage, or contact WEL Networks on **wel.co.nz** or **0800 800 935**.

Road conditions and closures

Road conditions and road closures can be found on AA Roadwatch, **aa.co.nz/travel/roadwatch**.

State highways information

For information on state highways, or to report an issue on a state highway, call **0800 4 HIGHWAYS (0800 44 44 49)**.

Waka Kotahi NZTA Journey Planner

Travel information, updates and road closures are also available on the Waka Kotahi Journey Planner, **journeys.nzta.govt.nz**

Mobile apps and alert

Emergency Mobile Alerts are sent directly to most mobiles to get life saving messages out. To check if your mobile phone can receive these alerts and to get more info, visit **civildefence.govt.nz**

You can also download these apps on your phone that can help keep you updated when there's an emergency.



Red Cross Hazard App on Android or iOS, to help you identify hazards, reduce risks and stay informed when you need it most.




Metservice App on Android or iOS provides local weather information and warnings.

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 /HamiltonCityCouncil

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 07 838 6699

hamilton.govt.nz